Breaking society free from fossil fuels

Annual and Sustainability Report 2024

VATTENFALL

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About the report

The Annual and Sustainability Report 2024 for Vattenfall AB (publ) is submitted by the Board of Directors and describes the company's overall targets and strategy as well as the year's results. The administration report and accounts are found on pages 5, 7, 12, 14, 28, 46–57, 59–73 and 155–206 and are assured by our auditors. A part of the administration report on pages 74–148 and 150 include Vattenfall's statutory sustainability report according to the Swedish Annual Accounts Act and are assured by our auditors. Vattenfall has prepared its sustainability reporting in accordance with the European Sustainability Reporting Standards (ESRS). For non-material disclosures, Vattenfall has reported the information cited in this GRI content index for the period from 1 January 2024 to 31 December 2024 with reference to the Global Reporting Initiative's (GRI) standards. The Sustainability Report prepared in accordance with ESRS is part of the administration report, non-material elements (defined on page 74) are not part of the administration report. The Annual and Sustainability Report as a source for its Communication on Progress for the UN Global Compact (UNGC).

Further information about Vattenfall's operations and sustainability work can be found at group.vattenfall.com/who-we-are/sustainability

"Our early commitment to a fossil-free business model and footprint, has made our business more competitive and resilient to the ever changing world we operate in while benefiting customers and climate alike."

CEO Message on page 8 →

Working for fossil freedom

Our world needs to change. Fast. Although we've taken big steps towards fossil-free living, society is still deeply dependent on fossil fuels, and this dependency endangers the environment, energy security and our way of life. But even as the effects of accelerating climate change are being felt more tangibly by people everywhere, the energy transition still isn't moving fast enough. Through all this, the direction to achieve net-zero is clear.

At Vattenfall, our promise is clear. We have a net-zero target for 2040, and every day we're working for a future where we can all move, make and live fossil free. This is not only our sustainability strategy, it's our business strategy. And even in these more challenging times, we're constantly seeking out the opportunities that fossil freedom presents – to drive society forward as a profitable energy company.

Our ongoing work to realise this strategy is the focus of this report. We'll present the progress we've made this year, and the investments we're making for the future.

Let us show you our work for fossil freedom

Stornorrfors hydro power plant

Steps towards fossil freedom

Extended nuclear operating time secures future energy supply

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The power of partnerships

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Food and energy production co-existing in Vattenfall parks

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Sustainable procurement helps achieve emission targets

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Our business in brief

Vattenfall is one of Europe's largest producers and retailers of electricity and heat, and has around 21,000 employees. The parent company, Vattenfall AB, is wholly owned by the Swedish state, and its headquarters are in Solna, Sweden.

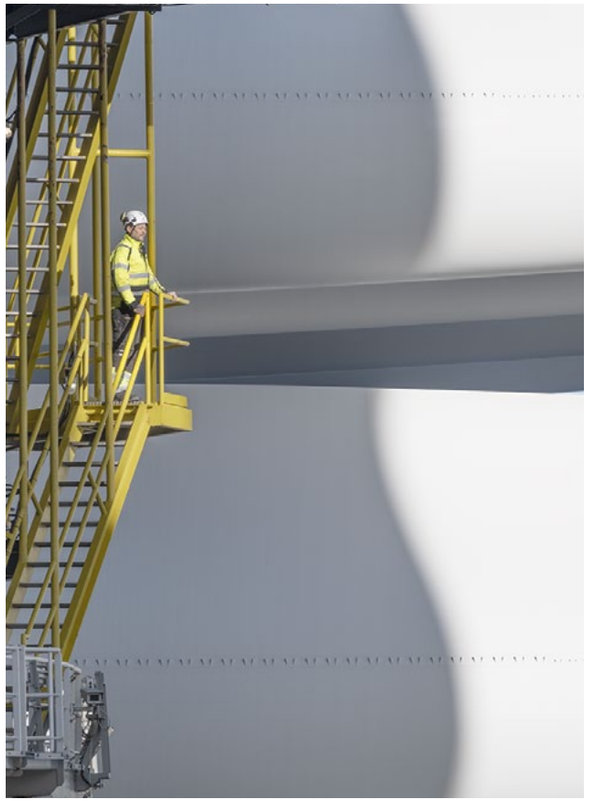
Business segments

Customers & Solutions
uEBIT SEK 6.6 billion
Page 35

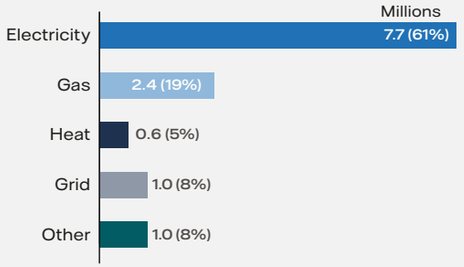
Power Generation
uEBIT SEK 4.0 billion
Page 37

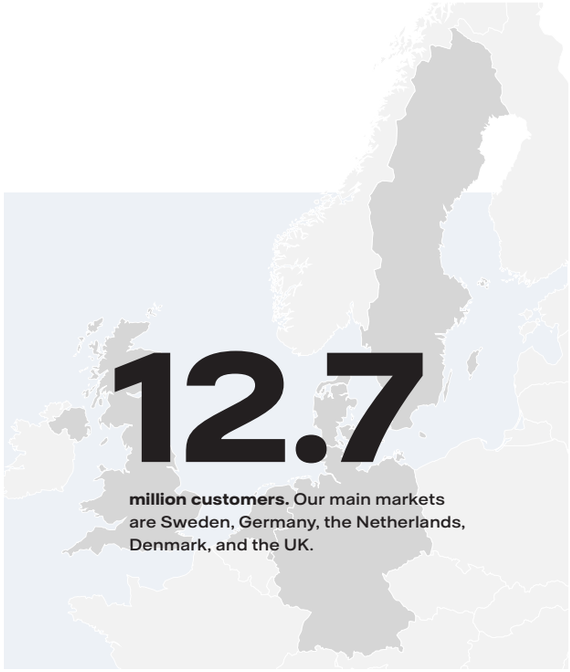
Wind
uEBIT SEK 5.9 billion
Page 39

Distribution
uEBIT SEK 2.6 billion
Page 41



Numbers of customer contracts, by type

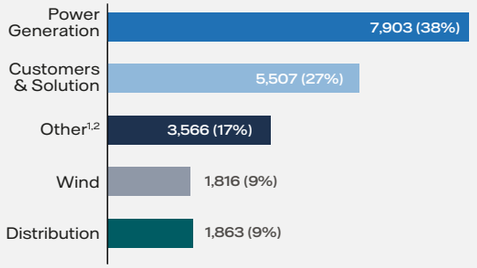




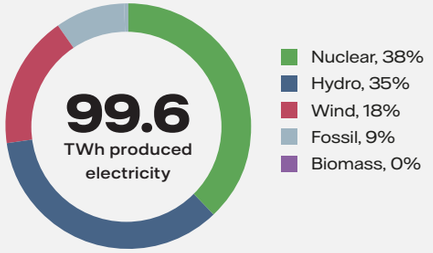
12.7

million customers. Our main markets are Sweden, Germany, the Netherlands, Denmark, and the UK.

Number of employees, by operating segment



Electricity generated, by source



1. See note 2 (page 165) for more information on the change in the operating segments.
2. "Other" pertains mainly to Staff Functions, including Treasury and Shares Service Centres. The heat operations in Berlin are included in Other until 2 May 2024.

Our assets and production plants

Largest plants

Largest plants	Type	Country	Capacity	
Wind farms				
Hollandse Kust Zuid	Offshore	The Netherlands	1,509	MW
Kriegers Flak	Offshore	Denmark	605	MW
Horns Rev 3	Offshore	Denmark	407	MW
Vesterhav Syd and Nord	Offshore	Denmark	344	MW
Thanet	Offshore	United Kingdom	300	MW
DanTysk	Offshore	Germany	288	MW
Sandbank	Offshore	Germany	288	MW
Nuclear power plants				
Ringhals	Nuclear	Sweden	2,211	MW
Forsmark	Nuclear	Sweden	3,363	MW
Hydro power plants				
Harsprånget	Hydro	Sweden	818	MW
Stornorrfors	Hydro	Sweden	599	MW

District heating

Vattenfall's largest district heating networks are in Amsterdam and Uppsala. Heat Berlin was divested to the State of Berlin during 2024.

Other operations

Distribution
Vattenfall's Distribution business owns and operates electricity distribution grids in Sweden and the UK.

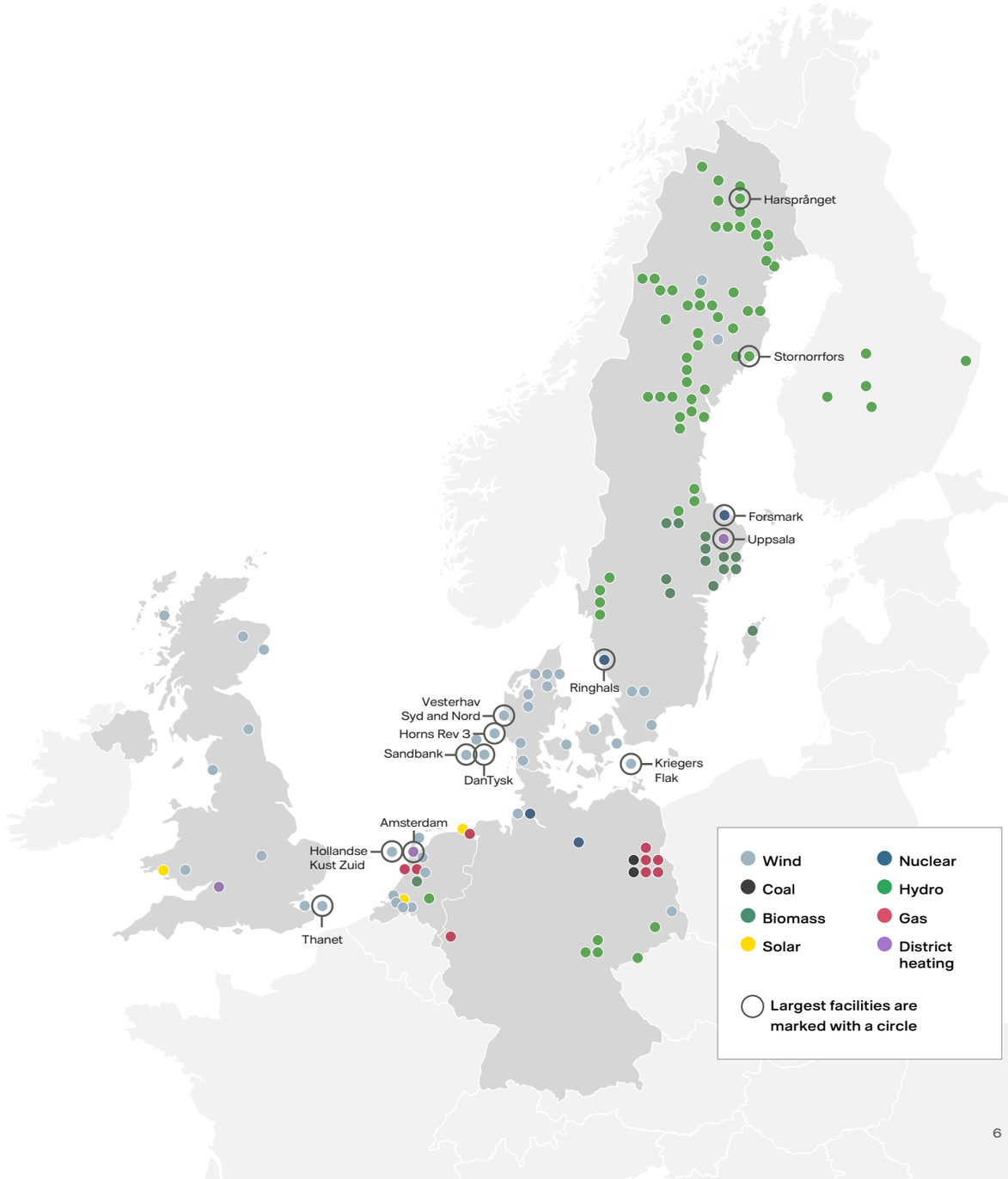
Sales
Serves B2B and/or B2C customers in Sweden, Germany, the Netherlands, Denmark, the UK, France, Finland, and Norway.

E-mobility charging solutions
Vattenfall operates 66,000 charging points throughout Sweden, Germany, Norway, and the Netherlands.

Power-as-a-Service
Designing, building, owning, and operating necessary electrical infrastructure for industry and heavy transport. It is an established business in Sweden and the UK with recent market entries in the Netherlands and Denmark.

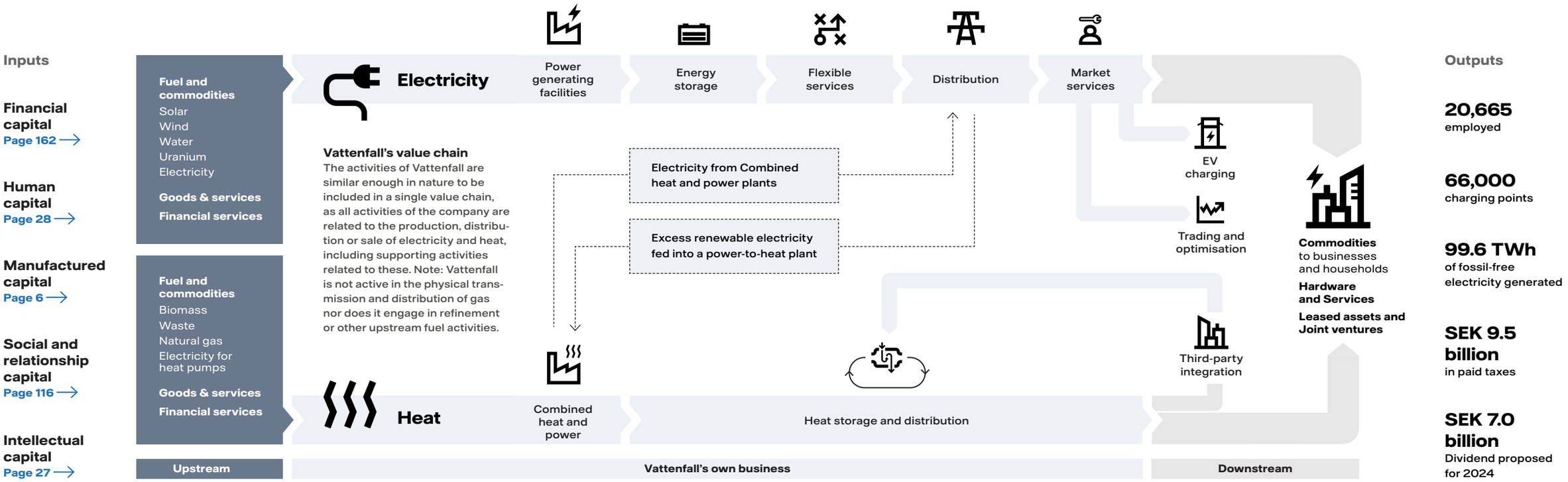
Offices

Vattenfall has offices in Sweden, United Kingdom, Finland, France, Norway, Poland, and Belgium.



Business model and value chain

It takes several steps for electricity and heat to reach the end consumers, and Vattenfall is present throughout the full value chain in accordance with our strategy as an integrated utility. Our business model is centred around creating value for our stakeholders.



“Our early commitment to a fossil-free business model and footprint, has made our business more competitive and resilient to the ever changing world we operate in while benefiting customers and climate alike.”

CEO Message

Direction is clear, the pace is not

Our resilience was tested amid global challenges in 2024. Even so, Vattenfall delivered a stable financial result, advanced our key projects and sustainability goals. By prioritising profitable investments, operational excellence and collaboration, we continue to enable the fossil-freedom that drives society forward as a profitable energy company. Our focus to provide value to our customers while leveraging the energy transition to shape the energy system of tomorrow remains.

Progress is rarely linear
Some stabilisation in European energy markets has occurred during 2024, even as we continue to navigate a world marked by growing geopolitical and economic uncertainties. Economic and supply chain challenges, political turbulence, and regulatory ambiguity remains. As a result, the energy transition has lost pace, although ambitious goals of reaching net-zero remain.

Navigating complexity with strategic focus
To deliver on both our financial and sustainability targets, we prioritise efficiency and prudence in our operations. This includes being a trusted partner to our customers, investing in the right projects with strong fundamentals, optimising our business processes, and ensuring that we are positioned to act swiftly as conditions change. Our early commitment to a fossil-free business model and footprint, has made our business more competitive and resilient to the ever changing world we operate in while benefiting customers and climate alike.

In uncertain times it is easy to focus on what remains undone. But in doing so, meaningful progress and achievements are overlooked – important steps that collectively drive the energy transition forward. At Vattenfall we have decreased 53% of our CO_2 emissions in our own operations compared to 2017. Now, we are expanding our efforts to decarbonise our supply chains as well. A proven and successful track record, a strong financial position, and a solid plan throughout the organisation puts us in a good position to achieve this goal.

Transformation takes time
When news on progress gets overshadowed by those on setbacks, it is easy to forget that transition takes time, it is not linear nor without its challenges. The work we do today builds on the efforts of those who came before us. Whenever I visit our production sites, I'm inspired by the photographs of our former colleagues, such as those who built the first hydro power plants over a century ago. Their commitment and determination is still visible. Now we are building for coming generations.

Businesses and industries are in a transformation mode, expecting fossil free electricity to be able to deliver on their own climate targets and meet customer demand. Collaboration across industries is key to create value chains and models that deliver affordable and competitive fossil-free products and services. European citizens also show a willingness to contribute, as concluded by Vattenfall's energy barometer published in December 2024. They are environmentally cautious and many have adapted their way of living to protect the environment. However, their drive to change is often overshadowed by the ongoing cost of living crisis.

"Less renewable energy will be needed to replace the 95,000 TWh[1] of fossil fuels that are currently consumed every year globally. This highlights that we are not only undergoing an energy transition, but also a process of energy development."

1. According to International Energy Agency's (IEA) data "World energy balances highlights for 2024" and Energy Institute's publication Statistical Review of World Energy"

It's as much an energy development as a transition
Fossil-free electricity production plays a key role in decreasing CO_2 emissions, and it also minimises energy losses. Less renewable energy will be needed to replace the 95,000 TWh[1] of fossil fuels that are currently consumed every year globally. This highlights that we are not only undergoing an energy transition, but also a process of energy development. To support this transition and meet the future energy demand, which might double in Sweden and increase even more in Europe, sustainable electrification is crucial. Achieving this will require significant investments in renewable electricity generation, grid expansion and storage solutions.

For the years 2025 to 2029 we have planned net investments amounting to SEK 170 billion, with the majority (61%) dedicated to growth investments (see more detailed on page 24).

Main projects include the development and construction of new wind farms such as Nordlicht I and II in Germany and the Zeevonk project in the Netherlands. We have also planned SEK 41 billion investment in our distribution business, to reinforce the electricity grids and secure quality of supply and connect new customers in Sweden.

We are also making important investments into hydro power such as increasing the capacity of the Harsprånget hydro power plant and investigating reopening our hydro pumped storage plant in Juktan.

The work towards enabling new nuclear in Sweden is ongoing, although potential investments are further out on the horizon and dependent on a sound risk-sharing model with the Swedish state.

Continued efforts for fossil-free energy generation
A robust and stable energy system, requiring a balance of flexible electricity solutions and reliable baseload capacity, is crucial for both Sweden's and Europe's economic growth and competitiveness. For an energy system to be stable yet flexible, you need solid grids

Highlights of 2024

Key milestones in onshore and offshore wind projects

Vattenfall has reached significant milestones in its renewable energy portfolio with the inauguration of the Vesterhav Nord and Syd offshore wind farms in Denmark, and the Windplan Blauw onshore wind farm in the Netherlands.

The future of nuclear power

Vattenfall is working at high pace to enable new nuclear power adjacent to the existing power plant at Ringhals. We have evaluated five suppliers since the summer of 2024 and are now down to two suppliers of small modular reactors (SMR) and two suppliers of large-scale reactors. A risk-sharing model from the Swedish state is in development and needs to be concluded for a commercial actor to invest. For our existing nuclear power, Vattenfall has made a directional decision to extend the operational lifetime of the Forsmark and Ringhals nuclear reactors from 60 to 80 years, reinforcing our commitment to ensure a stable, low-carbon energy supply for Sweden.

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and a mix of fossil free energy sources as they all have different characteristics and functionalities in the energy system that complement each other. To bridge between periods with high and low electricity generation energy storage and flexibility are also key contributors.

During 2024 we have furthered our efforts throughout the entire energy system. We have taken the directional decision to extend the operating time of Forsmark and Ringhals reactors from 60 to 80 years and our share of fossil-free electricity generation has increased to 90% this year, with Hollandse Kust Zuid and the Vesterhav projects in Denmark being large contributors.

Building the energy system of the future comes with significant investments. The profitability challenges in today's uncertain environment calls for innovative approaches. Vattenfall collaborates across value chains, and we have several extensive partner collaborations underway such as those with global chemical company BASF and Swedish industry collaboration Industrikraft. Synchronised investments in supply and demand can manage risk and drive progress by both decreasing project risk and supporting industries in their decarbonisation journey.

"Our integrated business logic and diversified portfolio has served us well, acting like a natural hedge positioning us to better manage risks and maintain resilience."

Overcoming challenges

For the energy industry, a big concern is that electricity prices in many European markets are not at a level that enable European industry to invest in new electricity production. This in combination with bottle necks in supply chains and overly complicated permitting processes many times makes the cost for investing in new fossil free electricity production currently higher than the market prices.

This is a threat for the economic growth and competitiveness of both Sweden and Europe and we need to accelerate in finding a pragmatic solution. Clear incentives, fair carbon pricing, and market-driven solutions are key to enable investments that support the energy transition while ensuring companies profitability and competitiveness.

Another challenge is the limited number of suppliers in key value chains. This lack of competition hinders cost reductions, and geopolitical regulations further restrict supplier availability.

On the other hand, we also operate in a time of transformative technologies that are scaling fast and open up opportunities for the energy transition. An example of this is HYBRIT, our collaboration with SSAB and LKAB. After six years of research, we have successfully demonstrated the feasibility of fossil-free steel production. We can say with confidence that direct reduced iron produced with the HYBRIT process has superior characteristics compared to iron produced with fossil fuels. Proving that sustainable solutions are not just theoretical but achievable and better.

By aligning innovation, investments, and regulatory frameworks long-term conditions are established that enables us to build a sustainable energy system that secures economic and environmental resilience.

More highlights of 2024

Sale of the German Heat Business to the State of Berlin completed

Vattenfall completed the sale of its German heat business to the state of Berlin which marks the end of Vattenfall's district heating activities in the country. The sale includes power plants, heat grids, subsidiaries and employees transferred to the new owner. The state of Berlin will, in accordance with Vattenfall's condition for the sale, continue on the journey towards 40 percent of the district heating being generated from renewable energy sources by 2030 and to achieve climate neutrality.

Completion of the sale of the Norfolk Offshore wind Zone in UK

In March 2024, Vattenfall completed the sale of the Norfolk Offshore Wind Zone in the UK to RWE. The deal ensures continued development of the Norfolk Zone which will produce renewable energy for over four million households across the UK. As a result of the transaction, Vattenfall reports a capital gain of SEK 4.6 billion.

Sustaining momentum
– future proofing the business

Our integrated business logic and diversified portfolio has served us well, acting like a natural hedge positioning us to better manage risks and maintain resilience.

Our return on capital employed is now at 12.4% (5.3% in 2023), and we have maintained a strong capital structure, with our FFO/AND above the target interval at 49.2%. This outcome largely reflects the positive market changes in energy derivatives as well as capital gains related to the sale of 49% of Nordlicht I & II in the Netherlands to BASF and the sale of Norfolk offshore wind zone in the United Kingdom to RWE.

We accelerated our efforts to strengthen our resilience and profitability this year. Being prudent with investments, only investing in line with our strategic priorities and when it gives us a competitive advantage, will continue to be a top priority for us. We will also continue to work on efficiencies within the business to reach operational excellence. This includes reviewing common processes to leverage synergies as well as the potential of AI. Operational excellence is key.

To ensure future competitiveness forward new skills are necessary, making it essential to secure the right talent and support our colleagues. This year, we have launched initiatives to strengthen our culture and values and continuously work on developing leadership within the organisation.

As we introduce new strategic targets for 2030 alongside updated financial targets, I look forward to work together with our 21,000 colleagues to ensure that Vattenfall remains a stable and profitable energy company.

Being a leader in the transition towards net zero

Reflecting on 2024, we can take pride in completing key projects, delivering on our financial and strategic targets and advancing sustainability goals. These achievements highlight our unwavering commitment to reaching net-zero throughout our value chain by 2040.

Climate change is the most important issue of our time, and it is our collective responsibility to work towards a safe, liveable world for future generations. The energy transition, while not the sole solution, is a crucial piece of the puzzle. The key to solving both the climate issue and ensuring energy security is electrification, using fossil-free electricity. To achieve this, we must collaborate across regions and sectors, mobilize investments, and forge partnerships. Stable investment frameworks and continued commitment to the European Green Deal through the implementation and enforcement of recent EU climate and energy policies is crucial to incentivize investments in a fossil-free future.

We need to be quick on our feet as conditions evolve. We aim to remain at the forefront of the energy transition by providing innovative, sustainable solutions; for here and now, and the future. After all, we are building for the next 100 years.

“We aim to remain at the forefront of the energy transition by providing innovative, sustainable solutions; for here and now, and the future. After all, we are building for the next 100 years.”

Anna Borg,
President and CEO

More highlights of 2024

Several strategic partnerships powering the energy transition in 2024

Commercial partnerships with the industry are key for succeeding with the energy transition. This year, we have entered into several new partnerships and strengthened existing ones. In the Netherlands, Vattenfall and Copenhagen Infrastructure Partners won the IJmuiden Ver Beta offshore wind farm tender (Zeevonk project). We strengthened our partnership with BASF, selling 49% of the Nordlicht I & II offshore wind farms in Germany. Additionally, a 10-year hydropower PPA with Borealis will support reduction of CO_2 emissions, while a wind power deal with Salzgitter supports decarbonising Germany’s steel industry.

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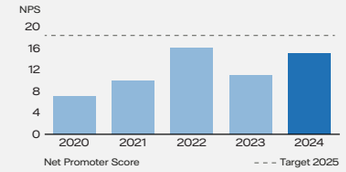
Strategic targets

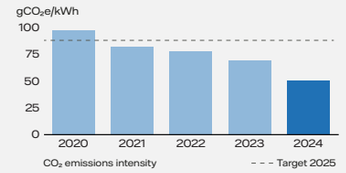
Vattenfall is taking the next step to enable the fossil freedom that drives society forward by introducing updated strategic targets for 2030. Building on the foundation set by our 2025 targets, these updated targets reflect our ambition to be a leader in the energy transition while ensuring a strong customer focus as a profitable energy company. Outcome for both the 2025 and 2030 targets are presented in the next two pages.

Strategic targets 2025

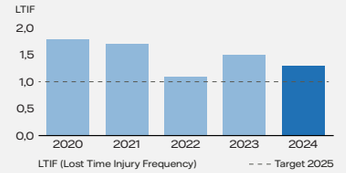
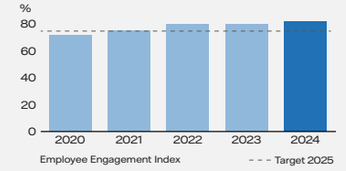
Driving decarbonisation with our customers and partners

Target for 2025	Outcome 2024	Comment	Five-year trend
+18 Customer engagement, Net Promoter Score (NPS)[1]	**+15** (+11)	Increase in NPS mainly as a result of improvments in the Dutch customer business following lower prices.	

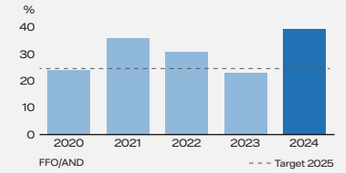
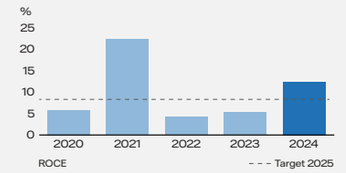
Securing a fossil-free energy supply

Target for 2025	Outcome 2024	Comment	Five-year trend
≤ 86 gCO_2e/kWh CO_2 emissions intensity[2]	**50** (69)	Improvement due to lower fossil-based generation, mainly due to divestment of the heat business in Berlin. For more information, see page 91.	

Motivating and empowering our people

Target for 2025	Outcome 2024	Comment	Five-year trend
≤1.0 Lost Time Injury Frequency (LTIF)[3]	**1.4**[4] (1.5)	Above target levels although an improvement compared to 2023. Continue efforts to enhance safety. For more information, see page 110.	
75 Employee Engagement Index[5]	**82** (80)	Outcome above target level after continued improved performance with more engaged employees. For more information, see page 28.	

Conduct high-performing operations

Target over a business cycle[6]	Outcome 2024	Comment	Five-year trend
22–27% Funds from operations (FFO)/ adjusted net debt	**49.2%** (21.5)	Above target interval as a result of lower adjusted net debt, mainly due to net received margin calls, the divestment of the heat operations in Berlin and the sale of offshore wind power projects.	
≥ 8% Return On Capital Employed (ROCE)[7]	**12.4%** (5.3)	Outcome above target mainly due to positive changes in market value of energy derivatives and capital gains from divestment of offshore wind power projects.	

Figures in parentheses refer to 2023.

1. NPS is a tool for measuring customer loyalty and for gaining an understanding of customers' perceptions of Vattenfall's products and services.
2. Consolidated value including the heat business in Berlin until the sale on the 2nd of May 2024. Includes CO_2 and other greenhouse gases such as N_2O and SF_6, as well as indirect emissions from electricity and heat use (Scope 2). The target for 2025 is to be on track to achieving the 1.5° C target by 2030, according to SBTi.
3. Lost Time Injury Frequency (LTIF) is expressed as the number of lost time work injuries (per 1 million hours worked), that is, work-related accidents resulting in absence longer than one day, and accidents resulting in fatality. The ratio pertains only to Vattenfall employees.
4. Deviates from reported value as communicated in year-end report 2024.
5. Documentation for measurement of target achievement is derived from the results of the My Opinion employee survey, which is conducted on an annual basis.
6. 5–7 years.
7. The key ratio is based on EBIT and average capital employed (see page 213).

Strategic targets 2030

Driving decarbonisation with our customers and partners

Target for 2030	Definition	Outcome 2024	Comments
20 Customer engagement, Net Promoter Score (NPS)	NPS is a tool that measures customer loyalty and for gaining an understanding of customers' perceptions of Vattenfall's products and services.	**+15**	Increase in NPS (+11 in 2023) mainly as a result of improvments in the Dutch customer business following lower prices.

Securing a fossil-free energy supply

Target for 2030	Definition	Outcome 2024	Comments
18.2 Mt. Absolute CO_2 emissions (includes scope 1, 2 and 3)	Total absolute CO_2e emissions including Scope 1, 2 and 3, as covered by Vattenfalls 2040 Net Zero targets validated by SBTi.	**24.6**	Total emissions reduced compared to 25.8 in 2023 due to more fossil-free electricity sales.

Conduct high-performing operations

Target over a business cycle[1]	Definition	Outcome 2024	Comments
≥ 25% Funds from operations (FFO) /adjusted net debt	Capital structure metric based on proportional fund from operations excluding dividend attributable to non-controlling interests. Adjusted net debt is exclusing margin calls.	**41.2%**	Above target interval as a result of lower adjusted net debt, mainly due to the divestment of the heat operations in Berlin and the sale of offshore wind power projects.
≥ 8% Return on capital employed (ROCE)	Profitability metric based on underlying EBIT excluding items affecting comparability.	**6.3%**	Outcome below target mainly due to lower underlying EBIT.

Motivating and empowering our people

Target for 2030	Definition	Outcome 2024	Comments
<2.0 Total recordable injury frequency (TRIF+) with a zero fatality threshold[2]	Workplace safety metric that includes occupational fatal accidents, injuries resulting in lost workdays, accidents requiring medical treatment beyond first aid, and incidents that restrict people's ability to perform their regular duties.	**3.5**	Outcome above target level. Further actions required to enhance safety performance. For more information see pages 110-111.
86 Employee Engagement Index[3]	Employee engagement is measured as the degree of employees' connection to their organization, reflected in their commitment to achieving goals.	**86**	Outcome in line with target, continued efforts to maintain employee engagement.
40% Driving diverse leadership	Target that focuses on increasing female representation in leadership roles. This metric is measured by the Female Manager Ratio, which reflects progress toward gender diversity in leadership.	**34**	While we are still below the target set for 2030, we are making significant strides in this area.

1. 5–7 years.
2. Per 1 million hours worked. This metric includes both Vattenfall employees and contractors. In case of fatality, this target can not be achieved.
3. Documentation for measurement of target achievement is derived from the results of the My Opinion employee survey, which is conducted on an annual basis.

Financial targets

Vattenfall's owner has proposed three updated financial targets for the Group, which pertain to profitability, capital structure, and dividend policy. These targets are intended to ensure that Vattenfall creates value and generates a market rate of return, that its capital structure is efficient, and that financial risk is kept at a reasonable level. The updated financial targets are set over a business cycle[1] and will be presented at the Annual General Meeting 2025 for approval. The table below outlines the 2024 outcomes for these targets.

Hybrid park Haringvliet, the Netherlands

Profitability

Target over a business cycle[1]	Outcome 2024	Comments
≥ 8% Return On Capital Employed (ROCE)[2]	**6.3%**	Outcome below target level due to lower underlying operating profit mainly due to provisions for nuclear power.

Capital structure

Target over a business cycle[1]	Outcome 2024	Comments
≥ 25% Funds from operations (FFO) /adjusted net debt[3]	**41.2%**	Above target interval as a result of lower adjusted net debt, mainly due to the divestment of the heat operations in Berlin and the sale of offshore wind power projects.

Dividend policy

Target over a business cycle[1]	Outcome 2024	Comments
40-70% Of adjusted net profit[3]	**7.0** SEK billion[4]	The Board of Directors has proposed a dividend of SEK 7 billion.

1. 5-7 years.
2. Based on underlying EBIT exclusing items affecting comparability and average capital employed (see page 213) .
3. Adjusted net profit is excluding fair values and return from nuclear waste fund. The updated dividend policy takes into account future developments in capital structure and investment needs.
4. Metric based on proportional fund from operations excluding dividend attributable to non-controlling interests. Adjusted net debt is excluding margin calls.

Case story

Extended nuclear operating time secures future energy supply

Fossil-free electricity generation secured right into the 2060s. This will become reality if the directional decision made during the year is confirmed. This favours transition in the industry, as well as Swedish consumers' access to efficient electricity supply.

At the beginning of 2024, the owners of the nuclear power plants Forsmark and Ringhals made a directional decision to extend the operating time of the five existing reactors, from 60 to 80 years. This would provide a supplement of fossil-free electricity totalling to about 800 TWh, which is around six times Sweden's current electricity consumption per year, an important contribution in light of the fact that the demand for electricity is expected to increase drastically.

"Nuclear power has played, and will continue to play, an important role in Swedish electricity generation going forward. It is therefore of the utmost importance to continue investing in our existing reactors while planning for new nuclear power. Following the extensive modernisations previously carried out, the conditions are good for extending the operating time by another 20 years," says Johan Dasht, Head of Business Area Generation at Vattenfall.

“Nuclear power has played and will continue to play an important role in Swedish electricity generation going forward. It is therefore of the utmost importance to continue investing in our existing reactors while planning for new nuclear power. Following the extensive modernisations previously carried out, the conditions are good for extending the operating time by another 20 years,” says Johan Dasht, Head of Business Area Generation at Vattenfall.

After the directional decision was made, an in-depth investigation was initiated to identify what needs to be done and by when, to make detailed cost calculations and to analyse the risks around, among other things, suppliers and competence. The goal is to present the basis for a final investment decision to Vattenfall’s Board and the other owners in 2026.

Major advantages with extended operating time

The feasibility study carried out shows that it is economically efficient to utilise investments already made and that it contributes to an electricity system with low carbon dioxide emissions. The fact that nuclear power will remain for a longer period also creates opportunities for the energy transition. It is a platform and a baseload that stabilises the grid, which increases the opportunity for energy transition in the society and building more wind and solar power.

“Continuing to generate fossil-free power at existing plants is both economically and environmentally beneficial,” says Dasht.

“Additionally, the extended operating time for the existing reactors does not entail complex permit processes, and the assessment is also that the extra nuclear waste can be accommodated within the nuclear waste system for the existing reactors.”

The sooner the better

Long-term planning is crucial for operations at Forsmark and Ringhals. Therefore, the sooner this kind of decision is made, the better as it increases the opportunities to optimise processes and measures going forward.

“For the investments we make today, we have a planning horizon of around 60 years, and work based on a given maintenance strategy. With a horizon of 80 years, we can make strategic decisions to instead replace components at an earlier stage and thus avoid unnecessary costs,” says Dasht.

Investments are planned for the 2030s

According to today’s estimates, most of the work will be carried out during the 2030s and will culminate around the year 2035. Apportioning the measures over several years is a conscious strategy based on needs and ability to carry out the work adequately, sustainably and safely.

The investments are estimated at SEK 40–50 billion for replacing or renovating systems and components such as turbines, condensers, generators, and for modernising steering and control systems. Investments will also need to be made in switchgear and power lines, plant buildings and other infrastructure.

“We replace many of the components on an ongoing basis, at different intervals depending on how they wear. The only difference now is that it will be on a larger scale,” says Dasht.

Ensuring adequate competence

The right skills are essential for a project of this magnitude. Being involved and learning from the start provides significant opportunities to build knowledge. The challenge lies in having access to the right basic skills and attracting the best talent, both to Vattenfall and to the supply chain. If done right, a solid base of experience and know-how will be built, that we and the industry will benefit greatly from.

“It is an extremely positive decision for those of us who work in nuclear power as well as for Vattenfall as a company,” says Dasht.

“Continuing to generate fossil-free power at existing plants is both economically and environmentally beneficial”

Johan Dasht, Head of Business Area Generation at Vattenfall

Forsmark nuclear power plant

Facts

Forsmark has three reactors with an annual generation capacity of around 25 TWh electricity. Vattenfall owns 66 per cent of Forsmarks Kraftgrupp. Mellansvensk Kraftgrupp owns 25.5 per cent with Fortum as the largest shareholder, and Uniper (Sydkraft Nuclear Power) owns 8.5 per cent.

Ringhals has two reactors with an annual generation capacity of nearly 17 TWh. Vattenfall owns 70.4 per cent and Uniper (Sydkraft Nuclear Power) owns 29.6 per cent of Ringhals AB.

Strategy

Forces impacting our operations and strategy

The world is at a critical juncture, facing the ongoing challenge of climate change. The rapid rise in global temperatures has put the energy transition in sharp focus – offering substantial opportunities alongside inherent risks and challenges.

Vattenfall navigates a complex landscape shaped by macroeconomics, geopolitics, technology developments and regulatory ambiguity. 2024 has been a year marked by challenges ranging from political shifts due to elections in several key markets, ongoing geopolitical tensions as well as macroeconomic volatility.

Looking ahead we face uncertainties about whether consumers will be able to shoulder the costs associated with the green transition, and whether policy commitments endure under economic constraints. The investment environment is becoming more demanding as well. Despite today's energy prices being above historical averages, European electricity and gas prices have declined significantly over the past year. This situation is compounded by supply chain disruptions and elevated price levels.

Meanwhile, the energy sector must accelerate sustainable investments, drive technological innovation, and deliver affordable, low-carbon solutions in order to meet the demand for renewable energy. Additionally, geopolitical shifts and evolving trade dynamics highlight the need for a resilient and sustainable energy infrastructure to secure future stability.

The challenges mentioned impact the pace of the energy transition despite the fact that the European goal to reach net zero remains clear. At Vattenfall we focus on capitalising on the opportunities presented by the energy transition and thus continue to strengthen our business.

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Beliefs that underpin our strategy

Given the global forces we see impacting our operations, we believe that our market environment will be challenging in the short term. However, we maintain a positive long-term market outlook, guided by our key fundamental beliefs in the market.

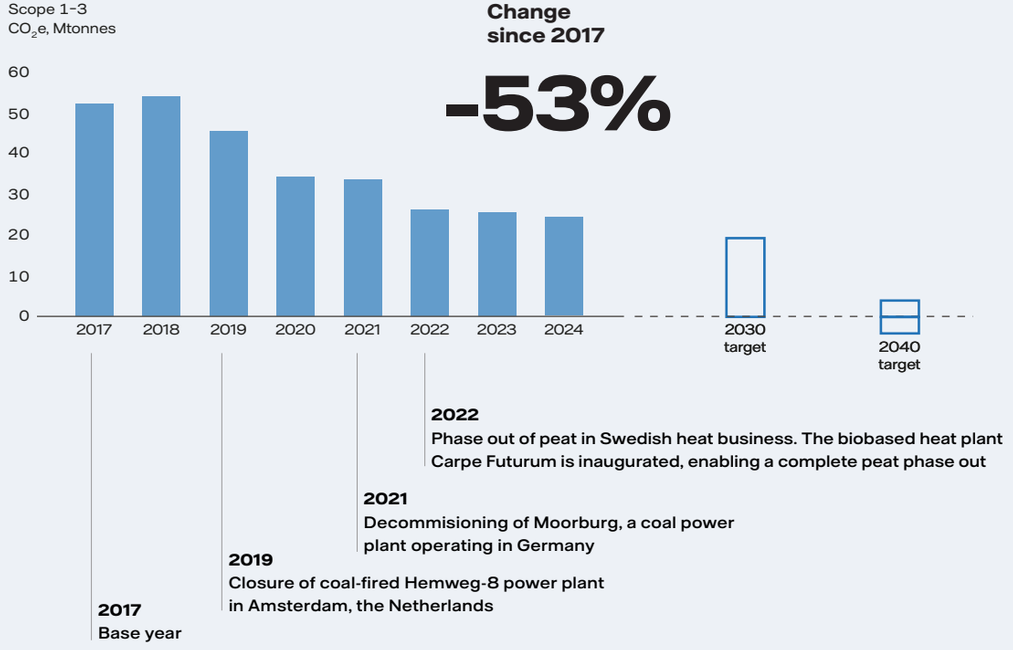
There will be growth in the demand for fossil-free electricity
We believe there will be a energy transition, and as a consequence there will be growth in demand for fossil-free electricity. This also means all fossil-free technologies will be needed.

There will be a demand for fossil-free flexibility
With an increased share of intermittent energy production, such as wind and solar, power grids will experience more volatility, and, at times, power scarcity. This is where flexible assets, such as flexible generation and storage, as well as demand-side flexibility, become essential.

Government interventions are a natural part of the market environment
Given the market challenges and investment uncertainty, governments need to be heavily involved in the energy transition to provide development guidance and support capacity build out. This involvement will lead to significant political and regulatory risks, requiring companies to understand and manage these risks in their business decisions.


Forsmark nuclear power plant

Our decarbonisation journey and key milestones



Read more about our decarbonisation journey in the Sustainability Statement on page 74 →

Our strategy in a nutshell

Fossil-free electricity is our core, and we believe that it will be the main energy carrier of the future, where everyone can choose affordable, fossil-free ways to move, make and live.

Our purpose
Our purpose is to enable the fossil freedom that drives society forward, making it possible to move, make and live fossil-free, as a profitable energy business. We have set out to be a leader in the energy transition. That is both a responsibility and a business opportunity.

Our foundation
We focus on carefully managing and growing our position in fossil-free electricity, as it is at the core of our company and we believe it will grow to be the main energy carrier of the future.

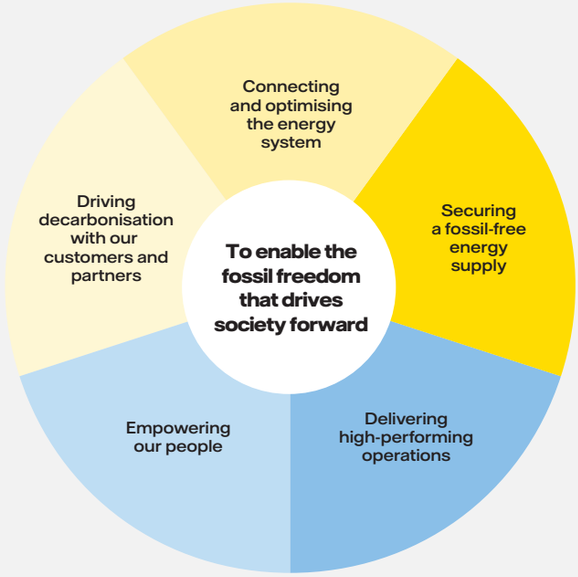
Our business model
We believe in the business model of an integrated utility, as being active in generation, flexibility, distribution, sales, services, optimisation and trading. This mitigates risks on a portfolio level, which in turn improves our debt-bearing capacity. It also provides us with competitive advantages and enables us to capture additional value from synergies across the value chain.

Our markets
We have and will further build a strong integrated utility position in Sweden, Germany and the Netherlands (with electricity distribution grids only included in Sweden).

We also have a presence in other geographical markets in northwestern Europe, such as the UK, Denmark, Finland, France, and Poland. Our presence in other markets is not as an integrated utility, but with specific business logic.

Our portfolio
Our strategy of being active throughout the energy value chain in northwestern Europe has resulted in a diversified portfolio, especially along the electricity value chain. Sustainability is at the core of our portfolio, driving our commitment to the energy transition and enabling long-term value creation across the energy system.

More about our portfolio on the next page →



The Vattenfall strategy wheel illustrates our integrated business model and what is needed to succeed with our strategy.

- **Driving decarbonisation** with customers and partners by enhancing customer centricity and promoting electrification and decarbonisation energy solutions where we excel.
- **Connecting and optimising the energy system** by maximising flexibility value and promoting stable, cost-efficient grid infrastructure.
- **Securing a fossil-free energy supply** by growing new power generation, maximizing existing assets' value, and implementing our CO_2 roadmap.
- **Delivering high-performing operations** by being competitive and cost-effective, leveraging digitalisation, and taking social and environmental responsibility throughout the value chain.
- **Empowering our people** by securing necessary competence, improving the employee journey, and ensuring a safe work environment.

Our portfolio

Generation
In Generation, we include all our assets that produce electricity such as hydro, nuclear, wind and solar, as well as the implementation of innovative technologies to increase efficiency and reduce environmental impact. The generation of fossil-free electricity from our nuclear and hydro power assets is the backbone of our business. It is what defines who we are and it is critical in enabling fossil freedom. We are one of the leading offshore wind developers and operators in Europe, based on installed capacity, while also pursuing opportunities in onshore renewables.

Flexibility
Flexibility refers to our ability to adapt to changes in demand and supply, using technologies such as hydro power, battery storage and pumped hydro. We believe that more flexibility will be needed as the share of intermittent energy sources increases in the energy system. To Vattenfall, there is strong potential for value creation within flexibility solutions like pumped hydro and co-located batteries, especially in Germany and Sweden.

Distribution
We operate large parts of the power grid in Sweden and ensure the delivery of electricity to our customers by owning both regional and local networks, where we are responsible for operations, expansions, and maintenance. Increasing capacity and building out distribution grids are essential steps to meet the rising demand for fossil-free electricity. Our unique position in Sweden as one of the largest distribution system operators (DSOs) on the regulated market enables us to drive electrification and allow industry and society to decarbonise.

Customers
We support our customers in their journey towards fossil freedom by providing fossil-free electricity, gas and heating solutions. Our customer sales business (B2B/B2C) strengthens our competitive position in core markets, further enhanced by our e-mobility business. We also enable their decarbonisation with heat pump and solar panel installations and activities in biomethane.

Services
We are looking beyond the energy sector and support the industry in their electrification and decarbonisation efforts to further enable fossil freedom. We do this by partnering with the industry, by offering added value services such as Power-as-a-Service and Vattenfall Services Nordic.

Optimisation and trading
We enhance and secure our competitiveness across the value chain through optimisation and trading. By optimising our asset portfolio we capture additional value and are able to monetise on market knowledge and volatility.


Vittjärv hydro power plant

Clear strategic direction

- We focus on growing fossil-free electricity generation and distribution, and decarbonising our remaining fossil-dependent businesses
- Growth investments are driven by our strong positions in wind, nuclear, hydro, distribution and customer sales
- Partnerships in industry and Power Purchase Agreements are tools to realise these growth investments
- We manage short-term market risk and uncertainty while staying committed to our long-term ambitions
- We will continue to support our customers and society in the energy transition, aiming to become net zero by 2040. Our full climate transition plan is described on page 91.

Case story

The power of partnerships

The energy transition is one of the greatest challenges of our time. No one can tackle this on their own and the benefits of collaborations have never been more evident. By joining forces, Vattenfall is elevating its competitive position and paving the way for a fossil-free future.

"Partnerships are great for both Vattenfall and the industries we collaborate with. By working together, we can cooperate with our partners in their decarbonisation efforts while also reducing our project risk," says Andreas Regnell, Head of Strategic Development at Vattenfall.

"The long-term relationship with Vattenfall enhances our competitive edge and is a proof-point that cross-industry collaborations are key success factors to make our transformation happen," says Markus Kamieth, CEO of BASF.

Fostering diverse collaborations
The energy transition is a societal transformation that requires collaboration between businesses, state and its citizens to succeed. Working with partners is a strategic decision at Vattenfall, although the levels of engagement vary. These partnerships range from the German-based chemical company BASF, to pioneering fossil-free steel production in the joint venture HYBRIT, together with steel company SSAB and mining company LKAB. Additionally, Vattenfall has signed an agreement with the industry collaboration Industrikraft, which identifies and evaluates conditions for joint investments in new fossil-free power production in Sweden.

The First Movers Coalition (FMC), launched by the U.S. State Department and the World Economic Forum, uses its members' combined purchasing power to accelerate investment in developing breakthrough technologies needed to decarbonise society – focusing on transports and materials – particularly during the difficult demonstration and early deployment phases. As a founding member of FMC, Vattenfall has committed to procuring low-carbon products and technologies within the sectors of cement, steel, aviation and trucking.

Partnering throughout the value chain
During the spring, Vattenfall deepened its collaboration with the chemical company BASF, which has purchased 49 per cent of the Nordlicht I & II offshore wind farms in the German North Sea. These are expected to be operational in 2028 and generate electricity equivalent to the consumption of 1.6 million German households. BASF's share of the power will be used to supply their European chemical sites with renewable power.

"Offshore wind energy is an essential contributor to the energy transition in Europe. Our partnership with BASF is a prime example of how industries can collaborate to strengthen competitiveness and drive progress in the development of our societies towards one free from fossil fuels," says Anna Borg, President and CEO of Vattenfall.

"The partnership has certainly bolstered our reputation as an innovative and sustainable company that takes concrete and impactful measures when it comes to emission reduction. The long-term relationship with Vattenfall enhances our competitive edge and is a proof-point that cross-industry collaborations are key success factors to make our transformation happen," says Markus Kamieth, CEO of BASF.

Together with BASF, Vattenfall has also entered into a partnership with Vestas for the supply and service of wind turbines for the Nordlicht projects. Parts of these wind turbines will be manufactured using low-emission steel, which will reduce the carbon footprint of those components by 66 per cent.

In June, Vattenfall and the Swedish company CemVision entered a Letter of Intent for the development and future supply of cement that potentially can reduce carbon dioxide emissions by 95 per cent compared to traditional cement. The new cement has several potential applications, such as foundations for wind power turbines and power distribution, and prefabricated concrete elements. The partnership is a result of Vattenfall's commitment to FMC, where Vattenfall has pledged that at least 10 per cent of its cement or concrete purchases will be as close to zero emissions as possible by 2030. With this demand Vattenfall, as a customer, is contributing to developing a market for near-zero emission cement.


Kriegers Flak offshore wind farm

"Offshore wind energy is an essential contributor to the energy transition in Europe. Our partnership with BASF is a prime example of how industries can collaborate to strengthen competitiveness and drive progress in the development of our societies towards one free from fossil fuels."

Anna Borg, President and CEO of Vattenfall

Energy and industrial development go hand in hand
The energy transition is not the only solution to the climate issue, but it is a very important piece of the puzzle. Vattenfall plays a key role, both as a supplier, partner and customer. Access to fossil-free energy is essential for a competitive Europe.

Investment plan

Our investment plan reflects Vattenfall's ambition to be a leader in the energy transition, enabling the fossil freedom that drives society forward. The focus of our investments is fossil-free electricity generation whilst being an integrated energy utility with a diversified portfolio. Other key investment areas are the development and extension of our electricity grids, the development and transition of our heating business, the maintenance and modernisation of our nuclear and hydro plants, alongside with increasing investments in electrification of transport.

Total investments
Total planned net investments for 2025 until 2029 amount to SEK 170 billion. Gross investments amount to SEK 236 billion. The difference is mainly due to partnering related to offshore projects, namely the Nordlicht projects in Germany and Zeevonk in the Netherlands, as well as develop-to-sell assumptions for onshore wind, mainly Windplanblauw and Clashindarroch II, and solar projects. The following figures relate to net investments.

Growth investments
Growth investments total to about 61 per cent (SEK 104 billion) of the total investment plan. Notably, final investment decisions (FIDs) for several projects are pending, making specifics subject to change. Around SEK 72 billion in investments are planned for the development and construction of new wind farms. Major investments include the further development and construction of the offshore wind farms Nordlicht I & II (together ~1,600 MW) and Zeevonk. The latter includes a 2,000 MW offshore wind farm, a 50 MWp floating offshore solar farm on site, and a new electrolyser at the Port of Rotterdam converting electricity to fossil-free hydrogen.

Growth investments also cover development costs for potential future wind power projects, such as Kattegatt Syd and the Kontiki projects in Sweden or Korsnäs in Finland. Potential construction spend for these projects is not yet included in the planning figures.

In the onshore wind business, growth projects include the finalisation of the wind farms Bruzaholm (138 MW) and Velinga (60 MW) in Sweden, as well as new construction of the wind farms Stormyrberget (248 MW) in Sweden and Waidachswald (160 MW) in Germany.

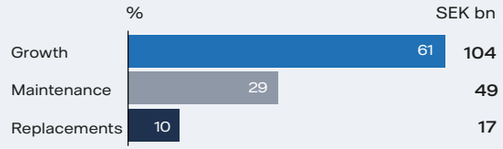
Another major growth area is the development and extension of our electricity grids in Sweden with investments of about SEK 13 billion, primarily aimed at connecting new customers and areas to our electricity grids, as well as providing network solutions. Additional growth investments amounting to around SEK 10 bn are planned for our different heating businesses, with the aim to decarbonise the heat supply. Major heat activities include erecting new peak and back-up capacity in Leiden, development of several large, city-scale low carbon heat networks in the UK or connecting several data centres to existing heating grids in the Netherlands.

Additional growth activities, totalling to around SEK 9 billion, include investments in EV-charging stations and a capacity increase project in the Harsprånget hydro power plant.

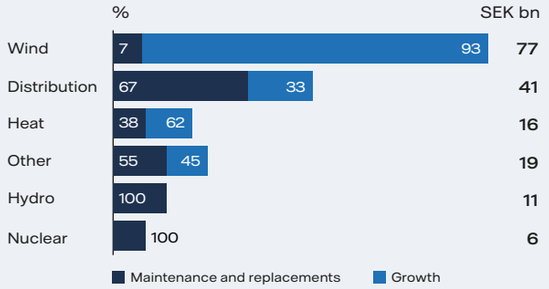
Maintenance and replacement investments
Vattenfall is also investing heavily in maintenance, modernisation and replacement in existing assets and businesses. Planned maintenance and replacement investments amount to about SEK 66 billion. This includes SEK 27 billion to reinforce our Swedish electricity grids and secure quality of supply. Additionally, we plan to invest around SEK 6 billion during the planning phase of extending the operating time of the nuclear power plants Forsmark and Ringhals reactors, from 60 to 80 years. Investments in dam safety as well as in maintenance and renewal of the Nordic hydro power plants are planned at about SEK 8 billion. In the heating business, we plan to invest at about SEK 6 billion to maintain and further develop our asset portfolio.

170 SEK billion total capex

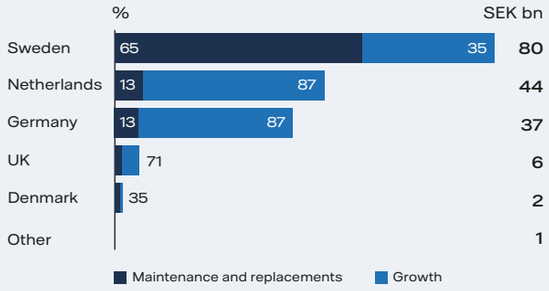
Total capex per category



Capex per technology



Capex per country



InCharge service vehicle
in the Netherlands

Major investment projects - decided on and in progress[1]

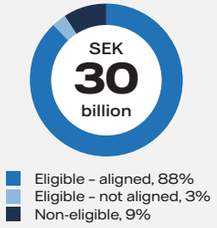
Project	Country	Type	Capacity	Est. CO_2 reduction[2] (ktonnes)	Vattenfall's interest (%)	Completion	Total investment
Bruzaholm[3]	Sweden	Wind onshore / Battery	139 MW	2	100	2025	2,360 MSEK
Velinga[3]	Sweden	Wind onshore	67 MW	1	100	2025	1,182 MSEK
Battery Toledo[3]	Sweden	Battery	55 MW	n/a	50	2025	43 MEUR
Nauen[3]	Germany	Solar	46 MW	11	100	2025	25 MEUR
E-boiler Diemen	Netherlands	Electricity as fuel	150 MWth	n/a	100	2025	45 MEUR
E-mobility – Netto[3]	Germany	E-mobility	n/a	n/a	100	2025	86 MEUR
E-mobility – Bünting[3]	Germany	E-mobility	n/a	n/a	100	2025	56 MEUR

1. All numbers in the table reflect the status as per 31 December 2024.
2. Production from onshore wind estimated to 2.6 GWh/MW installed, from offshore wind to 3.5 GWh/MW installed, and from solar to 1.0 GWh/MW installed. Resulting production is compared against grid average emission factors which will decline over time as the energy system decarbonises. Actual production emission factors and savings will vary. Other projects are compared to project-specific reference cases.
3. The project is EU taxonomy-eligible and aligned.

EU taxonomy reporting

The EU taxonomy regulation establishes a common classification system that defines when an economic activity can be considered sustainable, also referred to as taxonomy-aligned. Its ultimate aim is to steer investments into activities that help to achieve the ambitions of the EU Green Deal.

88 per cent of Vattenfall capex in 2024 were eligible and aligned
Electricity grids accounted for 35 per cent of investments in 2024. Other key investment areas were wind power (31 per cent), existing nuclear power plants (6 per cent), and district heating and cooling (4 per cent).



Eligible but not aligned capex
3 per cent of Vattenfall's investments during the year was made in eligible, but not aligned activities. These consist of investments in gas-fueled heating and/or cooling or gas-fueled combined heat and power generation that do not meet the substantial contribution to climate change mitigation criteria.

Non-eligible activities
For Vattenfall, this mainly includes sales, some service-related capex as well as maintenance investments that are not covered by the taxonomy regulation. Activities being reported as non-eligible does not necessarily indicate that the activities are considered not to be sustainable. It only indicates the activity is not listed in the EU taxonomy and therefore not assessed under the EU taxonomy regulation.

Future development of capex and turnover KPI
The continued growth in fossil-free capacity and projects linked to the decarbonisation of society will contribute positively to both the share of taxonomy aligned capex and turnover.

Read our EU taxonomy reporting on page 134 →

Green Bond Investor Report

Vattenfall issued its first green bond in June 2019 and by year-end 2024, Vattenfall had a total of SEK 25.2 billion in outstanding green bonds, and with a total investment of SEK 34.2 billion.

Vattenfall has decided to use green financing in its funding activities, and we expect all future long-term financing to be made under the Green Bond framework[1].

Green bond framework in brief

Vattenfall's current green bond framework consists of four eligible categories: Renewable energy, transmission and distribution of electricity, energy efficiency, and clean transportation. The climate research institute CICERO has provided a second opinion on the framework and issued the highest rating, "Dark Green".

Outstanding bonds

Our outstanding green bonds issued up to 2022 were emitted under the previous framework where the eligible categories were: renewable energy and related infrastructure, energy efficiency, electrification of transport and heating, and industry projects. Our latest hybrid bond issued in 2023 was issued under our new green bond framework.

Table of Investments under Vattenfall's Green Bond Framework[3,4]

Category / project / country	Type	Capacity (MW)	Est. CO_2 reduction[2] (ktonnes)	Vattenfall's interest (%)	Start/ compl.	Total investment	2023	2024	Total in MSEK
Renewable energy and related infrastructure									
Kriegers flak / Denmark	Wind offshore	604	156	100	2019/2021	7,600 MDKK	9,694		9,694
Princess Ariane / The Netherlands	Wind onshore	180	113	100	2018/2020	220 MEUR	1348		1,348
Princess Ariane / The Netherlands	Wind onshore	118	74	0	2018/2020	0 MEUR	0		0
Hollandse Kust Zuid 1-4 / The Netherlands	Wind offshore	1,509	1,265	51	2020/2023	2,600 MEUR	13,004	410	13,413
Vesterhav-projects / Denmark	Wind offshore	344	89	100	2022/2023	657 MEUR	6,068	1,131	7,199
Bruzaholm / Sweden	Wind onshore	139	2	100	2023/2025	2,360 MSEK	226	1,256	1,482
Velinga / Sweden	Wind onshore	67	1	100	2024/2026	1,182 MSEK	0	330	330
Battery Toledo / Sweden	Battery	55		50	2024/2025	43 MEUR		206	206
Industry projects									
HYBRIT / Sweden	Fossil-free steel	Pilot project	–	33	2019/ 2021	858 MSEK	480		480 MSEK
Total						**50,326**	**30,819**	**3,332**	**34,151**
Outstanding green bonds									**25,217**
Difference									**-8,934**

1. All external borrowing is done at corporate level with bonds issued by the parent company, Vattenfall AB, for general corporate purposes. Our bonds have a balanced maturity profile and Vattenfall does not refinance any particular bond maturities but rather takes into consideration the total financing need, i.e. cash from operations, existing liquidity, capex needs, and maturing financial payments such as bond repayments.
2. Production from onshore wind estimated to 2.6 GWh/MW installed, from offshore wind to 3.5 GWh/MW installed, and from solar to 1.0 GWh/MW installed. Resulting production is compared against grid average emission factors which will decline over time as the energy system decarbonises. Actual production emission factors and savings will vary. Other projects are compared to project-specific reference cases.
3. All numbers in the table reflect the status as per 31 December 2023.
4. The reporting of spend relating to green bonds has been updated from 2023 with the aim to be fully comparable with other, financial reporting of the projects. This is reflected in all active projects above, including for historic investments, i.e. accured expenses and not cash flow

Hjuleberg hybrid park

Battery Toledo

In southern Sweden, Vattenfall, in partnership with pension fund Skandia, is constructing two large-scale battery storage systems at the Höge Väg and Hjuleberg wind farms, creating Sweden's largest hybrid renewable energy asset. These projects aim to maximize the use of renewable energy by integrating wind power with battery storage, ensuring grid stability and balanced electricity supply.

Bruzaholm

Vattenfall has started the construction of the onshore wind farm project in Bruzaholm, Sweden. The 21 wind turbines will upon completion produce 460 GWh, which corresponds to the annual electricity consumption of around 91,500 households. The wind farm is expected to be commissioned in 2025.

Innovation

The demand for fossil-free energy, combined with the need for reliable and affordable energy, highlights the critical role of innovation. Technological advancements, new business models, and interdisciplinary approaches enable Vattenfall to develop solutions that are both sustainable and economically viable.

Our Research and Development (R&D) initiatives are central to driving innovation across the organisation, integrated in all business areas to drive our strategic goals. With over 150 experts, the R&D department explores new opportunities in the evolving energy landscape and engages in high-innovation projects to develop solutions that are proven in the lab or field.

Organised into interdisciplinary teams, our expertise spans from detailed component analysis to system and market-wide studies. R&D consists of two main units, a department focusing on digitalisation of the energy system, and a specialised facility in Älvkarleby for verification and emperimental activities. These efforts accelerate our journey towards fossil freedom, ensuring that new solutions are innovative, competitive, and seamlessly integrated into our business.

Specific projects and themes

Our R&D department is dedicated to driving innovation across four focus areas:

- **Sustainability** We are committed to addressing critical environmental challenges by focusing on biodiversity, sustainable materials, and circularity. Our goal is to create solutions that not only reduce our ecological footprint but also promote a healthier planet.
- **Flexibility** In an ever-changing energy landscape, flexibility is crucial. We are developing advanced flexibility services, including demand side management, Vehicle-to-Grid technologies, and hydrogen storage solutions. These innovations aim to enhance the adaptability and resilience of our energy systems.
- **Digitalisation** We are advancing technologies such as remote inspections, cyber security, digital twins, data analytics, and the application of generative AI. These digital tools are essential for improving efficiency, security, and decision-making processes within our operations.
- **Energy Systems** We are at the forefront of innovating in energy systems, focusing on comprehensive energy system analysis, sector coupling, and developing fossil-free heating solutions. Our efforts are geared towards creating a sustainable and reliable energy future.

By concentrating on these areas, our R&D department is poised to lead the way in creating innovative solutions that address the complex challenges of today and tomorrow.

Guiding fish with cellulose foam rods

Guiding fish to navigate past hydro power plants has long been a challenging task. Vattenfall and Cellufy are collaborating to test a new solution, using water-resistant cellulose foam rods that move in a way that directs the fish along the correct path.

Photo: HYBRIT

Storage for fossil-free hydrogen

A hydrogen storage was built using Lined Rock Cavern technology, and tested using optimised trading and operations against real electricity prices. This pilot plant, located 30 meters underground, stores hydrogen gas pressurized up to 250 bar. The fossil-free hydrogen is produced by water electrolysis using fossil-free electricity.

Digital model of Juktan hydropower plant

With the use of flying drones and underwater robots, a geometric Building Information Model (BIM) of the Juktan hydropower plant has been produced. This digital model will greatly aid in the design of the plant's reconstruction and allows project members to virtually visit the plant at any time. The model will also be beneficial throughout the plant's life span, enabling the tracking and inclusion of changes over time.

Illustration: Ramboll

Sustainable expansion of energy system

The southeastern districts in Uppsala municipality will be expanded sustainably to meet the growth in population. In SILVER, partially funded by the EU, the European Regional Development Fund and the Just Transition Fund, Vattenfall R&D collaborated with the municipality to investigate the future of heating in Uppsala through low-temperature district heating and seasonal thermal energy storage.

Our people

Our people are crucial for Vattenfall's purpose to enable the fossil freedom that drives society forward. Fossil freedom can only be achieved if the right people with the right competencies and skills choose to work with us. We strive to make sure that we all have a safe, inspiring and caring work environment.

We highly value diversity because we are convinced that a breadth of ideas is important, that open dialogue helps us to learn from each other, and that to perform we all need to feel welcome and be able to be ourselves at work.

Our commitment

At Vattenfall, we are committed to empowering, engaging, and developing employees so that everyone is able to perform at their peak, while ensuring a safe, inspiring, inclusive and caring workplace. We offer fair remuneration, flexible working hours as well as a challenging and international work environment with the opportunity to work with some of the best in the field. Vattenfall's culture rests on four guiding principles: Active, Open, Positive, and Safe. Our culture should empower us all to perform at our best and in a way that drives operational excellence and long-term value creation for the business. Our success is underpinned by a proactive and mature health and safety culture where our goal is zero accidents, injuries, or work-related illnesses. An integral part of our principles is creating a diverse and inclusive workplace. Vattenfall works actively for all employees to have the same opportunities and rights regardless of gender, ethnicity, age, transgender identity or expression, religion or other belief, disability, or sexual orientation. Everyone is included in working towards our goal of fossil freedom and contributes to building a more profitable and attractive company. We work hard to spread awareness, take concrete actions, and measure our progress. Read more about our Health & Safety or Diversity, Equity & Inclusion (DEI) strategy and results on pages 108 and 121, respectively.

Employer Rankings and Awards

We measure our progress through various rankings like Universum & Trendence. In 2024, Vattenfall ranked 8th (most attractive employer) in Sweden in the category MSc Engineering (9th place in 2023). In Germany in the same category, we jumped from place 43 in 2023 to 37 in 2024. In the Netherlands we were ranked 19th in the category STEM (20th place in 2023).

Also the Berlin Südkreuz office built and operated according to the WELL certification for maximum employee well-being, receiving a Platinum certification which is the highest possible level in the standard.

A people strategy fit for the future

There is a strong demand for talent and competence in the energy sector, and this trend continued in 2024. The driver is the accelerating energy transition but also the scarcity of critical competencies that are necessary to enable fossil freedom. Securing and retaining talent is central, and from a strategic perspective we are focusing on three key areas, attract, enhance, retain.

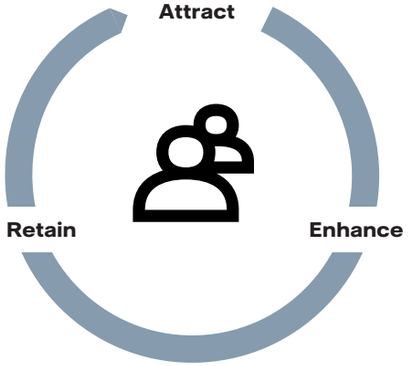
What our employees say

Each year, our employee survey My Opinion tracks our employees' degree of connection to Vattenfall's purpose and how each individual feels about their contribution. The results show that 88 per cent (85 per cent in 2023) of our employees would recommend Vattenfall as an employer. The survey also shows that Vattenfall's culture is collaboration and cooperation based, that there is a high level of trust and respect, and good team spirit. Compared to the peer norm in the survey[1], we score significantly higher on psychological safety and DEI measures. The engagement index, which is one of our five strategic targets (see page 12) was 82 per cent, which is 2 percentage points above 2023.

1. The peer norm is the weighted average of employee survey results from a cross-section of Energy and Utilities companies (Global Energy & Utilities), derived from recent client studies conducted by WTW.

Remuneration Policy

The Remuneration Policy outlines the general principles for compensation and benefits in Vattenfall, and is developed in line with the guidelines for Swedish state-owned companies. Remuneration at Vattenfall aims for equal pay for competence and performance and to drive an engaging and high-performing culture that will secure the critical know-how and talent in a competitive market. The main elements of the Remuneration policy are: Pay for job and performance, fair and gender equal pay, secure critical competence and talent, as well as to ensure compliance with local laws, regulations and collective bargaining agreements. The annual total remuneration ratio in Vattenfall is 22.2 percent (please refer to note 11, page 169).



See our people strategy focus areas and initiatives on the next page →

"After ten years at sea and then a number of years in offshore oil and gas, I can now tell friends and family that I live off the wind!"

Robin Vanderheijden,
Operations and Maintenance Manager
at Prinses Ariane Windpark, Wind

Read more about Robin's employee journey

"There has been a lot of support and encouragement to try different areas and roles to help me decide the direction I want to go in."

Anna Majer, Manager of the Order Management Team, Vattenfall IT

Read more about Anna's employee journey

People strategy – focus areas and initiatives

Attract

Attracting the right talent[1]

We want to target the people we need with a differentiated value proposition, recruiting presence, and by retaining leaders and experts.

Work with a purpose – we tackle issues that matter both for everyday lives and society at large.

Explore the full energy value chain with continuous opportunities to develop and grow in a challenging and supportive environment.

Open, fun, informal and diverse atmosphere to work in, where the brightest minds come to collaborate, and people are empowered to succeed.

Fostering an open, active, positive and safe learning culture where people continuously grow and develop.

Examples of graduate trainee programmes
- International Trainee Programme
- Nordic Nuclear Trainee Programme
- Framtidsprogrammet within Vattenfall Distribution.

Examples of opportunities for students
- Thesis projects
- Summer jobs
- Internships
- Placements for working students.

Enhance

Development through personal growth

We want to develop our people to secure key competencies and skills for the future and enable a culture of limitless learning.

Go beyond skills training and truly increase employee engagement and retention.

- Mentoring and coaching
- Learning platform with trainings, certifications, and other development opportunities
- Targeted initiatives for different stages in the employee journey.

Examples
- New as Manager Programme – for all new managers
- Leadership Focus Programme – gives managers guidance for their leadership
- Top Talent Programme – for potential successors to management functions
- Development Programme for Professionals – to foster professional development and self-leadership
- AI & Automation Change Journey – teaches leaders how to encourage the use AI tools
- HRBP Learning Journey – for HR professional's to serve as strategic business partners

Retain

A culture of performance and feedback

We focus on building a culture of performance and feedback. This supports our employees in encouraging each other to achieve new heights while maintaining a healthy work-life balance.

Fair compensation for high performance[2] demonstrating continuous improvements through feedback. **See page 29**

Trust is the basis of a strong feedback culture and requires an inclusive and psychologically safe environment.
- Team workshops
- Recurring discussions in team and leadership meetings.

Remote collaboration in a hybrid office environment.
State-of-the-art, flexible offices.

Mental and physical support – trained colleagues called mental first aiders that serve as a point of contact for employees experiencing mental health issues or emotional distress.

Reinforcement of culture through various culture-building initiatives.
- Young professionals network – Megawatt
- DEI-focused Diverse Energy Network. **See page 121**
- Annual group-wide innovation competition.

Work-life balance – Leaders promote employee well-being and are supported by our internal platform – Leadership Toolbox. Other initiatives that are being tested across the organisation are meeting-free Fridays and flexible workplaces.

1. All activities at Vattenfall in the area of recruitment and selection are carried out with diversity and inclusion in mind. In addition, we take responsibility for public security and safety by having a well-functioning and structured approach to pre-employment screening of all employees as part of our recruitment processes, as well as security vetting for the security classed positions.
2. 98% of Vattenfall's employees are covered by collective bargaining agreements.

Case story

Food and energy production co-existing in Vattenfall parks

Land and ocean space are valuable resources in Europe, sometimes claimed to be in competition for their use when different purposes aspire to the same areas. Vattenfall is now ensuring that production of food and energy that are essential for our living can co-exist.

80 per cent of Europe's land surface has been shaped by human activities: covered with buildings, roads, industrial infrastructure, or used for agriculture. With demand increasing for enough land to be provided to meet various spatial requirements, multifunctional land use. This is an opportunity supported by Vattenfall in a variety of ways.

"At two of Vattenfall's latest solar parks Tützpatz in Germany and Symbizon in the Netherlands, local acceptance is indeed very high," explains Claus Wattendrup, Head of Solar at Vattenfall.

"We must rethink how we use land efficiently to enable the energy transition, minimise our footprint, and secure more space for wild nature – all at the same time. Our approach here is to focus on multi-use of sites, while at the same time incorporating the equally important nature-inclusive considerations in our designs," says Helle Herk-Hansen, Head of Environment at Vattenfall. "In our distribution business, for instance, we work actively to enhance biodiversity in our power line corridors and in our hydro power business, we work on restoring rivers in northern Sweden to protect species in and along the rivers. At our offshore wind farms, we proactively protect marine species and habitats through features such as water replenishment holes in the monopiles and rock reefs on top of the scour protection."

Co-location of different energy facilities such as wind, solar, and batteries that utilise the same infrastructure, is another way of making responsible use of space. Vattenfall recently joined forces with the agricultural sector to share the land for dual purposes.

"We must rethink how we use land efficiently to enable the energy transition, minimise our footprint, and secure more space for wild nature – all at the same time."

Helle Herk-Hansen, Head of Environment

Sharing the space – solar and agriculture

Farmland covered 29 per cent of the total land in the EU in 2020 and critics of ground-mounted photovoltaic (PV) systems sometimes argue that they take up valuable farmland needed for food production. However, so far the impact of solar PV on farmland is negligible so, and even in the largest build-out scenarios, it is projected to cover only a very small fraction of land in the EU, preferably non-arable land or land with weak soil conditions.

In more southern parts of Europe, solar PV systems could even have a very beneficial effect, since they reduce evaporation. One of the biggest issues in renewable energy production is local acceptance, and this is where we see the biggest benefits of the combination.

"At two of Vattenfall's latest solar parks Tützpatz in Germany and Symbizon in the Netherlands, local acceptance is indeed very high," explains Claus Wattendrup, Head of Solar at Vattenfall. "These parks are based on the so-called agri-PV systems where agriculture and energy production co-exist. Agri-PV combines solar power output with food production and, as a bonus, it provides an additional source of income for farmers."

The Tützpatz site is one of the largest agri-PV projects in Europe to date and will feature nearly 150,000 solar modules with a total output of over 80 MW. It is divided into three sections that will serve different purposes. A significant portion of Tützpatz 1 will be used for poultry farming, potentially housing up to 15,000 chickens.

In the areas designated for the chickens, the solar modules are mounted at a steeper angle and higher elevation than conventional rows. The steeper angle prevents the chickens from flying onto the modules.

In the other two sections of the Tützpatz site, arable farming will continue. To enable this the solar panels are mounted on an axis, allowing them to follow the sun's path throughout the day for maximum power generation. A similar approach is being tested in the small 0.7 MWp Dutch Symbizon test agri-PV project, where the modules can be set to a very steep position during harvest and cultivation, allowing large agricultural machines to manoeuvre in between the rows.

At the agri-PV park Symbizon, the current set-up makes it possible to examine how various distances affect the shadow panels cast on the crops. Large-scale arable crops such as oats, potatoes, beans, onions, red beets, celery are grown between panels.

Wind, seaweed, and mussels – a sustainable mix

As wind turbines at sea cover larger and larger areas, Vattenfall started to investigate the potential of combining offshore wind with the production of seaweed and mussels. It is a pilot study at one of northern Europe's largest offshore wind farms – Vattenfall's Danish Kriegers Flak. How well the different seaweed species grow in waters with low salt contents will be tested to see how one effectively can combine the two very different industries. The project is carried out in collaboration with a range of partners, including universities, the Kerteminde Seafarm, and the public aquarium Kattegatcentret.

In the summer of 2024, the first seaweed was harvested at Kriegers Flak. Cultivation of seaweed does not only provide a sustainable food source, it can also improve the water quality through the uptake of nutrients and CO_2 from the surrounding marine environment.

Combining sectors can results in outcomes that are beneficial for both climate and biodiversity while reducing the pressure on terrestrial and aquatic land use.

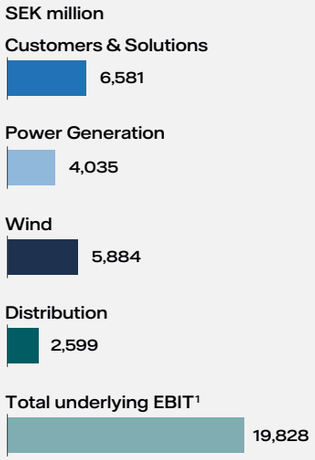
Seaweed grown at Kriegers Flak. Photo: Teis Boderskov

Operating segments

Our operating segments

Vattenfall reports on its activities based on four operating segments. These reflect the organisational structure – the business areas – except for the segment Power Generation, which is organisationally divided into the Business Areas Generation and Markets.

uEBIT per segment



1. Exclusions and other contributions to the underlying EBIT are included in the total but not illustrated here. See page 167 for exact breakdown per segment.
2. Excluding China as this market is generally inaccessible to western developers.

Customers & Solutions

Sales of electricity, heat, gas, energy services, and e-mobility charging solutions. Heat operations include district heating and gas-fired power plants.

- A market leader in Sweden with nearly 900,000 electricity contracts and 4.8 TWh heat sold, and in the Netherlands with around 3.2 million electricity and gas contracts and 1.6 TWh heat sold. A total of around 5.2 million electricity and gas contracts in Germany with a leading position as electricity supplier in Berlin and Hamburg
- Operates aound 66,000 e-mobility charging points in Sweden, Germany, and the Netherlands
- Heat production and distribution systems used as platforms to integrate other energy solutions, like district cooling, wind, and solar.

See more on page 35 →

Power Generation

Hydro and nuclear power operations, the maintenance services business, and optimisation and trading operations, including certain large business customers.

- Operates a portfolio with 5.5 GW nuclear power capacity in Sweden and 8.8 GW hydro power capacity across Sweden, Finland, and Germany
- One of Europe's largest producers of fossil-free electricity, with 37.9 TWh from nuclear power and 34.7 TWh from hydro power in 2024
- Provides professional asset optimisation services and market access, and is a leading player in commodities trading and power purchase agreements in northwestern Europe.

See more on page 37 →

Wind

Development, construction and operation of Vattenfall's wind farms as well as large-scale solar power and batteries.

- One of the largest producers of onshore wind power in Denmark and the Netherlands
- One of the largest producers of offshore wind power in the world[2]
- 17.4 TWh of electricity generated from 6.6 GW in operated capacity
- Strong wind power pipeline with 491 MW in construction and over 4.8 GW in mature stage development
- Forerunner in innovative solutions in solar and batteries, such as co-location.

See more on page 39 →

Distribution

Electricity distribution operations and provider of energy solutions via Power-as-a-Service (PaaS).

- Leading operator of regional electricity distribution grids and among the top three largest actors in local grids in Sweden
- Distributes over 50 per cent of the electricity in Sweden through the regional grid
- About 1.0 million business and private customers in Sweden

See more on page 41 →

High-temperature heat pumps to decarbonise homes

Vattenfall's journey to decarbonise its customers starts with existing homes. In the Netherlands, Vattenfall has developed a high-temperature heat pump which replaces traditional household gas boilers without major modifications. Furthermore, it uses CO_2 as a refrigerant which has a lower global warming potential than synthetic refrigerants used in other heat pumps. Installation is quick, typically within two days, and the total cost of ownership over 30 years is estimated to be lower compared to other heating solutions. A simple, innovative and natural-gas-free solution for Vattenfall's customers.

Operating segment

Customers & Solutions

Operations

Customers & Solutions provides electricity, heat, gas, and energy solutions to retail and business customers in northwestern Europe. The Heat operating segment is comprised of the heating and condensing businesses, including waste-to-energy plants, serving district heat customers in the Netherlands, Sweden and the UK, including Amsterdam, Uppsala, and Bristol.

Vattenfall is a market leader in Sweden – with 0.9 million electricity contracts and 3.1 TWh heat delivered, as well as in the Netherlands, with 3.2 million electricity and gas contracts and 1.6 TWh heat. We are among the leading energy suppliers in Germany with 5.2 million gas and electricity contracts. We are also a market challenger for sales of electricity in Finland and Norway, and in France for electricity and gas.

Vattenfall has installed 742 MW of charging point capacity throughout Europe, offering e-mobility charging solutions for people's homes and businesses, as well as public charging stations in our Swedish, Dutch, and German markets. Our flexible energy solutions support grid stability and the energy transition. In addition, we offer a broad range of decentralised decarbonisation solutions such as heat pumps and solar panels.

Business environment

Energy prices continued to decline in 2024 easing the pressure on consumers that followed after the 2022 energy crisis, also increasing the competition in our core markets.

District heating systems remain crucial for decarbonising buildings and integrating sustainable energy sources like geothermal, biofuels, and excess heat, as they reduce reliance on natural gas and lessen the pressure on the electricity grid. In 2024, warmer weather and rising biofuel costs influenced the market, along with regulatory efforts promoting price transparency and closer examination of sustainability claims.

In Germany and the Netherlands, heat pump adoption has been slower than expected, partly due to consumer and regulatory uncertainty, and the Dutch government is considering public ownership of heat networks.

Strategy and targets

Vattenfall aspires to be the decarbonisation partner of choice, supporting customers in the energy transition by offering fossil-free electricity and biomethane, low-carbon heating solutions grids, and decentralised energy solutions for businesses and consumers. The commitment remains strong to reducing emissions from heat, gas and electricity in line with our SBTi 2030 and net-zero 2040 targets.

The focus in heat operations is offering an attractive and reliable heat supply in the Netherlands, Sweden, and the UK. Vattenfall aims to become a leading operator of e-mobility charging points in northwestern Europe, and we are developing flexibility services to help customers optimise energy consumption and balance the energy grid.

Developments in 2024

Following the sale of the heat business in Berlin to the State of Berlin in May, the former Business Areas Heat and Customers & Solutions merged into a new Business Area, Customers & Solutions. In 2024, Vattenfall maintained a stable customer base in our core markets, despite selling the Danish consumer sales business Vindstød earlier this year.

The heat portfolio expanded in 2024 with technologies like e-boilers, third-party excess heat infeed (TPI), and thermal waste utilisation. In the Netherlands, a 150 MW e-boiler at the Diemen site was test-commissioned and an agreement was reached to develop sustainable heat sources for the Amsterdam heat network. As a result, the development of the Diemen bio-heat plant was stopped. New large-scale heating networks for existing buildings were paused due to market conditions. In the UK, a new energy centre, the Shawfair Energy centre, went into operation enabling existing and new housing to connect to low-carbon heat networks.

In the customer business, we advanced decarbonisation efforts in support of reaching our SBTi targets. We are increasing our fossil-free electricity share and investigating methods to secure additional fossil-free electricity certificates. In addition, we expanded our German heat pump installation network and secured our first biomethane offtake contracts in the Netherlands. As electrification progresses, we are increasingly developing and offering flexibility solutions to empower our business and customers to use their energy efficiently.

Our EV charging infrastructure continued to grow amounting to around 66,000 charge points, including 35,000 publicly accessible. In 2024, we also initiated partnerships with additional location partners such as Storebrand Fastigheter and Axfood in Sweden. Significant progress was made within public charging, having won three concessions in the Netherlands and our first public concession for the city of Hamburg, Germany.

Financial results 2024

Net sales decreased by 20% compared to 2023, while underlying operating profit decreased by 28%. This decline was partly driven by increased regulatory costs in the German customer business, and partly by lower gas prices impacting the heat business. The electricity production decreased due to the sale of the gas-fired condensing plant Magnum in the first quarter of 2023. The customer base decreased by 2% to 12 million contracts compared to the end of 2023, primarily due to the sale of Vindstød in Denmark in early 2024. Electricity sales decreased by 6% mainly due to lower sales volumes to resellers in France. Sales of gas increased by 14% mainly driven by more customers in Germany.

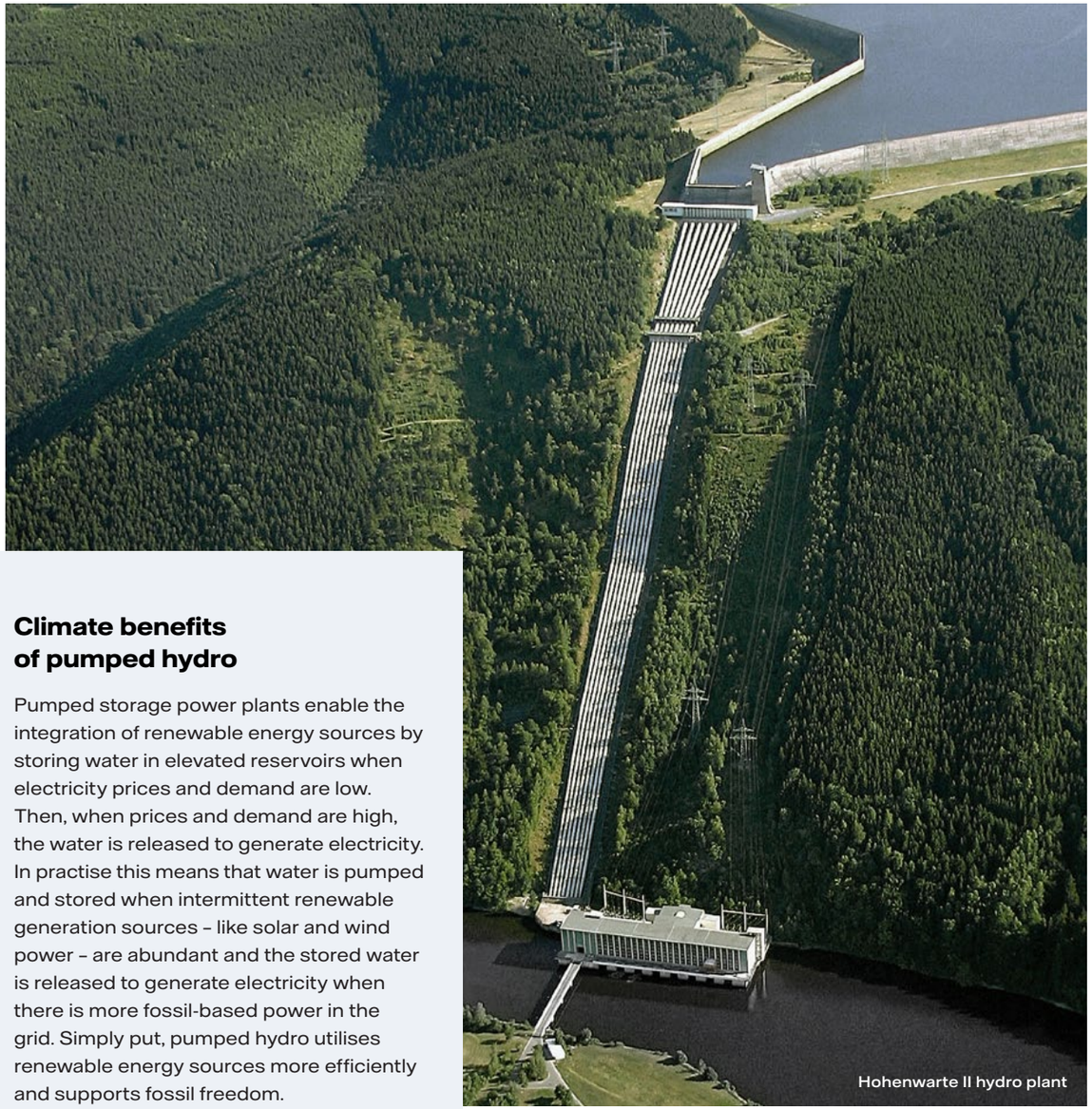
Key data

	2024	2023
Net sales (SEK million)	188,992	235,201
External net sales (SEK million)	175,530	215,626
Underlying operating profit[1] (SEK million)	6,581	9,203
- of which, heat operations	634	1,636
Electricity generation - TWh	6.9	7.3
- of which, fossil-based power	6.7	7.0
- of which, biomass, waste	0.2	0.3
Sales of electricity, TWh	106.5	113.5
- of which, private customers	27.3	27.6
- of which, resellers	27.0	36.3
- of which, business customers	52.2	49.6
Sales of gas, TWh	50.4	44.1
Sales of heat, TWh	4.8	4.8
Net Promoter Score (NPS) Absolute	+15	+11
Number of employees, (FTE[2])	5,507	5,055

1. Operating profit excluding items affecting comparability.
2. Full time equivalents.

Planned activities

- **Expand fossil-free electricity offering and continue developing portfolio of energy solutions**
- **Expand flexibility offering to give customers control over how and when to consume energy, reduce costs, integrate decentralised energy solutions, and balance the grid**
- **Further expansion of low-carbon infrastructure; District heat in UK, geothermal heat sources in the Netherlands, and reducing fossil-based feedstock in waste-to-energy plants in Sweden**
- **Growth in powering electrified transport by expanding our public charging network**
- **Continue to work with governments to address the impacts of incoming regulations.**



Hohenwarte II hydro plant

Climate benefits of pumped hydro

Pumped storage power plants enable the integration of renewable energy sources by storing water in elevated reservoirs when electricity prices and demand are low. Then, when prices and demand are high, the water is released to generate electricity. In practise this means that water is pumped and stored when intermittent renewable generation sources – like solar and wind power – are abundant and the stored water is released to generate electricity when there is more fossil-based power in the grid. Simply put, pumped hydro utilises renewable energy sources more efficiently and supports fossil freedom.

Operating segment

Power generation

Operations

The Power Generation operating segment comprises the Generation and Markets business areas. Business Area Markets maximises the value of Vattenfall's portfolio by optimising and dispatching, trading, hedging and sourcing for Vattenfall, third-party assets, and sales positions. Vattenfall's total installed hydro power capacity of 8,800 MW generated 34.7 TWh (36.1) of electricity. Business Area Generation produced a total of 72.6 TWh (73.5) of electricity in 2024 in our hydro power plants across the Nordics and in Germany, and our nuclear power plants in Sweden. At year-end, Vattenfall's Nordic reservoir levels were at 82 per cent (56 per cent), which is 25 per centage points above normal. The combined installed capacity of nuclear power was 5,500 MW and generation totalled to 37.9 TWh (37.4).

Business environment

Hydro and nuclear power are the two most important large-scale dispatchable fossil-free means of electricity generation in the Nordic markets. They face a rise in competition from renewable production. This shift also opens opportunities since the need for flexibility and storage increases as the proportion of wind and solar power in the system grows. Nordic electricity prices continued to fall in 2024, driven by lower continental gas prices, improved hydro conditions and increased wind and solar production. While continental electricity prices also declined due to cheaper gas, they remained double those in the Nordics. Meanwhile, higher wind and solar output across the continent led to increased short-term volatility, with a record number of negative price hours. In December, limited renewable production in Germany caused price spikes, resulting in greater volatility and increasing price area differences in southern Sweden, which is closely linked to continental markets.

Strategy and targets

Vattenfall aims to be a world leader in nuclear and hydro power operations with high safety, sustainability, and cost-efficient fossil-free electricity production. Safe decommissioning of closed nuclear reactors is also a key responsibility. Business Area Markets strive to increase process automation leveraging AI on secure and robust IT platforms. They drive decarbonisation by expanding fossil-free offerings, including biomethane, fossil-free power, and green hydrogen. To capture value from flexibility in for example our hydro power plants, and leverage our trading potential are key for robust and diversified revenue streams.

Developments in 2024

Hydro power

We continue to increase hydro power capacity through refurbishments, upgrades, and outage optimisation. From 2016 to 2024, we have increased capacity by roughly 800 MW in our existing plants. All Swedish hydro power plants will receive modern environmental

permit conditions in line with the EU water framework directive. The process was previously halted by the Swedish government to protect hydro power production. Now, a memorandum with proposals to strengthen the review of hydro power permits has been presented by the government. With more wind and solar expected, securing the flexibility and balancing power of hydro is vital for Sweden's electricity system.

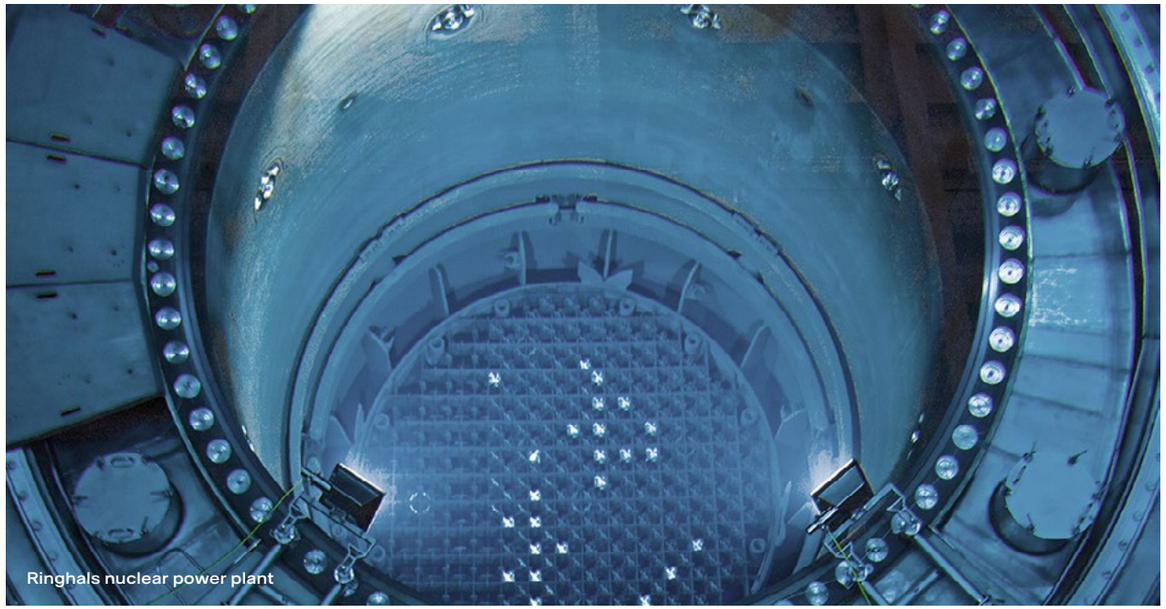
Nuclear power

Average availability for Vattenfall's nuclear power was 80.4 per cent (80.5). Overall, nuclear power generation remained unchanged and amounted to 37.9 TWh (37.4). Forsmark 1 finalised the testing for the power uprate during 2024 and aims to run permanently at the higher power level in 2025. The storage for low- and medium-level waste, SFR, will be out of commission for refurbishment in the period 2025–2035.

Markets

The rise in intermittent production leads to increased energy price volatility and higher importance of advanced forecasting and flexibility. In 2024, steps were taken to onboard third-party flexibility from batteries and implement new forecasting models to reduce imbalance costs. In the Netherlands, we support Dutch gas customers' decarbonisation journey by increasing biomethane sourcing. Markets also assist the industry in reducing their climate impact by concluding sizeable corporate Power Purchase Agreements (cPPA), such as with Salzgitter AG where Vattenfall will deliver fossil-free electricity from the Nordlicht I wind farm.

More information about partnerships, see page 22.



Ringhals nuclear power plant

Financial results 2024

Net sales decreased by 18% compared with 2023. The underlying operating profit increased, mainly as a result of a positive effects from price hedging in the Nordic region, which counteracted the lower electricity prices and, together with lower price area differences, contributed to a higher achieved electricity price in the Nordics. In addition, higher realised trading result had a contributing effect. This was partly offset by an increase in estimated costs for dismantling nuclear power plants and handling of spent radioactive fuel and nuclear waste in Sweden and Germany, as well as by lower generated volumes from hydro power (-1.4 TWh).

Key data

	2024	2023
Net sales (SEK million)	169,887	207,510
External net sales (SEK million)	44,906	37,760
Underlying operating profit[1] (SEK million)	4,035	3,075
Electricity generation (TWh)	72.6	73.5
Sales of electricity (TWh)	8.5	11.3
- of which, resellers	6.6	9.4
- of which, business customers	1.9	1.9
Gas sales (TWh)	0.6	0.4
Number of employees, (FTE[2])	7,903	7,474

1. Operating profit excluding items affecting comparability.
2. Full time equivalents.

Planned activities

- Dismantling activities at Ringhals Reactors 1 and 2 are to intensify in 2025
- Forsmark 1 completed the testing for the power uprate during 2024 and aims to run permanently at the higher power level in 2025
- Ongoing investigations and preparations for building new nuclear power capacity as well as prolonging the operational lifetime of our current Swedish fleet to 80 years
- Continued work towards world class dam safety, meaning excellence in both daily operation and in project performance, as well as knowledge sharing and continuous learning about dam safety within the organisation
- Expand biomethane and fossil-free power business to support customer decarbonisation. Increase hydrogen activities
- Grow contracting of third-party flexibility with focus on batteries. Increase support for investments in new Vattenfall flexible assets to capture value from flexibility
- Automate the steering of hydro, wind, solar and batteries and utilise machine learning and AI in forecasting and trading decisions
- Utilise our full trading and origination potential to help derisk the Vattenfall portfolio and diversify revenue streams.

Hollandse Kust Zuid offshore wind farm

Vattenfall and CIP were awarded IJmuiden Ver Beta

Zeevonk, a joint venture of Vattenfall and Copenhagen Infrastructure Partners (CIP), has been awarded a permit to build IJmuiden Ver Beta in the Netherlands. The project includes a 2 GW offshore wind farm, 50 MW floating offshore solar capacity and 1 GW system integration including an electrolyser. The project will generate state-of-the-art integrated energy, supporting further industry decarbonisation through green hydrogen and supplying 7 per cent of the Netherlands' electricity.

Operating segment
Wind

Operations

Vattenfall has a strong portfolio of offshore and onshore wind in combination with large-scale solar and batteries. We operate more than 1,400 wind turbines with a total operated capacity of 6.6 GW in Sweden, Germany, the Netherlands, Denmark and the UK.
In 2024, we increased our installed capacity by 34 per cent due to increased volumes from newly commissioned assets. In the spring, we commissioned the Hollandse Kust Zuid wind park, with enough capacity to supply electricity to 1.5 million Dutch households.
In Denmark, we inaugurated the Versterhav Nord and Syd projects, which generate electricity to supply 350,000 Danish households.

Business environment

The energy market remained uncertain during 2024 due to political elections in our core markets and the European Union, which presented a mixed picture regarding meeting decarbonisation targets and national pathways. Simultaneously, wind development costs kept increasing. Decreasing electricity prices have led to reduced investments industry-wide, slightly offset by decreasing interest rates. At the same time, global demand for electricity is expected to increase by up to one third by 2030 and renewable energy is set to dominate the expansion long term. Battery storage solutions experienced high growth due to increased need for flexibility in the European energy grids. Additionally, interest rates are coming down, allowing for more investments.

Strategy and targets

We accelerate Vattenfall's journey to fossil freedom through the power of renewables. By developing, constructing and operating offshore and onshore wind farms, as well as large-scale solar PV with co-located batteries, we deliver fossil-free electricity to our customers and partners. In offshore wind, our mid-term strategic priority is to deliver our flagship projects Nordlicht I & II in Germany, and Zeevonk in the Netherlands. In onshore wind, we balance our renewable growth ambitions and industry decarbonisation needs. For solar and batteries, we believe that hybrid development of large-scale solar and co-located batteries is the "new normal", to increase resilience and protect against lower prices.

Developments in 2024

Offshore wind

In March, Vattenfall completed the sale of the Norfolk Offshore Wind Zone to RWE. The agreed purchase price corresponded to an enterprise value of GBP 963 million. Vattenfall signed a purchase agreement with BASF for a 49 per cent stake in the German offshore wind farms Nordlicht I & II. Together with BASF, we have entered a partnership with Vestas for the supply and service of the Nordlicht projects wind turbines, which will be partially manufactured using low-emission steel reducing our carbon footprint by 66 per cent in those components. Vattenfall and BASF also signed a contract with Havfram for low-carbon transport and installation

services. In September, Vattenfall paused the development of the offshore wind project Swedish Kriegers Flak until further notice due to unviable investment prerequisites in Sweden. Lastly, Vattenfall signed a multi-year framework contract with Van Oord for turbine servicing, a substantial step forward in Vattenfall's operational efficiency.

Onshore wind

Vattenfall received the final permits for the adjacent Norrbäck and Pauträsk wind projects in Sweden with a maximum capacity of 530 MW, making them Vattenfall's largest land-based wind power project to date. In the UK, the 77 MW onshore wind farm Clashindarroch II secured a government price guarantee, Contract for Difference, in the latest allocation round, enabling Vattenfall to take a major step towards supporting the UK Government in delivering on their net-zero targets by providing low-cost renewable electricity to homes and businesses. In March, we finished construction of Windplan Blauw in the Netherlands. Other onshore projects such as Bruzaholm (139 MW) and Velinga (60 MW) are currently under construction.

Large-scale solar PV and batteries

Vattenfall made final investment decisions (FID) for its first hybrid solar and battery park in Neubrandenburg, Germany (55 MWp solar, 25 MW/55 MWh battery), and for the Juliusburg Krukow solar farm, backed by a PPA with Evonik. Permits for 11 projects (473 MWp total) were secured across Germany, the UK, and the Netherlands, with six subsidies won in Germany and the UK. Vattenfall also introduced its first community participation model in Silberstedt, Germany, and opened the Symbizon Agri-PV park in the Netherlands.

Hybrid park Haringvliet, the Netherlands

Financial results 2024

Net sales decreased by 15% compared to 2023. The underlying operating profit decreased by 10% driven by lower electricity prices, higher costs and higher depreciation, mainly due to new assets. Positive effects come from higher volumes from the Hollandse Kust Zuid and Vesterhav offshore wind farms, higher subsidies for German offshore wind farms and some availability warranty payments. Electricity generation increased by 23% driven by Hollandse Kust Zuid and Vesterhav Offshore wind farms.

Key data

	2024	2023
Net sales (SEK million)	21,585	25,373
External net sales (SEK million)	4,174	8,537
Underlying operating profit[1] (SEK million)	5,884	6,544
Electricity generation (TWh)	17.1	13.8
Number of employees, (FTE[2])	1,816	1,708

1. Operating profit excluding items affecting comparability.
2. Full time equivalents.

Planned activities

- **Collaborate with suppliers to mitigate supply-chain challenges**
- **Foster partnerships with industries for decarbonisation and a fair and just transition**
- **Implement and enhance sustainability criteria in procurement tenders**
- **Evaluate environmental impacts, mitigation and biodiversity enhancement of wind and solar farms through our Environmental R&D program**
- **Engage and inform decision makers and relevant stakeholders on renewable energy risks and opportunities to facilitate a swift transition in a sustainable (environmental, social and economic) manner**
- **Enhance health and safety practices for both physical and mental well-being**
- **Promote a diverse and inclusive workplace for employee empowerment.**

New approach for faster grid expansion

Vattenfall Distribution is accelerating its grid expansion in Sweden by introducing a new approach, which enables shortened lead times in regional grid projects by up to two years. By performing several work steps in parallel, such as starting detailed planning and land access permits while applying for concession, Vattenfall Distribution can shorten the lead time for regional grid projects that currently take up to 10–12 years to complete. This new method speeds up grid expansion which is crucial for the energy transition.

Operating segment
Distribution

Operations

Operating segment Distribution mainly consists of Vattenfall's electricity distribution operations in Sweden and the UK, and its offerings within Power-as-a-Service (PaaS). It is primarily a regulated business supervised by national regulators.

In Sweden, Vattenfall owns and operates around 139,000 km of electricity grids, primarily located in the north and central parts of the country and has about one million business and private customers in Sweden. Vattenfall is the largest owner and operator of regional grids and one of the three largest owners of local grids. The PaaS offering, which is a part of the unregulated business, enables electrification and facilitates the expansion of renewable production by acquiring, building, owning, and operating electrical infrastructure.

Business environment

The latest forecast indicates that Swedish electricity demand will more than double by 2045 – from around 140 TWh in 2020 to about 330 TWh by 2045[1]. The increase in demand is primarily driven by the industry and transportation sectors' need for decarbonisation. Simultaneously, renewable electricity production, which needs to be connected to the grid, is forecasted to be at least double by 2030[2]. Furthermore, major parts of the regional electricity grid were built in the 1960s–70s, therefore large investments are needed for a robust and reliable distribution of electricity.

1. Energiföretagen Sverige, Sveriges elbehov 2045 (2023).
2. Energimyndigheten, Scenarier över Sveriges energisystem 2020 (2021).

The pace of the energy transition is highly uncertain and dependent on a range of factors, including regulations as well political and geopolitical developments. Increasing production from renewables and national energy security concerns suggest an increased focus on robust electricity grids. The development of new regulations and legislation within the energy sector will also impact our business and operations.

Strategy and targets

A robust and cost-efficient grid is a prerequisite for the energy transition. By accelerating the expansion and renewal of the electricity grid, we enable the energy transition for customers and society. Our aim is to enable distribution of twice as much electricity in our grid by 2030 while maintaining 99.99 per cent continuity of supply. To achieve this, efforts focus on optimising our operations whilst continuing to develop competencies and securing the value chain. Working on alleviating bottlenecks like regulation, permitting processes and contractor availability will be key to ensure long-term and stable market conditions.

Our strategy is deeply rooted in the sustainability agenda, contributing to a just energy transition that benefits individuals, society, and the environment. To identify areas where we can improve, we follow up on our own performance and conduct supplier dialogues, inspections, and audits. Going forward, our focus will be on enhancing biodiversity, reducing CO_2 emissions from our operations and supply chain, and ensuring the health and safety of our contractors and employees.

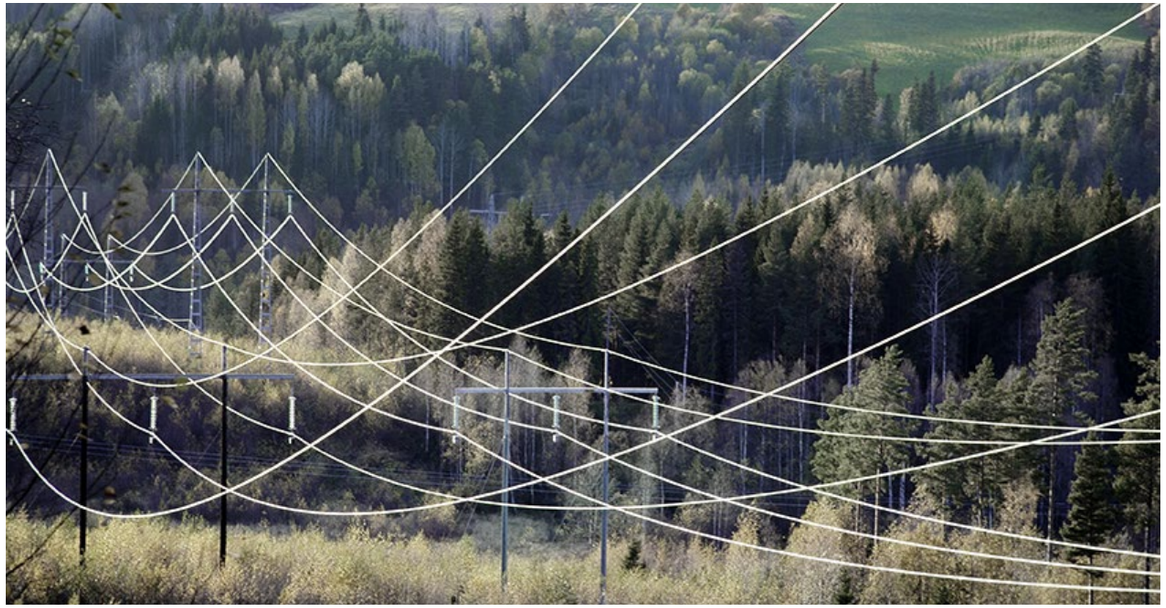
Developments in 2024

Requests for regional and local grid connections, including consumption and generation, have increased significantly with exponential growth in recent years. In 2024, regional grid connection requests remained high, driven by increased connection requests for production and energy storage. Local grid requests also remained high, becoming more complex and time-consuming requiring an increased degree of reinforcement of the electricity grid. However, requests for connection of generation, including solar panels, declined slightly, reflecting changed market conditions for customers.

Accelerating electricity grid expansion is necessary for the energy transition. Therefore, Vattenfall continued to increase investments from SEK 6 billion in 2023 to SEK 10 billion in 2024. Additionally, we have installed new smart meters for our 900,000 customers, providing them with better oversight and control of their electricity use.

The legal proceedings regarding the electricity grid companies' revenue cap for 2020–2023 continued during the year. The previous decisions on revenue cap regulation that was referred back to the Swedish Energy Markets Inspectorate by the Administrative Court have now been finally determined by the authority. The biggest change compared to the previous decisions is the increase in weighted average cost of capital from 2.16 per cent to 3.39 per cent (real before tax), a central parameter for calculating revenue frames.

In 2024, we have signed several Power-as-a-Service (PaaS) contracts within the manufacturing and steel industries. PaaS is an established business model in Sweden.



Financial results 2024

Net sales increased by 24% compared with 2023. The underlying operating profit increased by 70%, which is mainly explained by higher revenues. The comparison is to a great extent affected by the temporary reduction of the electricity grid tariff during the second half of 2023. The higher revenues were partly offset by higher costs for the transmission grid as well as higher operating expenses and depreciation, primarily as a result of growth.

Key data

	2024	2023
Net sales (SEK million)	13,851	11,139
External net sales (SEK million)	13,229	10,445
Underlying operating profit[1] (SEK million)	2,599	1,526
Investments (SEK million)	10,245	7,000
SAIDI[2]	123	132
SAIFI[3]	1.9	1.9
Number of employees, (FTE[4])	1,863	1,340

1. Operating profit excluding items affecting comparability.
2. SAIDI: System Average Interruption Duration Index. Refers to Sweden.
3. SAIFI: System Average Interruption Frequency Index. Refers to Sweden.
4. Full time equivalents.

Planned activities

- **Major annual investments of in average SEK 8-10 billion until 2030 in regional and local grids to meet high growth in electricity demand, connect new customers, and increase quality of delivery**
- **Improve grid robustness, resilience and continuity of supply by continuous reinvestments and maintenance of the electricity grid**
- **Advance solutions for more efficient grid usage including new types of grid tariffs and load steering to avoid high peaks**
- **Continue roll-out of biodiversity enhancement measures that benefit bees and butterflies at substations**
- **Continue to improve health and safety performance by conducting pilots for critical control management**

Case story

Sustainable procurement helps achieve emission targets

As emissions from our activities decline, the emissions from supply chain and customers become increasingly important in Vattenfall's goal to achieve net-zero CO_2 emission across the whole value chain by 2040.

Our net-zero target consists of three scopes from the Green House Gas (GHG) Protocol that distinguishes between the different origins of the greenhouse gas. Scope 1 includes emissions directly resulting from our own activities, while Scope 2 covers indirect emissions from energy purchased and used for Vattenfall's activities. Scope 3 is about all the remaining GHG emissions related to our value chain such as the emissions associated with the goods and commodities that we purchase from suppliers and the emissions our customers release as a result of using our products.

"We are actively working with our suppliers to integrate sustainability and innovation into projects, such as creating low-carbon charging stations from steel and forming end-of-life partnerships", says Morten Movig, Central Category Management.

To reduce Scope 3 emissions, Vattenfall can decarbonise its products and services for customers. Additionally, we can actively engage with suppliers and include sustainability requirements in tenders to ensure the procurement of decarbonised goods and services.

In 2021, Vattenfall initiated the Supplier CO_2 Reduction (SCORE) project with the purpose to reduce our suppliers' greenhouse gas emissions by 50 per cent by 2030, as a milestone on our path to net zero by 2040. The project is part of Vattenfall's Sustainable Supply Chain Roadmap (SCCR) through which we aim to further integrate sustainability into our sourcing and business practices. The following examples provide insight into how we do this in practice.

Building a new high-voltage line

Distribution applies a qualitative sustainability assessment in tenders for major construction projects. Eric Nilsson, Procurement Director, explains: "We have an established method where the tenderer receives a deduction on the evaluated price if they use materials or fuel with lower CO_2 intensity. The price deduction is dependent on the kilograms of CO_2 equivalents reduced compared to industry average."

A good example is the new high-voltage overhead line where the winning bid chose to use renewable fuels for the construction machinery. They also used low-carbon concrete and recycled aluminium in the conductors to reduce the CO_2 footprint of the project. "All in all, this is expected to lead to a realised reduction of about 15,000 tonnes of CO_2 equivalents compared to using the industry standard for comparable fuels and materials," Nilsson says.

Leading operator of charging points

"Sustainability is at the heart of our three core markets: Sweden, the Netherlands and Germany," says Andra Marinete, Consultant at Vattenfall's Value Management & Governance, E-Mobility. Procurement plays a key role here. "One of our strategic focus areas is to become a leading and sustainable charge point operator, from understanding the climate impact to ensuring that we provide fossil free energy," says Marinete.

By defining clear sustainability questions we aim to provide insights into the actual CO_2 emissions of each charging station. We also asked all our hardware suppliers about the quantity and type of recyclable materials. "Once all the data has been analysed, we will begin strategic discussions with the suppliers on how to reduce CO_2 emissions," says Morten Movig, Central Category Management.

"Besides this we are actively exploring with our suppliers how to integrate sustainability and innovation into projects. For instance how we can make a CO_2-neutral charging station from steel and establishing end-of-life partnerships," says Movig.

Construction of new wind turbines

The tender for the Bruzaholm wind farm in southern Sweden also called on the creativity of potential suppliers. "We asked them to come up with ideas and solutions for sustainable procurement in addition to their bids for the construction of the wind farm," says Arthur Besse, Head of Onshore Wind Procurement. "The freedom we give them in doing so not only saves us a lot of work, but we also receive ideas we did not think were possible."

The final winner came up with three good ideas. "The first one was simple," explains Philip Millar, Balance Plant Procurement Manager at Business Area Wind. "Switching from regular diesel to biodiesel is slightly more expensive but has a very good climate impact." The second idea was to use low-carbon concrete for the foundation of the wind turbines. "We were lucky that there was a production facility nearby that could supply low-carbon concrete at almost the same price as normal concrete."

The third idea was to use recycled plastic pipes for cable ducts and signage. "That generally has a very small CO_2 impact but was very easy to implement and cost very little."

"It is not always about the size of the impact or the price," Besse concludes. "In this project, I saw a small shift between the traditional employer-contractor relationship and the true partnership concept with the contractor. On the supply side, partnerships are not that common, which makes this a great success to be proud of in that sense."

Collaboration

Vattenfall collaborates with its suppliers to make decisions in the procurement process in line with net zero targets. We encourage suppliers to disclose their climate impact, for example through the Carbon Disclosure Project (CDP). By being a member of the First Movers Coalition (FMC), we demonstrate our commitment to increasing the share of emerging decarbonisation technologies that are crucial to the net-zero transition of our procurement practices.

Risk Management

Stor-Rotliden onshore wind farm

Enterprise Risk Management

Our industry is at the centre of societal development, national politics, and global geopolitics – all areas subject to volatility. Operating in this environment means that we cannot avoid all risks, so instead we must be equipped to manage them.

At Vattenfall, we apply a conscious and balanced approach to risk-taking, assessing business transactions from both profitability and risk perspectives. Our risk management practices are managed based on a sound risk culture supporting our short-term objectives while achieving our long-term strategic goals. In accordance with the Swedish Corporate Governance Code and the Risk Policy, adopted by the Board of Directors, Vattenfall's risk management framework ensures thorough identification and management of acceptable risk exposure.

Enterprise Risk Management
The purpose of Enterprise Risk Management (ERM) is to manage risks to which Vattenfall is exposed in order to support value creation, ensure risk awareness, and balance risk against reward. ERM at Vattenfall involves analysing and monitoring all types of risks. It is based on the risk management standards of the Committee of Sponsoring, Organisations of the Treadway Commission (COSO) and the "three lines" model (see page 64).

The objectives for each business unit are based on Vattenfall's strategy and are established during the business planning process. When setting these objectives, risks that might hinder their achievement are identified. In our risk management process, risks are quantified and analysed with respect to both financial and non-financial consequences. These risks are then assessed against our risk tolerance, and decisions are made regarding suitable risk measures. Furthermore, each business area's most important risks and risk management measures are followed up as part of the regular monitoring. After aggregating the risks, a composite overview of our risk situation is produced. The potential financial impacts are linked to financial key data used for steering of the company. Information is provided on a regular basis to the Executive Group Management and the Board of Directors.

Enterprise Risk Management process

Strategy & objective setting
What are we trying to achieve?

Event identification
What might affect the achievement of Vattenfall's strategy and objectives?

Risk assessment
Which of these events are the most important?

Risk tolerance setting
What level of risk is acceptable?

Risk response
What should we do about it?

Review activities
Did it work?

Reporting & communication
What is the status?
Who needs to know about it?

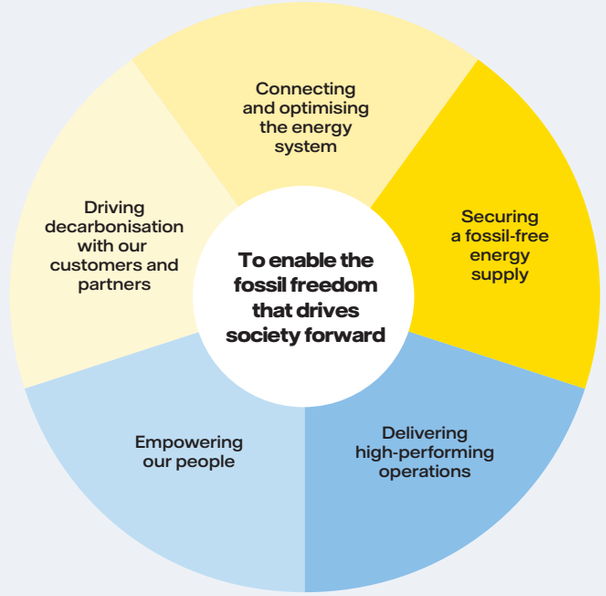
Strategic and non-financial risks

While ambitious climate goals are locked-in on EU level and the political commitment is still strong, the pace of the transition remains uncertain. Vattenfall faces a challenging market with a continued instable geopolitical environment, uncertain economic development and outlook in Europe, as well as uncertainties around technology costs and availability. The energy sector is affected by the pressure on international trade relations and strained supply chains. Our risk/return profile is changing with the ongoing growth in intermittent renewable generation and continuous changes in the energy market structure (for example decentralisation, electrification, and sector coupling). The profitability situation in new renewable energy projects is increasingly challenging, especially in offshore wind, but also for other new fossil-free energy investments. It is widely known that more investments in fossil-free power generation, distribution and storage are essential for the European energy transition, as well as proper energy management systems. The growing demand for fossil-free electricity and flexibility presents not only risks but also opportunities for Vattenfall, which influence both our operational as well as our strategic activities (see also CSRD disclosures, the material opportunity of E1 on page 87). It is essential to understand our markets well and prioritise our investments carefully. In this chapter we focus on the risk dimension. Long-term market price risk remains one of our largest risks (our risk management regarding short-term and mid-term market price risks is described on page 54). The relative importance of market price risks is increasing for Vattenfall because of the significant changes in subsidy schemes – especially evident within offshore wind. To mitigate this risk, we are seeking to strike an optimal long-term balance between the various portfolio components. We believe that our integrated business model offers a diversified risk profile, as value can shift from a business unit in one part of the value chain to another over time. In addition, the combination of power generation and customer sales offers a natural hedge. Furthermore, part of our revenues come from stable, regulated activities, such as electricity distribution, which improves the overall risk picture even further.

Our approach to sustainability risks

Management of Environmental, social, and governance (ESG) risks are seen as an integral part of the Enterprise Risk Management (ERM) framework of Vattenfall. Additionally, Vattenfall conducted a Double Materiality Analysis (DMA) for ESG topics during 2024 in accordance with the Corporate Sustainability Reporting Directive (CSRD) and the application requirements in the European Sustainability Reporting Standards (ESRS) which includes an assessment of sustainability related risks and opportunities that are financially material to Vattenfall. Four material environmental risks were identified in the DMA, which are also highlighted in the overview of strategic and operational risks below. A detailed description of the DMA is included in the sustainability statement (page 84). The process and result of the DMA as well as the overall efforts to comply with the new reporting standards, will form the basis for continued improvement related to the management of sustainability-related risks and opportunities in our strategy and governance processes.

The Vattenfall strategy wheel illustrates our integrated business model and what is needed to succeed with our strategy.



Learn more on page 48

Vattenfall has a robust governance in place to create transparency on potential risks at an early stage and to take suitable measures to deal with them. There is no recognisable threat to the company's existence in 2025.

In the below sections, we have highlighted key risks and related actions per strategic wheel area. The main risks are presented as well as how they are managed. Arrows indicate how the risk for Vattenfall developed during the year. Many of the risks are directly interrelated with corresponding opportunities. For example, a failure to decarbonise our asset portfolio at the pace required by our stakeholders is a risk that might result in loss of customers. A successful asset transformation, on the other hand, could be a competitive advantage as it will strengthen our reputation as a decarbonisation partner.

Overview of risks

The graph outlines key risks split by strategic focus area and the time horizon for when each risk might start to have an impact on Vattenfall.

Risks related to

A. Driving decarbonisation with our customers and partners

1. Loss of market share and customers.
2. Insufficient regulatory framework to stimulate our (industrial) customers to decarbonise fast enough.
3. Technologies to decarbonise do not reach competitiveness.
4. Customers unable to pay their invoices or even going bankrupt.

B. Connecting and optimising the energy system

5. Inability to ensure satisfactory security of supply because of grid constraints.
6. Inability to adapt appropriately to intermittent electricity generation and flexible demand.
7. Continued regulatory instability (for example distribution revenue frames in Sweden).

C. Securing a fossil-free energy supply

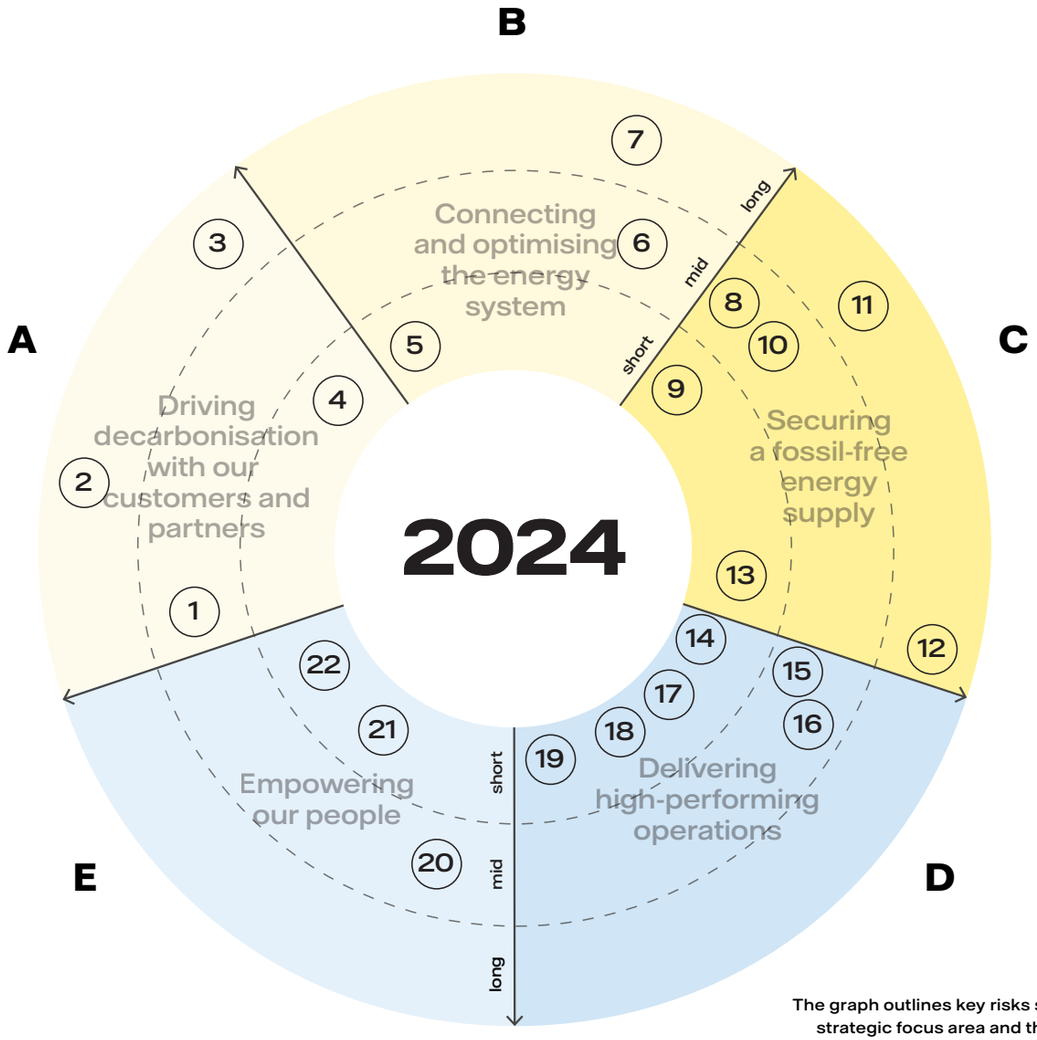
8. Political risks such as changes in energy market design.
9. Reduction of electricity consumption due to macroeconomic downturn.
10. Investments in renewables without subsidies add long-term market risk.
11. Not being able to expand the fossil-free generation due to difficulties permit processes.
12. Pressure on economic feasibility of projects due to surging prices for input material.
13. Not reaching growth targets due to sustainability risks in the supply chain.

D. Delivering high performing operations

14. Operational asset risks (e.g. power availability, dam failure, hazardous emissions).
15. Political risks due to new or changing regulations.
16. Project execution risk because of high number of large projects.
17. Not complying with regulations (for example GDPR, LKSG).
18. Security and Resilience risks (including cyber risks).
19. Fraud and unethical conduct.

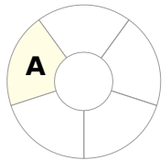
E. Empowering our people

20. Inability to secure the competence needed.
21. Work environment risks (for example accidents, incidents, mental health).
22. Inefficiencies and inability to ensure safe working environment due to pandemic risk.



The graph outlines key risks split by strategic focus area and the time horizon for when each risk might start to have an impact on Vattenfall.

Long: > 5 years
Mid: 1–5 years
Short: < 1 year



A. Risks related to driving decarbonisation with our customers and partners

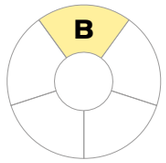
We promote electrification and decarbonised energy solutions in areas where we have a competitive advantage. We do this together with our customers and partners.

Risks	Trend	Term
1 Risk of loss of market share and customers because of inability to meet expectations of customers and partners. This risk also refers to the environmental risk of negative effects due to greenhouse gas footprint as described in the sustainability statement on page 89.	→	Mid
2 Risk of insufficient regulatory frameworks to stimulate our (industrial) customers to decarbonise fast enough.	→	Long
3 Risk that technologies to decarbonise with hydrogen or electricity do not reach cost competitiveness.	→	Long
4 Risk that customers are unable to pay their invoices or even go bankrupt.	→	Short

Trend ↗ Increase → Unchanged ↘ Decrease
Term The time horizon for when each risk might start to have an impact on Vattenfall; short, mid, or long.

Risk management and activities 2024

- Reducing our cost-to-serve and maintaining economies of scale through digitalisation and by growing our customer sales business (see page 35)
- Supplying large customers with renewable energy and supporting them in achieving their sustainability goals. For example, Vattenfall sold 49 per cent of Nordlicht I & II wind farms to BASF. Vattenfall is also offering corporate Power Purchase Agreements (PPAs), for example we signed one with the steel company Salzgitter AG in 2024 for fossil-free electricity from the Nordlicht I offshore wind farm. Deliveries are planned from 2028. For more information see pages 39 and 40
- Partnering with industries to electrify and decarbonise industrial processes for example HYBRIT. Another example is the new cooperation with CemVision to supply near-zero emission cement
- Contributing to the phase-out of fossil fuels in the entire transport sector by using our fossil-free electricity and developing charging infrastructure
- Developing energy solutions and expansion in e-mobility charging solutions. For example, in the Netherlands, Vattenfall won the tender for Limburg and Noord-Brabant (22,000 charging points), the Hague City Council (5,400 charging points) and the Amsterdam Metropolitan Region (35,000 charging points, in partnership with two other operators, Shell lubitricity and TotalEnergies
- To combat the risk of economic downturn and unfavourable subsidies legislation, the Dutch C&S subsidiary Feenstra started a pilot selling home battery solutions to a select group of customers.



B. Risks related to connecting and optimising the energy system

We are focusing on maximising the value of flexibility and promoting a stable and cost-efficient grid infrastructure.

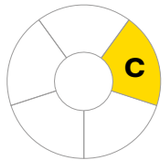
Risks	Trend	Term
5 Risk of inability to ensure satisfactory security of supply because of grid capacity constraints, extreme weather conditions, or delays in permitting processes for building new grids. This risk also refers to the environmental risk of challenges related to the roll-out of the energy transition as described in the sustainability section on page 87.	→	Short
6 Risk of inability to adapt appropriately to new technologies (including process automatisation) to cope with the increasing share of intermittent electricity generation and flexible demand.	→	Mid
7 Risk of continued regulatory instability regarding the revenue frames for electricity distribution in Sweden.	→	Long

Trend ↗ Increase → Unchanged ↘ Decrease
Term The time horizon for when each risk might start to have an impact on Vattenfall; short, mid, or long.

Risk management and activities 2024

- Development of smart solutions that can reduce the frequency and duration of outages and enable customers to monitor and control their energy consumption
- Implementation of load steering and new tariffs that support flexibility
- Influencing work related to changing regulation to speed up permitting processes
- Complementary solutions such as Power-as-a-Service help bridging the gap until new infrastructure is in place
- Further development and implementation of algorithms for physical planning, optimisation, and dispatch areas to support management of flexibility
- Implementation of solutions for a more efficient use of the power grid (for example under the Zeevonk joint venture, solar and wind is planned to share the same grid connection).

Stornorrfors hydro power plant



C. Risks related to securing a fossil-free energy supply

Our focus is on growth in renewables, maximising the value of our existing fossil-free assets and implementing our CO_2 roadmap.

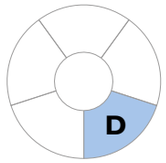
Risks	Trend	Term
8 Political risks such as changes in energy market design due to challenges in the energy market caused by networks stressed by increasing intermittent generation and potentially increasing costs of electricity.	→	Mid
9 Risk of reduction of electricity consumption due to macroeconomic downturn.	↗	Short
10 Risk that investments in renewable fossil-free generation without subsidies add long-term market risk.	→	Mid
11 Risk of not being able to expand the fossil-free generation as planned because of difficulty in securing permits and in new permit processes for example due to national security reasons or biodiversity impacts (for example because of environmental risks like negative impact on species as described on page 86.)	→	Long
12 Risk that economic feasibility of projects come under pressure because of surging prices for input material and procurement risk, including risk of increasing competition for critical and low carbon materials for construction of fossil-free assets. This risk also refers to the environmental risk of negative effects due to scarcity of resources as described in the sustainability section on page 101.	→	Long
13 Risk of not reaching growth targets (for example in the solar business) due to sustainability risks in the supply chain, such as suppliers failing in sustainability screening.	→	Short

Trend ↗ Increase → Unchanged ↘ Decrease
Term The time horizon for when each risk might start to have an impact on Vattenfall; short, mid, or long.


Forsmark nuclear power plant

Risk management and activities 2024

- Directional decision to extend the operating time of Forsmark and Ringhals nuclear power plants (see page 15)
- Investigating the possibilities to deploy Small Modular Reactor (SMR) technology as well as analysing the conditions for Large Scale Reactors (LSR)
- Working actively together with the Swedish state for a risk-sharing model to ensure that prerequisites are in place for new nuclear in Sweden
- Vattenfall sold the entire district system and heat business to the State of Berlin (see page 10)
- Official inauguration of the two Danish offshore wind farms Vesterhav Nord and Vesterhav Syd (see page 39)
- In the Netherlands, the projects Echteld Spoorstraat, Sas van Gent, Goirle and Bloessemlaan Zeewolde are expected to be commissioned
- In the Netherlands, Zeevonk, a joint venture between Vattenfall and Copenhagen Infrastructure Partners (CIP) has applied for and been awarded a permit to build wind farm IJmuiden Ver Beta in the Netherlands (offshore wind farm, floating offshore solar farm and a large-scale electrolyser at the Port of Rotterdam)
- CPPAs and LTAs to reduce medium- and long-term market risk as well as strong focus on high-performing operations (see section below)
- Influencing work addressing the need for shorter permitting processes
- CO_2 emissions from our suppliers to be cut by half from 2020 to 2030 in the capital goods category (see page 91) and sustainability criteria to be used for tenders. For instance, via sustainable procurement for the Swedish Bruzaholm wind farm that reduces the carbon footprint from construction to a minimum
- Continued improvements of sustainability performance, including human rights action plan, environmental action plan, and sustainable supply chain roadmap (see pages 106 and 103)
- To ensure diversification of the supply chain and availability of resources, we cooperate with suppliers and peers, for example through First Movers Coalition



D. Risks related to delivering high-performing operations

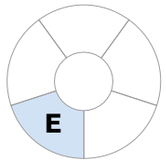
We are focusing on being both competitive and cost-effective and leveraging opportunities in digitalisation. We are also taking social and environmental responsibility throughout our value chain.

Risks	Trend	Term
14 Operational asset risks – such as power availability, dam failure or environmentally hazardous emissions (see page 90).	→	Short
15 Political risks due to new or changing regulations, including sustainability and security related regulations (for example CSDDD and CIS).	→	Mid
16 Project execution risk because of high number of large projects.	↘	Mid
17 Risk of not complying with regulations (for example GDPR and LKSG).	→	Short
18 Security & resilience risks (including cyber risks for example data leakage and new risks stemming from adoption of GenAI).	↗	Short
19 Risk of fraud and unethical conduct which could disrupt operations and have negative impact on people and environment. It could also harm our brand, damage trust or lead to the loss of our license to operate.	→	Short

Trend ↗ Increase → Unchanged ↘ Decrease
Term The time horizon for when each risk might start to have an impact on Vattenfall; short, mid, or long.

Risk management and activities 2024

- Monitoring of regulatory changes and market development trends as well as analysis of short-term and long-term impact
- Monitoring and analysis of stakeholder expectations and proactive engagement and activities
- Management of operational asset risks involves a systematic inspection program, continuous control of plant conditions and effective maintenance. New methods for monitoring and predictive maintenance are being deployed, which further improves our resilience to disruptions
- Applying and improving Business Continuity Management processes
- Keeping Levelised Energy Cost (LEC) competitive is a key focus
- Group-wide projects for the implementation of risk management and other processes for new and upcoming sustainability regulations, for example CSDDD
- Internal instructions have been formulated and roles and responsibilities defined in Vattenfall's Environmental Management System and the Code of Conduct for Suppliers and partners, the latter has been updated in 2024 to ensuring alignment with external legislation and international standards (see pages 66–67 and 87)
- Work to increase awareness and ensure compliance with the Code of Conduct and Integrity, for example through trainings
- Long-lasting improvements across the entire company through SAP upgrade with the Next Gen ERP program
- Update and strengthening of the Project Management framework and instruction
- We have established a systematic, risk-based and holistic approach to security & resilience (including physical, personnel and information- and cyber security measures) and we work actively to assess the criticality of our business operations in order to determine and prioritise what to protect and how
- We are carrying out regular, mandatory security awareness trainings for all employees
- We constantly monitor the threat landscape, including incidents, and cyber-attacks on our IT/OT-infrastructure and we are actively working with implementing safeguards and protective measures
- To address emerging risks arising from the adaptation of GenAI, an AI Policy has been established, we have centrally steered piloting-initiatives, defined standards to ensure ethical and secure use, as well as dedicated training of users.



E. Risks related to empowering our people

We are focusing on securing necessary competence while improving the employee journey and providing a safe work environment.

Risks	Trend	Term
20 Inability to secure or retain the competencies needed to succeed in delivering on our strategy & targets.	→	Mid
21 Work environment risks related to accidents and incidents as well as risks regarding the mental health of employees.	→	Short
22 Inefficiencies and inability to ensure safe working environment due to pandemic risk.	→	Short

Trend ↗ Increase → Unchanged ↘ Decrease
Term The time horizon for when each risk might start to have an impact on Vattenfall; short, mid, or long.

Risk management and activities 2024

- Attracting new talent and competencies, retaining people with critical capabilities and developing the skills of our employees (see page 28)
- Diversity Equity and Inclusion activities (see page 121)
- Annual employee survey conducted to monitor key aspects from the employees' perspective and contribute to guide the development of Vattenfall as a workplace (see page 28)
- Offering a more flexible work situation and adapting to changing work habits as well as our employees' needs (such as remote working and smarter-working concepts)
- Monitoring and controlling that health and safety risks are covered in the various risk management systems of the respective units. We perform thorough analyses of past accidents and work to prevent future issues (see page 110)
- Group-wide mental health programme with seminars to increase awareness (see page 111)
- Digital events for employees, covering many areas of Vattenfall's operations, climate ambitions, and business opportunities
- Launch of a new Health and Safety Policy
- Offering of flu vaccination by health management for Vattenfall employees in Germany.

Financial risks

Market risk - commodities including electricity

Market risk for electricity and commodities refers to the risk of adverse changes in electricity or commodity prices and is monitored daily. Market risk includes the risk of a change in volumes, especially in the Nordic market where hydro power production is highly dependent on precipitation.

Risk management activities
Through our asset ownership and sales activities, we are mainly exposed to electricity, gas and CO_2-emissions allowance prices, which in turn are affected by numerous factors, such as the global macroeconomic situation, local supply and demand as well as political decisions. We are active in the wholesale trading market and hedge our electricity, gas and emission exposure through physical and financial forward contracts and long-term customer contracts. The latter pertain to longer time horizons where there is no liquidity in the futures market and are typically 10–15-years bilateral contracts to either hedge new renewables projects or the existing asset portfolio. The majority of hedge volumes for forecasted production are executed in the nearer term horizon, with a lower portion of hedge volumes further out. The Vattenfall Risk Committee (VRC) decides how much of the generation should be hedged within the mandate issued by the Board of Directors. Sales volumes are to a large extent hedged back-to-back. To measure exposure to market risk, we use methods such as Value at Risk (VaR) and Gross Margin at Risk (GMaR) along with various stress tests.

Portfolio structure
The dominant market exposure in Vattenfall's current portfolio is linked to Nordic nuclear and hydro power generation. We generate a substantial share of regulated revenue from electricity distribution and heat as well as (partially) subsidised wind power and solar, which diversifies the risk exposure in our portfolio. In addition, Vattenfall has thermal generation market risk exposure from continental gas assets, being the price spreads between electricity and fuel/emissions. This has a lower risk profile than the outright power exposure in the Nordic countries. Price risk for uranium is limited, as uranium accounts for a relatively small share of the total cost of nuclear power generation.

Nordic market
Vattenfall uses hedging instruments to steer the market price risk of the Nordic production portfolio, which mainly consists of outright power positions from nuclear, hydro, and wind generation. The table to the right shows the average indicative Nordic hedge prices and the estimated Nordic hedge ratio as per 30 December 2024. The volume risk is managed through analyses and forecasts based on historical weather data, including factors such as precipitation and snowmelt.

Continental markets
Similar to the Nordic market, Vattenfall uses hedging instruments to manage the market price risk of the continental electricity production. This portfolio mainly consists of spread production (power, gas, and emissions positions), as well as wind power production and pumped hydro storage.

Ancillary trading
In addition to the market risk mentioned above, the CEO has a risk mandate from the Board of Directors to allow some discretionary risk taking and trading. Most of our risk exposure in the ancillary trading portfolio is based on market valuation (mark-to-market). In cases where no market prices can be observed, modelled prices are used (mark-to-model). Mark-to-model positions arise mainly in asset and sales-related portfolios (see Note 36 to the Consolidated accounts, Financial instruments). Management of such valuation models is strictly regulated, and approval is required from the risk organisation before they may be applied.

Average indicative Nordic hedge prices and hedge ratio as per 30 December 2024

	2025	2026	2027
Hedge prices, EUR/MWh	48	41	41
Hedge ratio, %	52	27	11

Funding liquidity risk

Funding liquidity risk is the risk of Vattenfall not being able to finance short-term payment commitments or its longer-term capital needs. This may arise if asset values at maturity do not match liabilities and other derivatives.

Risk management activities

Access to capital and flexible financing solutions is ensured through several types of debt issuance programmes and credit facilities.

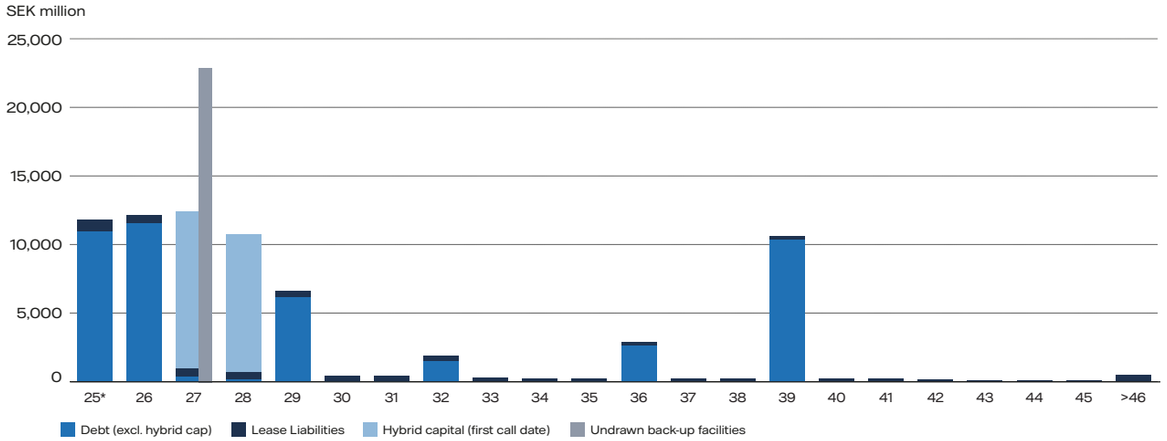
Short-term financing

The Group target for short-term accessibility to capital is that funds corresponding to no less than 10 per cent of consolidated net sales, or the equivalent of 90 days stressed liquidity needs of the business (which-ever is higher) shall be available. As per 31 December 2024, available liquid assets and/or committed credit facilities stood at 43 per cent (28 per cent 2023) of consolidated net sales.

Long-term financing

The maturity profile of our debt portfolio is shown in the chart to the right. Vattenfall is committed to maintaining financial stability, which is reflected in the long-term targets for our capital structure. On 6 July 2021, Moody's affirmed Vattenfall's long-term A3 and short-term P-2 ratings, and its Baa2 rating for hybrid bonds. At the same time, the rating outlook was revised from negative to stable. On 15 November 2023, Standard & Poor's affirmed Vattenfall's long-term BBB+ rating and short-term A-2 rating as well as its BB+ rating for hybrid bonds.

Maturity profile for Vattenfall's loans as per 31 December 2024[1]



1. Excluding loans from minority owners and associated companies.
* Excluding short term debt (SEK 20,283 million).

Interplay between Market / Credit / Liquidity Risk

Commodities prices fluctuate on an ongoing basis. Due to the nature of our core business activities, we are naturally exposed to the resulting market risk. As described above, we hedge via wholesale term-market contracts and long-term customer contracts to reduce this market risk. These contracts in turn increase credit risk as there is a risk that these counterparties may not meet their obligations to us. One common method to manage credit risk is the use of collaterals (margin call agreements for wholesale markets). Whilst these are useful tools for the mitigation of credit risk and required by exchanges, it can increase the Group funding liquidity risk if the overall spread between collateralised and non-collateralised contracts increases. With fluctuating prices, the amount of collateral that needs to flow between counterparties changes as well. In extreme market price movements this can lead to immediate large cash out- or inflows that need to be either financed in the short-term or deposited with financial institutions that may not want the cash. If the resulting impact for a counterparty is that this drives them into their own liquidity shortage, this subsequently translates back into a credit risk for Vattenfall. Reducing credit and liquidity risks by lower hedge activity, leads again to an increase in market price risk. Thus, all three risks (market, credit, and liquidity risk) are interlinked and mutually dependent. The management of this triangle of market, credit, and liquidity risk requires an especially well-balanced approach and clear steering principles which Vattenfall has established by means of a dedicated risk management process.

Borrowing programmes and committed credit facilities

		Maximum aggregated amount, in millions		Maturity		Used portion, %		Reported external liabilities, SEK million	
	Currency	2024	2023	2024	2023	2024	2023	2024	2023
Borrowing programmes									
Commercial paper	SEK	–	–	–	–	–	–	–	–
Euro Commercial paper	EUR	10,000	10,000	–	–	1	55	–	20,034
Euro Medium Term Note	EUR	10,000	10,000	–	–	37	19	43,013	61,941
Committed credit facilities									
Revolving Credit Facility[1]	EUR	2,000	2,000	**2027**	2025	–	–	–	–
Committed credit facilities	SEK		1,000		2024				

1. Back-up facility for short-term borrowing.

Committed credit facilities consist of a EUR 2.0 billion Revolving Credit Facility that expires on 31 October 2027. he maturity structure reptains to the debt portfolio excluding loans from minority owners and associated companies, which amounted to SEK 7 221 million for 2024 (10 783). Further information about the maturity structure of loans is provided in Note 30 to the Consolidated accounts, Interest-bearing liabilities and related financial derivatives.

Credit risk

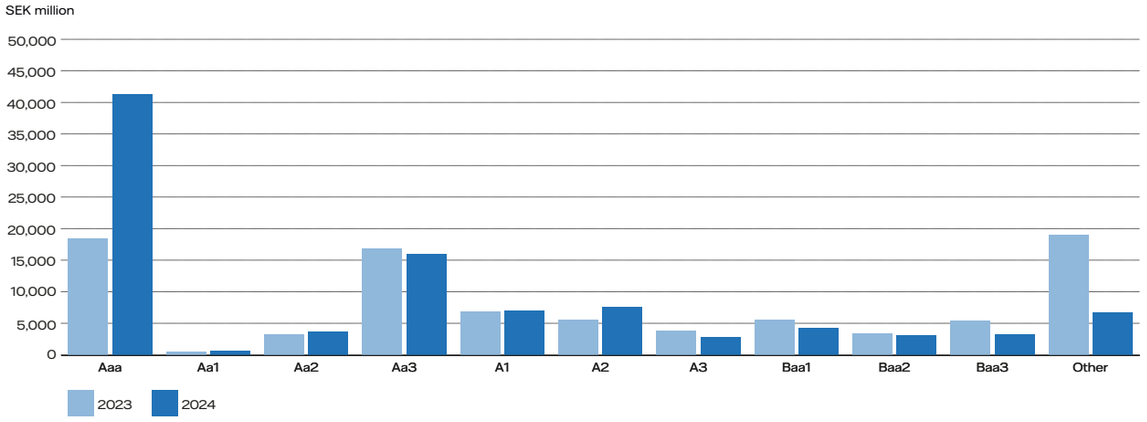
Credit risk is the risk that a counterparty cannot or will not meet its obligations to Vattenfall, the risk exists across all activities.

Risk management activities

We have a strict framework for governing and reporting credit risks to ensure that risks are monitored, measured, and optimised so that the total credit exposure is kept at an acceptable level. The company's credit risk management involves counterparty analysis, reporting of credit risk exposures, contract negotiations, and proposals for risk mitigation measures (such as requiring collateral). Credit risk exposures per rating class is shown in the chart below in SEK million.

The chart shows exposures to Vattenfall's counterparties where the exposure is greater than SEK 50 million per counterparty, by rating classification according to Moody's rating scale. Counterparties are reviewed and approved in line with Vattenfall's credit mandates and policies. Smaller exposures are considered to have such a large diversification effect that the net risk for Vattenfall is judged to be low. Procurement and heat sales exposures are not included. Other financial assets (that are neither past-due nor impaired) are considered to have good creditworthiness.

Counterparty exposure by rating class



Interest rate risk

Interest rate risk refers to the risk of negative impact from changed interest rates on the consolidated income statement and cash flow.

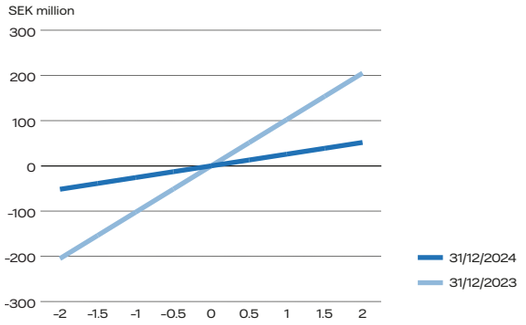
Risk management activities

We quantify interest rate risk in our debt portfolio in terms of duration, which describes the average term of fixed interest. The target duration of 2 to 6 years is based on the company's current financing need and desired interest rate sensitivity in net interest income/expense. The duration of the Vattenfall's debt portfolio at year-end was 4.49 years (3.53) including hybrid capital. See the table for the remaining fixed rate term in our debt portfolio.

Interest rate sensitivity

The interest rate sensitivity analysis shows how changes in interest rates affect the Vattenfall Group's interest income and expenses (before tax) within a 12-month period given the Group's current structure of borrowing at fixed interest rates. With the same method and an assumption that interest rates would rise by 100 basis points, the impact on the Vattenfall Group's equity after tax would be SEK -21 million (-81), including derivatives and Hybrid Capital, but excluding loans from minority owners and associated companies.

Interest rate sensitivity[1]



1. Excluding loans from minority owners and associated companies. All figures in nominal amounts.

Remaining fixed-rate term in debt portfolio

	Debt		Derivatives		Total	
SEK million	2024	2023	2024	2023	2024	2023
< 3 months	7,841	8,045	-4,047	-276	3,794	7,769
3 months–1 year	10,684	33,113	-2,553	-1,688	8,131	31,426
1–5 years	36,994	46,218	968	1,278	37,961	47,497
> 5 years	20,887	22,125	5,432	709	26,318	22,834
Total	**76,405**	**109,502**	**-201**	**24**	**76,204**	**109,525**

The portfolio includes loans and interest rate derivatives in order to steer the duration of borrowing. Negative amounts are explained by the use of derivatives, such as interest rate swaps and interest rate forwards. The sum of derivatives is not equal to zero due to currency effects. Figures are exclusive of loans from minority owners and associated companies, totalling SEK 7,221 million for 2024 (10,783). The average financing rate as per 31 December 2024 was 3.64% (3.75%). All figures in nominal amounts

Currency risk

Currency risk refers to the risk of negative impact from changed exchange rates in the consolidated income statement and balance sheet.

Risk management activities

We have limited transaction exposure, since most generation, distribution and sales of electricity take place in the respective local markets. Sensitivity to currency movements is therefore relatively low. All transaction exposure that exceeds a nominal value equivalent to SEK 10 million is hedged immediately when it arises. The target for hedging transaction exposure is to, over time, match the currency composition in the debt portfolio with the currency composition of the Group's funds from operations (FFO). Vattenfall's largest exposure is in EUR, totalling SEK 97,090 million (66,566). Of this amount, 23 per cent (40 per cent) was hedged at year-end. For further information, see Note 38 to the consolidated accounts, Specifications of equity. A 5 per cent change in exchange rates, for example, would affect the Group's equity by approximately SEK 4.7 billion (3.6), where an appreciation of the currencies shown in the table in Note 38 to the consolidated accounts, Specifications of equity, would result in a positive change in equity.

Hollandse Kust Zuid offshore wind farm

Debt portfolio, by currency, in millions

	Debt		Derivatives		Total	
Original currency	2024	2023	2024	2023	2024	2023
DKK	4,028	158	–	–	4,028	158
EUR	39,166	77,520	4,900	4,745	44,066	82,265
GBP	19,535	18,129	-5,182	-4,788	14,353	13,341
JPY	1,405	1,420	-1,405	-1,420	0	0
SEK	12,271	12,274	1,486	1,486	13,757	13,761
Total	**76,405**	**109,502**	**-201**	**24**	**76,204**	**109,525**

The table shows currency risk in the debt portfolio and the currencies that Vattenfall is exposed to. Figures above are exclusive of loans from minority owners and associated companies, totalling SEK 7,221 million (10,783). All figures in nominal amounts.

Corporate governance report

Corporate governance report

This report includes information on corporate governance during the 2024 financial year, as prescribed by law and the Swedish Corporate Governance Code. Overall issues on corporate governance are handled in this report, while specific risk issues are handled in the Risks and Risk Management section and sustainability related risks and impacts in the sustainability statement in the Annual and Sustainability Report. The Corporate Governance Report has been reviewed according to RevU 16 by the company's external auditor.

During 2024, work at Board and CEO level included continued decision-making in line with Vattenfall's strategy. Among others, further investments in new wind farms have been decided and the work with potential new nuclear power has continued. Work has further taken place within the sustainability area, in order to fulfil requirements due to new legislation based on the EU directive CSRD.

A well-functioning corporate governance – with an effective organisational structure, internal control and risk management – helps Vattenfall to manage its business towards set targets and in accordance with Vattenfall's strategy and principles.

Vattenfall's corporate governance model

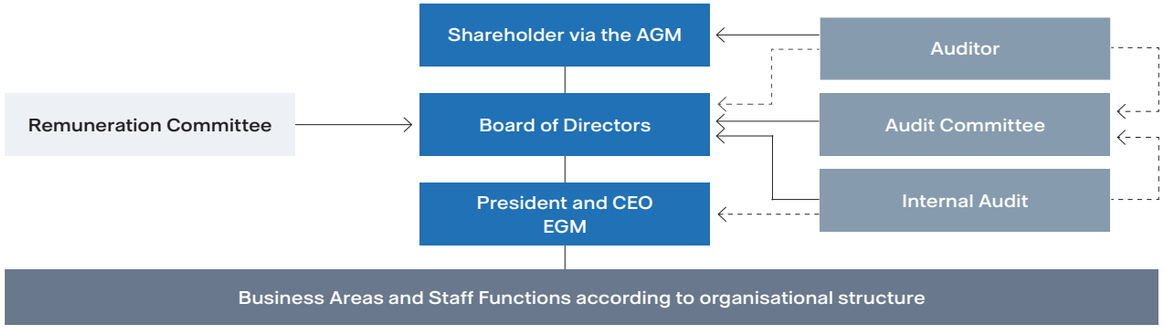
The Parent Company of the Vattenfall Group, Vattenfall AB, is a Swedish public limited liability company with registered office in Solna. Vattenfall AB is thereby subject to the provisions of the Swedish Companies Act. The main decision-making bodies are the Annual General Meeting (AGM), the Board of Directors and the President. The AGM elects the Board of Directors, which in turn appoints the President, who is responsible for the day-to-day administration of the company in accordance with the Board's guidelines and instructions.

Application of the Code

Vattenfall adheres to the Swedish Corporate Governance Code ("the Code", available in Swedish and English at www.bolagsstyrning.se). Since Vattenfall is wholly owned by the Swedish state, there is no need to protect minority shareholders. For this reason, the provisions on shareholders' right of initiative prior to general meetings (the Code, point 1.1) and the reporting on board members' independence (points 4.4 and 4.5) do not apply.

For the same reason, Vattenfall has no nomination committee (the Code, chapter 2). The nomination process for the Board and auditors is conducted in accordance with the Swedish state's ownership policy and is described below. Thus, the references to the nomination committee in points 1.3, 1.4, 4.6, 9.1, 10.2 and 10.3 are not applicable either. However, information on the nomination of board members for new election or re-election is posted on the company's website in accordance with point 2.6. Election of an AGM Chair is done at the AGM in accordance with the stipulations of the Swedish Companies Act and the Swedish state's ownership policy.

Governance and reporting structure



Important external and internal rules and regulations for Vattenfall

External rules and regulations

- Swedish and foreign legal rules, particularly the Swedish Companies Act and the Swedish Annual Accounts Act
- The Swedish state's ownership policy and principles for state-owned enterprises 2020[1]
- The Swedish Corporate Governance Code ("the Code")
- Stock exchange rules for fixed-income instruments registered on Nasdaq Stockholm
- International Financial Reporting Standards (IFRS) and other accounting rules
- The European Sustainability Reporting Standards (ESRS) and the UN Global Compact as well as reporting according to Green Bond Principles, Science Based Targets and the Task Force on Climate-related Financial Disclosures (TCFD).

Internal rules

- The Articles of Association
- The Board's and committees' Rules of Procedure, including the CEO instruction and the instruction for reporting to the Board
- The Vattenfall Management System (VMS), including the Code of Conduct and Integrity, and other internal governance documents.

1. On 20 February 2025, the Swedish Government adopted a new policy for state-owned companies. This policy will be presented for approval at Vattenfall AB's Annual General Meeting on 28 April and is intended to be applied by Vattenfall as of the AGM.

Vattenfall AB's Articles of Association and continuously updated information about corporate governance at Vattenfall are available on Vattenfall's website, group.vattenfall.com (original Swedish documents are available on group.vattenfall.com/se). The website is also a source for previous corporate governance reports and documentation from the most recent general meetings, links to the Swedish state's ownership policy, the Swedish Code of Corporate Governance as well as the Vattenfall Code of Conduct and Integrity and other internal policies.

Shareholder and general meetings

Vattenfall AB is wholly owned by the Swedish state. The right of the state, as a shareholder, to make decisions about Vattenfall's affairs is exercised at the Annual General Meeting (AGM) and other general meetings. Through a general meeting resolution on the content of the Articles of Association, the shareholder makes decisions on the company's operations. The application of the Swedish state's ownership policy and principles for state-owned companies is decided at the general meeting.

Steering and targets from the Shareholder

Based on a decision by Swedish Parliament in 2010, Vattenfall AB's Articles of Association stipulate that the objective for the company's activities is to generate a market rate of return by, directly or indirectly through subsidiaries and associated companies, operating a commercial energy business that enables the company to be among the leaders in developing environmentally sustainable energy production.

The Swedish state's ownership policy stipulates that to promote long-term sustainable value creation in state-owned enterprises, sustainable business is integrated in corporate governance. Companies with state ownership shall work for a healthy and safe work environment, respect for human rights, good and decent working conditions, equality and diversity, reduced climate and environmental impact, handling of climate-related financial risks and opportunities, good business ethics and active work on anti-corruption, ensure that no abuses occur due to their special status of being state-owned and exhibit responsible conduct in the tax area.

In accordance with the Swedish state's ownership-policy, the company's financial targets have been decided on by a general meeting[1]. The current financial targets were decided at an extraordinary general meeting on 12 December 2017 and a proposal for renewed targets will be presented at the Annual General Meeting 2025:

- Capital structure: Funds from operations/adjusted net debt of 22–27 per cent
- Profitability target: Return on capital employed of 8 per cent
- Dividend policy: The dividend should amount to 40–70 per cent of profit after tax.

The achievement of these targets is described in the Annual and Sustainability Report on pages 12–14. The owner proposes an update to the financial targets in accordance with the statement on page 14, with a decision to be made at the 2025 annual general meeting.

Duties of the Annual General Meeting

- Elect the Board of Directors, the Chairman of the Board and as well as the auditors, and decide on their fees
- Adopt the income statement and balance sheet for Vattenfall AB and the Vattenfall Group
- Decide on distribution of the company's profit
- Grant discharge from liability for the board members and the President
- Approve the remuneration report
- Decide on guidelines for remuneration of senior executives
- Decide on other matters of business prescribed by law or the company's Articles of Association.

Annual General Meeting 2024

Vattenfall held its 2024 AGM on 29 April. The company's owner, the Swedish state, participated at the AGM through its owner representative. The general public had the opportunity to participate on-site as well as via webcast. Members of Parliament were given the opportunity to ask questions during the AGM, and an open Q&A session was arranged after the meeting, in accordance with the Swedish state's ownership policy. Christian Levin and Nina Linander were elected as new Board members. Håkan Erixon and Ann Carlsson Meyer left the Board.

The 2025 AGM will be held on 28 April in Solna, Sweden.

Board of Directors

The Board's duties

The Board is the company's highest administrative body. Its fundamental duties are laid out in the Swedish Companies Act and the Code. Further duties are laid out in its Rules of Procedure and the instructions adopted each year by the Board. The Rules of Procedure and instructions regulate such matters as reporting to the Board, allocation of duties between the Board, the President and the Board's committees, the Chairman's duties, the form and content of board meetings, and the evaluation of the work of the Board and the President.

The Board shall, according to its Rules of Procedure, set the overarching targets for Vattenfall's operations, decide on Vattenfall's strategy for achieving those targets, and ensure that suitable systems are in place for monitoring and controlling Vattenfall's operations, risks and financial position in respect of the set targets. The Board is responsible for approving major investments, acquisitions and divestments and for, annually or following significant change, adopting central policies and instructions. Part of this is to define appropriate guidelines to govern the company's conduct in society, with the aim of ensuring its long-term value creation capability. The Board shall, according to its Rules of Procedure, also identify how sustainability issues impact the company's risks and business opportunities and it allocates stakeholder engagement issues to the CEO. Also, the Board shall approve certain important contracts, including contracts between Vattenfall and the President and other senior executives.

Vattenfall has formulated a strategy to reach its goal of fossil freedom. Decisions and investments made are steered by this. The annual planning for the Board and its committees includes recurring items in several of the areas for sustainable business which are identified in the Swedish state ownership policy. These areas are furthermore included as an integral part of the handling of concrete board matters and are also handled by the Executive Group Management. Vattenfall's strategic focus areas in themselves constitute sustainability objectives. Among others, sustainability aspects such as climate and environmental impact and human rights are included in the Board's handling of the strategy and in the business planning process. Sustainability-related expertise is available via a Group common sustainability department.

The Board's duties pertain to Vattenfall AB as well as the Vattenfall Group. Vattenfall's General Counsel serves as secretary to the Board of Directors.

The Chairman is responsible for – among other things – ensuring that the board members receive relevant information, contacts with the owner on ownership matters, and serving as a liaison between the owner and the Board. According to the Rules of Procedure, the Board – through the Chairman – shall coordinate its views with representatives of the owner when the company is facing particularly important decisions.

1. New financial targets are proposed for decision in 2025

Board meetings

The Board shall hold eight to twelve regular board meetings every year. In addition to the regular meetings, the Board is convened when necessary. The agenda of every regular meeting shall include the following items of business:

- The Group's business situation
- Financial report for the Group
- Reports from board committees, when committee meetings have been held
- Matters that are not handled by the President in the day-to-day administration
- Other matters of material importance for the Group.

In addition, certain recurrent items of business are included on the agenda, in accordance with the yearly planning in the Board's Rules of Procedure. Investments approved by the Board are followed up by the Board one year after their commercial operation date. Strategy issues are discussed in depth at an annual board seminar where the Executive Group Management also participates. The Board shall on an ongoing basis be informed on circumstances of importance for the best possible insight in the business and which facilitate an overall assessment of Vattenfall's situation.

The Board met ten times in 2024, including the statutory meeting. The board members' attendance is found on pages 68–69. The Board held a meeting at one of the Group's operational units. This meeting was held in Norrbotten, Sweden, and was combined with a study visit at the hydro power business and the industry projects on fossil free steel.

Appointment of the Board

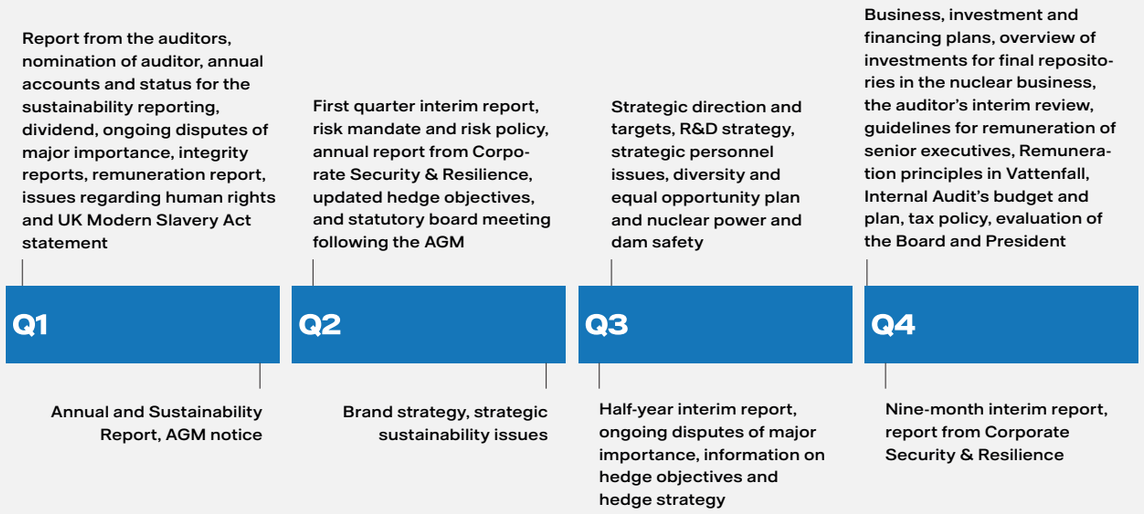
For companies that are wholly owned by the Swedish state, uniform and common principles for a structured nomination process apply. These principles are set forth in the Swedish state's ownership policy and supersede the Code's rules on drafting work for decisions on the nomination of board members and auditors.

The board nomination process takes place in the Swedish Government Offices and is coordinated by the Ministry of Finance. The expertise required is analysed on the basis of the enterprise's operations, situation and future challenges, board composition and board evaluations performed. As part of its work in the board nomination process, the Government Offices also conduct their own ongoing evaluation of the board of each state-owned company. Any recruitment need is then determined, and recruitment work is begun. Once this process has been completed, the nominations are publicly announced in accordance with the Code. Vattenfall provides orientation training for new directors who are elected by the AGM.

The Swedish state's ownership policy, which is the diversity policy applied with regard to the Board, stipulates that the selection of board members shall be made from a broad recruitment base in order to make use of the expertise of both women and men, as well as individuals with various backgrounds and experience. Discrimination associated with gender, transgender identity or expression, ethnic affiliation, religion or other belief, disability, sexual orientation or age is prohibited.

At the 2024 AGM, the owner's representative presented a reasoned statement on the Board's composition. In summary, the owner judged that the board members had relevant skills, experience and background for the company's operations, development phase and conditions in general. The gender balance on the Board did not achieve the government's goal, meaning a minimum of 40 per cent board representation for both women and men with regard to AGM-elected directors. The Board as a whole, however, was considered to have a versatility and breadth that reflected the requirements of the state's ownership policy. The gender balance among the AGM elected board members was 25 per cent women and 75 per cent men, which was equal to the gender balance previous year.

The Board's yearly planning



The Board's main items of business in 2024

- Items according to the Rules of Procedure
- Strategic and financial targets
- Acquisitions and divestments
- Items on Swedish nuclear business
- Partnership and investments with regard to new on- and offshore wind farms and solar power plants
- The heat business in Berlin and the Netherlands
- E-mobility investments
- Sustainability items, focusing on fulfilling requirements due to new legislation based on the EU directive CSRD
- Security situation and security issues.

More detailed information on the board nomination process is provided in the Swedish state's ownership policy, at www.regeringen.se.

The Board's composition
Vattenfall's Articles of Association stipulate that the Board of Directors shall have, in addition to the employee representatives, a minimum of five and a maximum of ten members without deputies. The directors are elected annually by the Annual General Meeting, which also elects the Chairman of the Board.

In 2024, no member of the Executive Group Management (EGM) was a director on the Board and thus 100% of the directors were non-executives. This is in line with the Swedish state's ownership policy. Similarly, none of the Board members elected by the AGM was employed within the company. By law, the unions are entitled to appoint three board members plus three deputies, and they exercised this right.

Biographical information about the board members is provided on pages 68–69.

Guidelines for directors' fees
Directors' fees for Board and committee work are set by the owner at the AGM, in accordance with the Swedish state's ownership policy. Information on directors' fees in 2024 is provided in the Annual and Sustainability Report, Note 11 to the consolidated accounts, number of employees and personnel costs.

Evaluation of the Board's and the President's work
The Board annually evaluates the President and its own work as part of efforts to develop work forms and effectiveness. This evaluation is conducted under the direction of the Chairman and is reported to the Board and the owner.

In 2024, an evaluation was conducted, with the help of an external consultant, with follow-up from the evaluation 2023. The evaluation used a questionnaire for the Board as a whole, which each of the members and deputies answered. The questions addressed Vattenfall's current challenges, management and organisation, the Board's efficiency, composition and expertise, and its relationship with the owner, chairman and CEO. The President, the CFO and the Secretary to the Board also answered the questionnaire. The evaluation was reported and discussed at the Board meeting in February 2025.

Board committees

The Board has established two committees and Rules of Procedure for these. At the statutory board meeting, the Board appointed a number of directors elected by a general meeting for each committee, of whom one serves as committee chair. The employee representatives of the Board have the right to appoint one representative to each committee. Information on the committees' composition and attendance is provided on pages 68–69.

The committees report their work to the Board at the next regular board meeting, whereby the committee chair presents a report accompanied by minutes from the committee meetings. Except for a few matters handled by the Audit Committee, the committees are only drafting bodies and make recommendations to the Board. The Board's legal responsibility under company law for the company's organisation and administration of the company's affairs is not constrained by the committees' work.

Audit Committee
The Audit Committee oversees Vattenfall's financial reporting, including the sustainability report, and is responsible for meeting with Vattenfall AB's external and internal auditors on a regular basis in order to stay informed about the planning, focus and scope of the company's audit. The Audit Committee is also responsible for discussing coordination of the external and internal audit work and views of the company's financial risks. The committee prepares Internal Audit's budget, the Internal Audit Charter and the internal audit plan for resolution by the Board. It has the right, on behalf of the Board, to decide on other services than auditing and review of sustainability reports that Vattenfall may procure from the Group's auditors.

The Audit Committee meets prior to Vattenfall's publication of interim reports and when warranted by the prevailing conditions. The CFO and head of Internal Audit serve in a reporting role. The external auditors attend all regular meetings and report on their observations of the audit.

During 2024, the Committee's duties have been adjusted to more clearly include duties related to the sustainability reporting, as preparation for application of new legislation based on the EU directive CSRD.

Remuneration Committee
The Remuneration Committee's duties include serving as a drafting body to ensure implementation and compliance with the guidelines, approved by the Annual General Meeting, for remuneration of senior executives. Where applicable, it conducts drafting work for any special reasons that may exist in an individual case

The Audit Committee's most important duties are:

- To oversee Vattenfall's financial reporting, including sustainability reporting
- With respect to financial and sustainability reporting, to monitor the effectiveness of Vattenfall's internal control, internal audit and risk management
- To stay informed about the audit of the annual report and consolidated accounts and the review of the sustainability report for Vattenfall AB and the Group
- To review and monitor the auditor's impartiality and independence
- To assist in the drafting of recommendations for decisions on the election of auditor by the Annual General Meeting
- To review and oversee the management of market, liquidity and credit risks
- To conduct an annual evaluation of the external auditors' work.

The Remuneration Committee's most important duties are:

- To conduct drafting work for board decisions on matters regarding remuneration principles, and on remuneration and other terms of employment for members of the Executive Group Management and other senior executives
- To monitor and evaluate application of the guidelines for remuneration of senior executives, which the Annual General Meeting is required to make a decision on by law, as well as remuneration structures and levels of remuneration in the company
- To conduct drafting work for the Board's decisions regarding overarching remuneration principles, such as the general existence of, amount and structure of variable remuneration (for employees who are not senior executives).

to deviate from the guidelines. It also conducts work for the Board's remuneration report and, ahead of the AGM, monitoring and following up the auditors' review. The President serves in a reporting role on the Remuneration Committee.

Auditor

The Swedish state's ownership policy stipulates that the owner is responsible for election of auditors and that the auditors are to be appointed by the Annual General Meeting. Proposals for election of auditors and for auditors' fees are submitted by the Board and drafted by the company. The auditors are elected for a mandate period of one year, in accordance with the main rule in the Swedish Companies Act. Vattenfall's Articles of Association stipulate that the company shall have one or two auditors with or without one or two deputy auditors, or a chartered accounting firm as auditor.

The AGM 2024 re-elected PricewaterhouseCoopers AB as auditor. The accounting firm appointed Authorised Public Accountant Eva Carlsvi as auditor-in-charge.

The auditor's audit assignment includes a review of the annual report, the consolidated accounts, the corporate governance report, the sustainability reporting and compliance with the guidelines for remuneration of senior executives. In addition, the auditor performs a review of the half-year interim report. The auditor has access to minutes of board meetings and board committee meetings. The Audit Committee has approved guidelines for how procurement of other services than auditing and review of sustainability reports shall take place from the auditor.

At the 2024 AGM, the auditor reported on the audit work in 2023 and on its review of compliance with the guidelines for remuneration of senior executives. The auditor reported on its review of the year-end accounts for 2024 to the entire Board at the board meeting in February 2025 (without the presence of any person from the Executive Group Management), and also reported on its observations at the board meeting in December 2024.

The auditor's fees are payable according to an approved invoice. The Group's auditing costs are described in more detail in the Annual and Sustainability Report, in Note 44 to the consolidated accounts, Auditor's fees, and in Note 33 to the Parent Company accounts, Auditor's fees.

CEO and Group Management

The President of Vattenfall AB, who is also Chief Executive Officer (CEO) of the Vattenfall Group, is responsible for the day-to-day administration in accordance with the Swedish Companies Act. Anna Borg was the CEO in 2024. An account of the President's remuneration is provided in the Remuneration Report and in the Annual and Sustainability Report, Note 11 to the consolidated accounts, Number of employees and personnel costs.

The CEO has set up internal bodies for governance of the Group and makes decisions independently or with the support of these bodies. The most important of these are the Executive Group Management (EGM) and the Vattenfall Risk Committee (VRC). The EGM focuses on the Group's overall direction and addresses – within the framework of the CEO's mandate from the Board of Directors – matters of importance for the Group. In the EGM, the Head of Strategic Development covers overall sustainability issues and the Group's Head of Sustainability reports to him. The VRC focuses on decisions pertaining to risk mandates and credit limits, among other things, and exercises oversight of the risk management framework.

Both bodies convene monthly and also conduct preparatory drafting work on matters that are to be decided by the Board of Directors. Ahead of decisions made by the President in the EGM or VRC on certain major investments and transactions, the risk unit performs an independent risk analysis, which makes up part of the decision-making documentation.

The President follows up operations via quarterly Business Performance Meetings. At these meetings, outcomes, forecasts, important events and challenges – including the status of Vattenfall's strategic targets – are analysed with the management of each business unit. Yearly deep-dives into sustainability topics – challenges, progress and actions for coming year – are performed with the top management of each business area.

Biographical information about the members of the EGM is provided on pages 70–71.

Internal Audit

Internal Audit is an independent and objective function that evaluates, recommends and monitors improvements to the effectiveness of Vattenfall's risk management, internal controls and governance processes throughout the Group. This also applies to compliance with Vattenfall's governance documents, including the Code of Conduct and Integrity. The function is directly subordinate to the Board of Directors and Audit Committee. It performs its work risk-based and in accordance with an established internal audit plan.

Internal Audit's budget, the Internal Audit Charter and the internal audit plan are drafted by the Audit Committee and decided on by the Board of Directors. The Head of Internal Audit reports administratively to the President and informs the management teams of the business units and other units about audit activities that have been performed. The Head of Internal Audit also submits a report to the Audit Committee at each regular Committee meeting.

Internal governance

Principles and strategy

Vattenfall's purpose is to enable the fossil freedom that drives society forward, and the strategy in brief means that:

- Vattenfall has set out to be a leader in the energy transition, as a profitable business
- Sustainability is at the core of Vattenfall's strategy, guiding the ambition level and where we grow
- Fossil-free electricity generation is the foundation for value creation
- Value and robustness through integration and diversification.

In addition to this are the financial targets, decided on by the general meeting and further described under "Shareholder and general meetings" above. Group scorecards support by linking to financial, non-financial and operational requirements, for instance with regard to CO_2 emissions and fossil-free generation capacity. Reporting back to the Board is performed as part of the quarterly reporting.

Vattenfall creates value for customers and shareholder by pursuing sustainable business in attractive markets with favourable conditions for returns, and where we can leverage our competitive advantages. Vattenfall's strategy is well aligned with the UN's Agenda 2030 Sustainable Development Goals and will drive Vattenfall to make an important contribution to the global sustainable development agenda.

Governing business ethics

Vattenfall's Code of Conduct and Integrity builds upon the four Vattenfall principles – open, active, positive and safety – and contains a number of rules built on the "think first" approach. It also includes references to the Vattenfall Management System (VMS), which elaborates on these rules. The Code of Conduct and Integrity has been communicated throughout the Group and is available on the intranet in several language versions, corresponding to the countries where Vattenfall has business operations. Information about the Code of Conduct and Integrity is provided in connection with new hiring and training. An e-learning programme on application of the Code of Conduct and Integrity is mandatory for all Vattenfall employees.

To ensure ethical and non-corrupt conduct throughout the organisation, Vattenfall requires all employees to act in accordance with the company's ethical guidelines, which are set forth in the Code of Conduct and Integrity as well as in internal instructions. Vattenfall believes that free competition plays a decisive role for a market to function effectively and has zero tolerance for bribery and corruption. An important step in ensuring this is the recurrent training that is conducted within the Vattenfall Integrity Programme, which is described on page 124.

Vattenfall's employees and other stakeholders have the opportunity to report serious improprieties anonymously through a web-based whistleblowing channel. Internal reports can also be made directly to any member of Internal Audit or to the local Whistleblowing Coordinator.

Read more about reported incidents in the Annual and Sustainability Report on page 124. Ongoing legal processes are described in Note 40 to the consolidated accounts, Contingent liabilities. Examples of sustainability initiatives and principles that Vattenfall has aligned itself with or supports are listed on page 76.

The three lines model

Vattenfall applies the "three lines model", for management and control of risks in general, based on the framework of the Institute of Internal Auditors.

1. The first line is primarily represented by units that provide products or services to the organisation's customers, such as Business Units and certain Staff Functions. It is responsible for executing the strategy and managing risks.
2. The second line provides control, expertise, support, monitoring and challenge on risk-related matters. It consists of Staff Functions governing the organisation, among them Health & Safety, Environment, Integrity, Security, Group Internal Financial Control and Risk Management.
3. The third line is made up of internal audit, which oversees and evaluates the first and second lines (as described above).

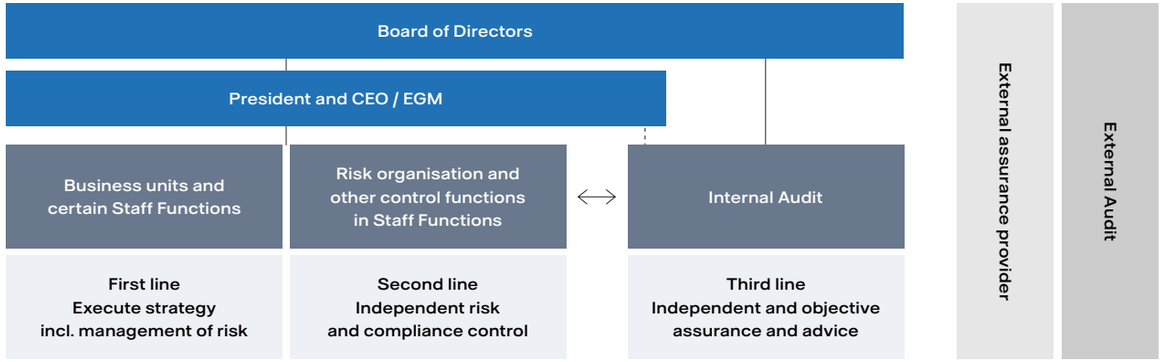
Vattenfall Management System

The most important internal rules for governing Vattenfall are found in the Vattenfall Management System (VMS). The VMS is the group system to develop, align and implement the rules and requirements decided by the Board, the President and the Group Staff Functions. It covers the group steering, while local management systems cover specific business and functional steering within the framework of the VMS. The VMS consists of binding policies and instructions. It is an integrated management system that applies for the entire Vattenfall Group and units must adhere to the VMS, with the limitations that may arise from legal requirements.

Vattenfall's policies lay out the company's direction in the areas of

- Code of Conduct and Integrity, as described above
- Remuneration, outlining general principles of remuneration and benefits in Vattenfall, in line with the guidelines decided by the Annual General Meeting
- Dam safety
- Nuclear safety
- Risk, see further pages 45–57 in the Annual and Sustainability Report
- Sustainability, where governance is based on an overall policy. In addition, specific policies exist for various sustainability areas:
- Environment
- Health and safety
- Human rights
- Code of Conduct for Suppliers and Partners
- Taxes.

Three lines model



The valid codes of conduct and sustainability policies are published on group.vattenfall.com. The Board of Vattenfall AB approves all policies except the policies on dam safety and nuclear safety; however, within these areas, regular reporting is conducted to the Board.

The content of the policies is concretised in instructions within the VMS, such as in special instructions for matters concerning competition law and for countering bribery and corruption. Instructions in the VMS also include concretisations of the content of the Board's Rules of Procedure, such as allocation of responsibilities and risk mandates.

The instructions shall be implemented in the relevant parts of the organisation and be adhered to by the defined target groups and units. Special routines are in place to ensure adherence to the management system also by subsidiaries. All policies and instructions are accessible for employees on the intranet. E-learning exists in several areas connected to VMS documents. Implementation and adherence are regularly followed up, and identified issues are addressed. All policies and instructions are regularly reviewed and updated.

Vattenfall's environmental management system is integrated in the VMS. At year-end 2024, nearly 100 per cent of Vattenfall's production and distribution portfolios had certified environmental management systems in accordance with ISO 14001. In addition, all of the Group's business units are certified for occupational health and safety according to ISO 45001. A number of business units have certificates on energy management in accordance with ISO 50001.

Vattenfall's organisation

The organisational structure comprises five business areas: Wind, Customers & Solutions, Generation, Markets and Distribution. The business areas are organised in four operating segments, where Generation and Markets make up a single operating segment (Power Generation). Central Staff Functions support and direct the business activities. For further information see pages 33–42.

The company structure differs from the business structure. Decisions are made primarily in the business organisation and, to the extent necessary or suitable, by subsidiaries' boards. Governance is conducted financially, non-financially (such as through Staff Functions), and operationally. Unit scorecards and the VMS are the most important governance tools. The business performance steering model consists of an annual business planning process and monthly reporting and follow-up of forecasts and actual results.

In accordance with legislation both within the EU and in the UK, operations of the electricity distribution network shall be separated from sales and generation of electricity (unbundling). For Vattenfall, this entails, among other things, that electricity distribution operations are conducted in separate subsidiaries that have the actual decision-making rights in respect of the company's day-to-day operations, as well as for decisions needed to ensure operation, maintenance and development of the network. The Head of Business Area Distribution is not member of any decision-making forums outside of the business area.

Risk Management Organisation

The Risk Management Organisation is headed by the Chief Risk Officer (CRO) and is responsible for monitoring and control of risks in general. The CRO is accountable for the risk management framework (as described on page 45) and is responsible for ensuring risk governance and risk control. Included in this responsibility are processes related to, among other things, new products and certain long-term agreements. The CRO provides information on a regular basis to the Vattenfall Risk Committee and to the Executive Group Management as well as to the Board and the Board's Audit Committee.

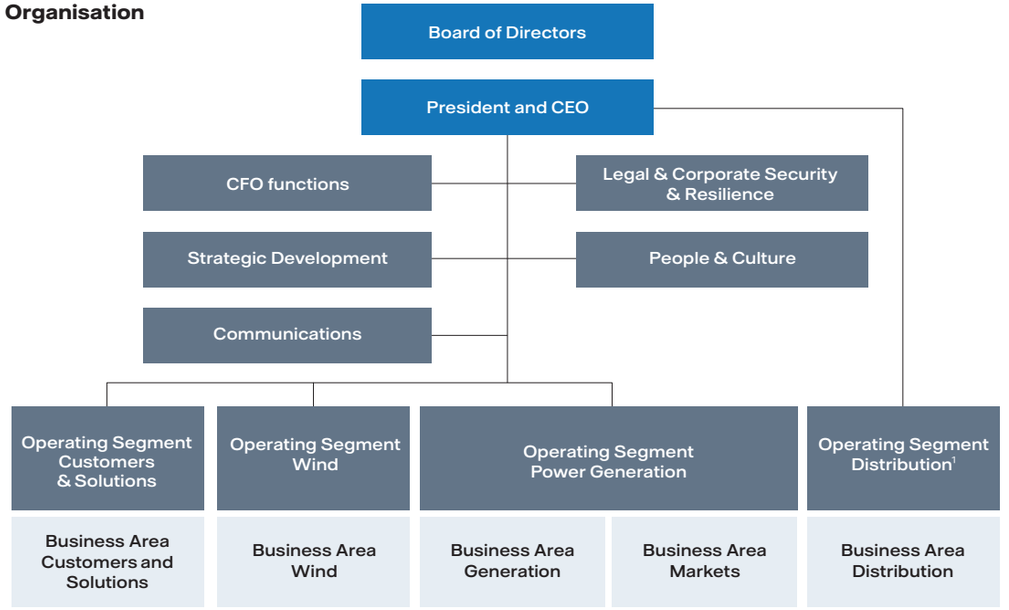
Integrity organisation

The aim of integrity work at Vattenfall is to preserve the integrity and to protect the reputation of Vattenfall. Integrity work at Vattenfall is organised according to the three lines model:

1. Ownership: The line organisation, which is responsible for compliance with laws and regulations within the unit.
2. Control and advice: The integrity organisation, with reporting to the Group's General Counsel.
3. Quality assurance: The Internal Audit unit.

The Integrity organisation's area of responsibility covers antitrust matters, antibribery and anti-corruption, conflicts of interest, inside information, awareness of Vattenfall's Code of Conduct and Integrity, and coordination of Vattenfall's whistleblowing function. Within its

Organisation



1. Vattenfall's electricity distribution operations are unbundled from other operations, in accordance with Swedish and UK legislation.

scope, the Integrity organisation supports Vattenfall in identifying, mitigating, managing and monitoring the risk of non-compliance with laws, regulations, rules, standards and codes of conduct, relevant to its activities. Work is conducted in accordance with an annual plan and regular follow-ups are performed. The annual integrity work is summarised in an integrity report to the Board.

Current integrity issues in 2024 are described in more detail in the sustainability statement in topical section Governance on page 123.

Guidelines for remuneration of senior executives

The 2024 Annual General Meeting adopted guidelines for remuneration of senior executives. These guidelines are based on the Swedish Government Offices' principles, which form part of the Swedish State's ownership policy, with a deviation as to how the principles are applied in Vattenfall's subsidiaries. This deviation means that instead of the definition of senior executive in the Swedish Government Offices' principles, senior executives shall be defined on the basis of whether they have a significant impact on the Group's earnings, through use of the International Position Evaluation (IPE) model. Managers with positions of IPE 68 and higher are to be considered as senior executives. The Board's explanation for this deviation is stated in the guidelines, which are found on Vattenfall's website, group.vattenfall.com and in the 2023 Annual and Sustainability Report, pages 110 and 111. These guidelines are based on the Swedish Government Offices' principles (www.regeringen.se), which form part variable remuneration must not be paid to senior executives.

Actions with respect to agreements with senior executives were during 2024 continuously reported to the Remuneration Committee and the Board, which also decided on the entering into such agreements. Independent external remuneration consultants provided benchmark data prior to decisions on remuneration. Remuneration and compliance with the adopted guidelines are described in the Remuneration Report and in the Annual and Sustainability Report, Note 11 to the consolidated accounts, Number of employees and personnel costs. The proposed guidelines ahead of the 2025 AGM are shown on pages 72–73.

Internal control over financial reporting

Vattenfall Group appreciates high quality in financial reporting in achieving a trusting relation with key stakeholders. This section describes the most essential elements in Vattenfall's system of internal control and risk management in conjunction with financial reporting, as prescribed by the Swedish Annual Accounts Act and the Code. Vattenfall's framework for this control is based on the updated framework "Internal Control – Integrated Framework" from 2013, which has been developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this framework, internal control is defined as "a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance". Vattenfall's overall risks and risk management are further described in the Annual and Sustainability Report, pages 45–57.

Control environment

The control environment is based on the delegation of authority between the Board and the President, which is set forth in the Board's Rules of Procedure, along with the reporting requirements set by the Board. The Board has also adopted Vattenfall's Code of Conduct and Integrity, which lays out the overarching rules governing conduct for all employees.

The Board of Directors has ultimate responsibility for internal control over financial reporting, according to the Swedish Companies Act and the Code. In this context the Board shall ensure that the company's organisation is structured in such a way that the bookkeeping, treasury management and the company's financial conditions in general are controlled in a satisfactory manner.

The Board's audit committee monitors the status of internal control over financial reporting on behalf of the Board and makes recommendations and proposals to ensure the reliability of the reporting. The committee also informs the Board about the results of the audit and about the ways in which the audit contributed to the reliability of the financial reporting and about which function the committee has had.

The VMS (described on page 64) contains steering rules for all identified entity level controls, including roles and responsibilities, authority and risk mandates, decision-making processes, risk management, internal control, as well as ethics and integrity issues. The VMS lays out the grandparent principle and four eyes principle for decision-making. An instruction and IT solution

The Internal Financial Control (IFC) process valid 2024

is in place for assignment of Group internal authority concerning invoicing, among other things. The VMS also stipulates which decision-making, oversight and advisory bodies exist within the Group, on top of those required by law.

Vattenfall has an internal financial control (IFC) process, organised in Group Finance. Its overall purpose is to ensure that the Vattenfall Group has internal controls in place which provide reasonable assurance that the risk of material misstatements in the financial reporting is mitigated. Vattenfall also has a limited number of key controls for non-financial reporting.

In order to achieve a higher degree of formalization, the IFC process has been updated. The updated process now also includes the activities that are performed locally, while the previous process focused on Group IFC activities. IFC coordinators are responsible for the local activities.

Risk assessment

The Board addresses the Group's risk assessment and risk management process for the financial reporting at an overarching level. The Board's audit committee conducts evaluation and monitoring of risks and quality in financial reporting and other enterprise risks. The Audit Committee maintains regular contact with the Group's internal and external audit functions to gather input to continuous risk assessments.

A continuous Enterprise Risk Management (ERM) process makes it possible to quantify and compare financial risks. The risk department reports the findings in the ERM process to the Executive Group Management, to the Vattenfall Risk Committee and ultimately to the Audit Committee and the Board.

For the financial reporting, the IFC process serves as the framework for internal control that identifies and defines risks for material misstatements in the reporting. These are overseen by the CFO function through an annual assessment of the effectiveness of process and IT general controls for units in scope of IFC. The scope is based on a materiality and risk analysis. The CFO function is also responsible for performing regular analyses of risks related to financial reporting and for updating this framework. Vattenfall has introduced formal local control frameworks for all business areas. For mandatory group audits, local control frameworks have documented one or more local controls. An evaluation of the effectiveness of local controls will start in 2025, in addition to the annual group evaluation.

Control activities and monitoring

The Board monitors and addresses the Group's financial situation at every regular board meeting, with a starting point from the financial report submitted by the President and the Chief Financial Officer (CFO).

The Audit Committee conducts the Board's monitoring of the effectiveness of internal control and regularly receives status reports on the Group's internal control over financial reporting, in accordance with the IFC process. A financial report is presented quarterly at regular Audit Committee meeting, sustainability issues and tax issues are reported on and followed up on a regular basis. The Audit Committee, in turn, reports to the Board on its most important observations and recommendations. The timing and forms of this reporting are set in the Board's and Audit Committee's respective Rules of Procedure.

The Executive Group Management holds regular follow-up meetings with the heads of the Business Areas and Staff Functions regarding the financial outcome. Operations are followed up on a quarterly basis via Business Performance Meetings.

Internally, Vattenfall applies the "three lines model" (described on page 64) for internal control over financial reporting. In this context, the second line includes the Group Internal Financial Control Officer (IFCO), and IFC co-ordinators at local level, who are responsible for monitoring and control of risks in the financial reporting. The Group IFCO is responsible for the IFC process, which aims to strengthen the governance structure and effectiveness of controls. Continuous improvements to the IFC process are ensured through an annual evaluation and updating process. Information about ineffective controls is provided to internal and external audit. Each incidence of ineffectiveness is risk-assessed in consultation with the first line. Information about these risks is provided to the risk organisation. An IFC status update is provided semi-annually to the Audit Committee.

The Vattenfall framework for internal financial control includes processes for assessments, monitoring, reporting and improvement of control activities in order to prevent, discover and correct material misstatements in the financial reporting. Confirmation that internal and external regulations have been complied with is obtained via signed so-called internal representation letters.

Information and communication

The Group's steering documents are accessible via Vattenfall's intranet. The forms for managing internal and external communication are documented in a VMS instruction which aims to ensure that Vattenfall is in compliance with legal as well as stock exchange rules, the Swedish state's ownership policy (including principles for external reporting), and other obligations. Accounting and reporting principles are laid out in a joint manual for the entire Group. Updates and changes in these policies and principles are communicated on a continuous basis via the intranet as well as at meetings with representatives of the Group's Business Areas and Staff Functions.

Reporting and follow-up reporting to the Board and EGM are part of monitoring activities. Internal and external audit and the Chief Risk Officer (CRO) also report on their observations to the Board's audit committee. Furthermore, the semi-annual status report from IFC is a basis for the assessment.

Financial reporting includes interim reports, the year-end report and the annual report. In addition to these reports, financial information is provided to the Group's external stakeholders via press releases and Vattenfall's websites, in accordance with the Swedish Securities Market Act, among other things. Presentations and conference calls for financial analysts, investors and the media are held as a rule on the same day that reports are published.

Board of Directors

Mats Granryd (1962)
Chairman of the Board
Education Mechanical M.Sc.
Other assignments Board member of Ratos AB (2024–), Chairman of the board COOR (2017–), Director General GSMA (2016–), Member of the UN Broadband Commission (2017–).
Previous positions Member of the board Swedbank (2017–2020). Member of the board ENVAC (2013–2017). Group CEO Tele2 (2010–2015). Positions within Ericsson (1995–2010).
Elected 2020
Committee assignment Member of the Remuneration Committee
Board meeting attendance 10/10
Committee attendance 5/5

Pär Ekeroth (1974)
Board member
Education M.Sc. in Business and Economics.
Current position Senior Advisor, Ministry of Finance.
Other assignments Board member of SJ AB.
Previous positions Senior Manager, PwC Corporate Finance.
Elected 2023
Committee assignment Member of the Audit Committee
Board meeting attendance 10/10
Committee attendance 5/6

Ingemar Engkvist (1957)
Board member
Education Ph.D Nuclear chemistry with focus on nuclear waste management.
Current position Self-employed Executive Advisor.
Other assignments Board member of ISEC Monitoring Systems AB.
Previous positions Chief Executive Officer, World Association of Nuclear Operators, London (2020–2022). Board member of World Association of Nuclear Operators (2020–2022). Director, World Association of Nuclear Operators, Paris Centre (2016–2019). Chief Executive Officer, E.ON Kärnkraft Sverige (2010–2016). Chairman of the Board of Directors, OKG AB (2010–2016). Board member, Ringhals AB (2010–2016), Board member, Forsmark Kraftgrupp AB (2008–2016). Board member, Svensk Kärnbränslehantering AB (2008–2016).
Elected 2023
Committee assignment Member of the Remuneration Committee
Board meeting attendance 9/10
Committee attendance 3/4

Christian Levin (1967)
Board member
Education B.Sc. of Science in Business Administration and a Master of Science in Mechanical Engineering.
Current position President and CEO at Scania, CEO at Traton AB.
Other assignments Chairman of the Supervisory Board, MAN Truck & Bus SE. Board member of Scania CV AB, Navistar LLC, Volkswagen Truck and Bus Ltda, Association of Swedish Engineering Industries and the Royal Institute of Technology (KTH).
Previous positions Chief Operating Officer, Traton SE (2019–2021). Executive Vice President, Sales & Marketing Scania CV AB (2016–2018). Executive Vice President, Commercial Operations Scania CV AB (2005–2016). Managing Director, Italscania S.p.A (2006–2010).
Elected 2024
Board meeting attendance 5/7

Nina Linander (1959)
Board member
Education M.Sc. in Business and Economics. MBA.
Current positions Board member of Swedavia, Suominen and Asker Healthcare Group.
Previous positions Founder and partner, Stanton Chase International AB, Head of Finance, AB Electrolux (publ). Various leadership positions within Vattenfall AB, work within Corporate Finance at investment banks in London.
Elected 2024
Committee assignment Member of the Audit Committee
Board meeting attendance 7/7
Committee attendance 4/4

Per Lindberg (1959)
Board member
Education Mechanical M.Sc, Ph.D Industrial Management and Work Organization.
Current position Senior advisor, Peymar.
Other assignments Chairman of the Board of Permascand AB and Nordic Brass Gusum AB. Board member of Boliden AB, Valmet Oyj, and ReOcean AB.
Previous positions President & CEO, Epiroc AB (2018–2020). President & CEO, BillerudKorsnäs AB (2012–2017). President & CEO, Billerud AB (2005–2012). President, Korsnäs AB (2001–2005). Vice President, Investment AB Kinnevik (2004–2005).
Elected 2023
Committee assignment Member of the Audit Committee
Board meeting attendance 8/10
Committee attendance 4/6

Board of Directors, cont.

Carola Puusteli (1965)
Board member
Education International Business School.
Current position Board member of HALTON (Finland), Carbo Culture (Finland) and Infrasonik (Sweden).
Previous positions Board member of Interpartner (Denmark), Polarium (Sweden), Schneider Electric (2006–2024), previous Vice President Strategy & Technology (Power & Grid segment), COTS Sarl Founder & Managing Director (2003 –2006). Various positions within Industrial Services & Automation, ABB (1994–2003). Managing Director of Infrasonik Sarl and, formation and management of the subsidiaries in France, UK, USA and Poland (1989–1994).
Elected 2023
Committee assignment Chair of the Remuneration Committee
Board meeting attendance 10/10
Committee attendance 5/5

Fredrik Rystedt (1963)
Board member
Education M.Sc. Business and Economics.
Current position Executive Vice President and CFO of Essity Aktiebolag (publ).
Previous positions Chief Financial Officer, Country Senior Executive, Nordea Sweden (2008–2012). Chief Financial Officer, Electrolux Group (2001–2008). Chief Financial Officer (2000–2001) and Head of Business Development (1998–1999), Sapa Group. Positions within the Electrolux Group (1989–1998), including as Vice President and Head/Director of Mergers & Acquisitions (1995–1998).
Elected April 2017
Committee assignment Audit Committee, Chair
Board meeting attendance 10/10
Committee attendance 6/6

Robert Lönnqvist (1979)
Employee representative
Education 3-year upper secondary degree in electrical installation. Further education in project management, labour law and health & safety.
Current position Employee representative for Seko Facket för Service och Kommunikation. Vattenfall employee since 2007, currently as Project Manager at Vattenfall Services Nordic AB.
Other assignments Member of the European Works Council. Assignments for Seko.
Committee assignment Member of the Remuneration Committee
Elected 2017
Committee assignment Member of the Remuneration Committee
Board meeting attendance 10/10
Committee attendance 4/4

Rolf Ohlsson (1961)
Employee representative
Education Mechanical M.Sc.
Current position Employee representative for Akademikerna at Vattenfall. Vattenfall employee since 1998, currently as full time representative for Akademikerna at Forsmarks Kraftgrupp AB.
Other assignments Employee representative on Forsmarks Kraftgrupp AB's board. Chairman of Akademikerna i Vattenfall.
Elected 2017
Committee assignment Member of the Audit Committee
Board meeting attendance 10/10
Committee attendance 6/6

Persons who left the Board of Directors in 2024

- Håkan Erixon
- Ann Carlsson Meyer

Jeanette Regin (1965)
Employee representative
Education Secondary school diploma and two-year education in healthcare.
Current position Employee representative for Unionen. Responsible for Sales Heat at Gotlands Energi AB.
Elected 2011
Board meeting attendance 7/10

Joel Hersan (1979)
Employee representative (deputy)
Education 3-year upper secondary degree in electricity distribution. Further education in project management, leadership, labour law and health & safety.
Current position Deputy Employee representative for SEKO Facket för Service och Kommunikation. Vattenfall employee since 1999, currently as Team Manager at Vattenfall Services Nordic AB.
Other assigments Assignments for SEKO.
Elected 2023
Board meeting attendance 10/10

Deputy employee representatives

Anders Bohlin (1965)
Employee representative (deputy)
Education Energy Engineer.
Current position Research Engineer at Strategic Development, Vattenfall AB.
Other assigments Member of the European Works Council. Vice Chairman, Unionen Vattenfall.
Elected 2019
Board meeting attendance 10/10

Christer Gustafsson (1959)
Employee representative (deputy)
Education Four-year education in technology.
Current position Employee representative for Ledarna. Vattenfall employee since 1986, currently in the the engineering department, Forsmarks Kraftgrupp AB.
Other assigments Representative for Energy & Technology, Confédération Européenne des Cadres (for energy issues). Chairman of Ledarna at Vattenfall and European Works Council at Vattenfall.
Elected 2013
Board meeting attendance 10/10

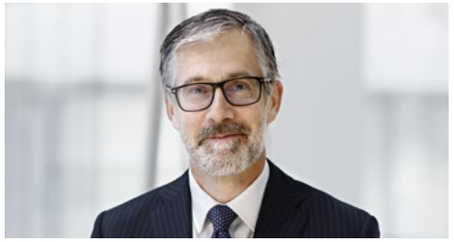
Executive Group Management

Anna Borg (1971)
President and CEO
Vattenfall employee since 2017 and 1999–2015
Education Master in Economics and Political Science.
Previous positions CFO, Vattenfall (2017– 2020), Senior Vice President, Business Area Markets, Vattenfall (2017), Senior Vice President, Nordic Klarna (2015–2017), Vice President, Marketing and Sales Nordic, Vattenfall (2013–2015), Vice President B2C Sales Europe, Vattenfall (2011–2013), Vice President, Sales Nordic, Vattenfall (2009–2011), Management positions in Strategy, Business Development, Project Management and Trading, Vattenfall (1999–2009).
Other assignments Board member FAM and Ruter Dam.

In 2024, Anna Borg did not have any significant shareholdings in companies with which Vattenfall has business relations.

Kerstin Ahlfont (1971)
Senior Vice President, Chief Financial Officer
Vattenfall employee since 1995
Education M.Sc. Eng.
Previous positions Vice President Human Resources (2015–2020) Head of Finance Region Nordic (2014–2015), Vice President Controlling and Continuous Improvement Business Division Production (2012–2014), Head of Project Management Office (2010–2012). Long-standing experience from various management positions within Vattenfall such as Business Group Pan Europe (2009–2010), Business Unit Heat Nordic (2000–2009), Product Manager Specialist (1998–2000), Consultant Vattenfall Energisystem AB (1996–1998) and trainee 1995–1996).
Other assignments No other assignments.

Helene Biström (1962)
Senior Vice President, Head of Business Area Wind
Vattenfall employee since 2021 and 1983–2010
Education MSc in Mechanical Engineering.
Previous positions Executive Vice President Commercial BillerudKorsnäs AB (2019–2021), CEO Infranord (2017–2019), CEO Norrenergi (2011–2014), Member of Group Management Vattenfall AB (2007–2010). Chairman of the Board Sveaskog and Cramo, Board member of Statkraft AS, KTH and Pöyry (2014–2017).
Other assignments Board member of Boliden AB.



Jonas Bengtsson (1970)
Senior Vice President, General Counsel and Secretary to the Board of Directors and responsible for Corporate Security & Resilience
Vattenfall employee since 2024
Education LL.M.
Previous positions Head of Corporate Affairs Polarium Energy Solutions AB (2022–2024), General Counsel, Secretary to the Board of Directions & Head of Corporate Affairs Telia Company AB (2014–2021), General Counsel and Secretary to the Board of Directors Tele2 AB (2007–2013), General Counsel Telenor Sverige AB (2002–2006), General Counsel Utfors AB (2000–2002), Associate Mannheimer Swartling (1997–2000).
Other assignments No other assignments.

Martijn Hagens (1971)
Senior Vice President, Head of Business Area Markets
Vattenfall employee since 2003
Education M. Sc. Industrial Engineering and Management.
Previous positions Head of Business Area Customers & Solutions, Vattenfall (2015–2023) A.I. Head of Business Area Heat, Vattenfall (2022–2023). Head of Heat Continental/UK, Vattenfall (2014–2015). Head of Customer Service, Vattenfall (2011–2013). Head of Customer Care Centre, Nuon (2008–2010). Program Director Unbundling, Nuon (2006–2007). Nuon Consultancy Group & Lean Competence Center, Nuon (2005–2006). Head of Customer Care B2B, Nuon (2003–2004). Management Consultant, Accenture (1996–2002).
Other assignments Managing Director of Vattenfall N.V. Netherlands.

Executive Group Management, cont.

Åsa Jamal (1972)
Senior Vice President, Head of Group Staff Function Communications and Acting Head of Staff Function People & Culture
Vattenfall employee since 2022
Education BA Political Science and Economics.
Previous positions SVP Head of Communications, Telia Company (2019–2020), VP Head of Communications Sweden, Telia (2017–2020), SVP Communications, HR and Public Affairs, Bonnier Broadcasting/TV4 (2012–2017), Managing Director and Partner, JKL (2006–2012), Consultant, JKL (2000–2006).
Other assignments Board Member of British-Swedish Chamber of Commerce.

Andreas Regnell (1966)
Senior Vice President, Head of Staff Function Strategic Development
Vattenfall employee since 2010
Education B.Sc. Econ.
Previous positions Head of Nordic Business Strategy, Vattenfall (2014–2015). Head of Strategy and Sustainability, Vattenfall (2010–2013). Senior Partner and Managing Director, Managing Partner of Nordic Region, The Boston Consulting Group (1992–2010). Analyst and Account Manager, Citibank (1989–1992).
Other assignments Chairman of the Board of Green Cargo AB. Board member of HYBRIT Development AB. Board member of Energiföretagen Sverige – Swedenergy AB.

Alexander van Ofwegen (1971)
Senior Vice President, Head of Business Area Customers & Solutions
Vattenfall employee since 2001
Education M. Sc. Mechanical Engineering and Financial Management.
Previous positions Head of Business Unit Heat Netherlands and Head of Business Unit Moorburg Hamburg Vattenfall (2019–2023), Head of Condensing Netherlands Vattenfall (2011–2019), Head of Heat Netherlands Vattenfall (2015–2019), Plant Manager of power plant Hemweg (2007–2011), Manager Finance & Control Nuon (2004–2007), IT manager Nuon (2001–2003, Sales manager Stork N.V. (1997–2000), Process engineer Stork N.V. (1995–1997)
Other assignments Finance Director of Vattenfall N.V. Netherlands.

Johan Dasht (1975)
Senior Vice President, Head of Business Area Generation
Vattenfall employee since 2020
Education MBA, Licentiate of Technology, M.Sc. Eng.
Previous positions CEO Vattenfall Hydro Nordic (2022–2024), CEO SKB AB (2020–2022), CEO OKG AB (2016–2020), Production and plant manager Oskarshamn 3 (2013–2015), Vice President Engineering OKG (2010–2011), Head of Projects OKG (2010–2011), Manager of Core and Fuel department OKG (2007–2009), Engineer (2006–2007), Trainee (2005–2006)
Other assignments Chairman of the Board of Vattenkraftens miljöfond

Persons who left the Executive Group Management in 2024

- **Anne Gynnerstedt**
  General Counsel and Secretary to the Board of Directors and responsible for Corporate Security & Resilience
- **Torbjörn Wahlborg**
  Head of Business Area Generation
- **Christian Barthélémy**
  Head of Staff Function People & Culture
- **Anna-Karin Stenberg**
  Senior Vice President, Head of Business Area Markets

Annika Viklund (1967)
Senior Vice President, Head of Business Area Distribution
Vattenfall employee since 2006
Education Computer Science, MBA.
Previous positions Managing Director Vattenfall Eldistribution (2010–2015,2017–), Vice President Distribution Nordic, Vattenfall (2011–2015), Head of Local Networks, Vattenfall Distribution (2008–2010), Head of Marketing, Vattenfall Distribution (2006–2008), Nordic Resource Manager IBM Global Service (2005–2006), Client Unit Executive Manager Public Sector IBM Sweden (2004–2005), Consultant Manager IBM Global Services (1998–2003).
Other assignments Board member Teracom Samhällsnät and Wise Group AB.

The electricity distribution operations are unbundled from Vattenfall's other operations in accordance with Swedish and British legislation. The head of Business Area distribution it therefore not a member of the EGM.

Proposal for the Annual General Meeting

The Board's proposed guidelines for remuneration of senior executives
These guidelines cover the President and other members of the Group management. They also cover board members, to the extent their remuneration is not decided by the Annual General Meeting. The guidelines are designed in accordance with the Swedish Government's principles for remuneration for senior executives, as defined in the Swedish State Ownership Policy, dated 20 February 2025 (www.regeringen.se), with a deviation as to how the principles are applied in Vattenfall's subsidiaries (see additional information under Explanation for deviations from the government's principles). The guidelines shall apply to remuneration agreed upon, and changes made to already agreed remuneration, after the guidelines have been adopted by the 2025 Annual General Meeting.

The guidelines' promotion of the company's business strategy, long-term interests and sustainability
Vattenfall has formulated a strategy to reach the goal of enabling fossil freedom. The business strategy is further described on the web page https://group.vattenfall.com/who-we-are/about-us/our-goals-and-strategy.

A prerequisite for the successful implementation of Vattenfall's business strategy and safeguarding of its long-term interests, including its sustainability, is that Vattenfall is able to recruit and retain qualified personnel. To this end, it is necessary that Vattenfall offers competitive remuneration. These guidelines enable Vattenfall to offer the senior executives a competitive total remuneration.

Types of remuneration, etc
The remuneration has to be competitive, capped, appropriate and not market-leading in relation to comparable companies, and may consist of the following components: Fixed cash salary, severance pay, pension benefits and other benefits. Variable remuneration must not be paid to senior executives.

Premiums for retirement and survivors' pension benefits shall be defined contribution solutions that do not exceed 30 per cent of fixed annual cash salary, unless benefits are provided through a group pension plan applied to an enterprise. In that case, the contributions are determined by the terms and conditions of the pension plan. Any expansion of a group pension plan above the pay level covered by the plan has to be on a defined contribution basis where the maximum contribution is 30 per cent of the part of salary above the cap. The retirement age must follow the recommended retirement age ("riktåldern").

If a salary swap scheme is offered, the solution has to be cost-neutral
Other benefits may include, among others, company cars. Compensation in connection with work incapacity due to illness shall follow the terms and conditions for sick pay and disability pension set out in applicable collective agreements. Any expansion of group disability insurance above the pay level covered by collective agreement has to correspond to market practice.

As regards employment relationships governed by non-Swedish legislation, the appropriate adjustments may be made concerning pension benefits and other benefits so as to follow mandatory rules or established local practice; in doing so, the overall purpose of these guidelines has to be satisfied as far as possible.

It shall be avoided that a board member or deputy board member is engaged as a consultant in the company and thus receives consultancy fees in addition to the director's fee. If this is the case, the assignment shall be examined by the Board of Directors on a case-by-case basis, be clearly separate from the ordinary board assignment, limited in time and regulated by written agreement between the company and the member. The remuneration for such assignments shall be consistent with these guidelines.

Termination of employment
If the company gives notice of termination, the period of notice must not exceed six months and severance pay must be limited to at most twelve months' salary. Severance pay is to be paid monthly and consist only of the fixed monthly salary with no pension benefits or other benefits added. In case of new employment or some other additional paid assignment or income from business activity, remuneration from the terminating company shall be reduced by an amount equivalent to the new income during the period covered by salary for notice of termination and severance pay. No severance pay is paid if the employee gives notice of termination. Severance pay is paid until the agreed age of retirement at the latest and is never paid after the recommended retirement age ("riktåldern") in force at any given time.

Additionally, remuneration may be paid for non-compete undertakings. Such remuneration shall compensate for loss of income and shall only be paid in so far as the previously employed executive is not entitled to severance pay. The remuneration shall amount to not more than 60 per cent of the monthly income at the time of termination of employment and be paid during the time the non-compete undertaking applies, however not for more than 12 months following termination of employment.

Salary and employment conditions for employees
Remuneration to senior executives shall not be market-leading in relation to comparable companies but should be moderate in character. In the preparation of the Board's proposal for these remuneration guidelines, salary and employment conditions for employees of the company have been taken into account by including information on the employees' total income, the components of the remuneration and increase and growth rate over time, in the Remuneration Committee's and the Board's basis of decision when evaluating whether the guidelines and the limitations set out herein are reasonable.

The decision-making process to determine, review and implement the guidelines
The Board has established a Remuneration Committee. The members of the Remuneration Committee, elected by the Annual General Meeting, are independent of the company and its executive management. The Committee's tasks include preparing the Board's decision to propose guidelines for remuneration to senior executives. The Board shall annually prepare a proposal for guidelines and annually submit it to the general meeting for decision. The Remuneration Committee shall also follow and assess the application of the guidelines for remuneration to senior executives as well as the current remuneration structures and levels of remuneration in Vattenfall. The President and other members of the executive management do not participate in the Board's processing of and resolutions regarding remuneration-related matters, in so far as they are affected by such matters.

The Board certifies that the remuneration in question is in compliance with the guidelines set by the general meeting in such way that before a decision is made on remuneration and other terms of employment for a senior executive, written documentation shall be available that shows the company's total cost. The proposal for decision shall be drafted by the Board's Remuneration Committee and thereafter be decided by the Board. The company's auditors shall perform a review to ensure that the set remuneration levels and other terms of employment have not been exceeded and, in accordance with the Swedish Companies Act, shall once a year – not later than three weeks before the Annual

General Meeting – issue a written statement as to whether the adopted guidelines have been adhered to.

Deviations from the guidelines
The Board of directors may temporarily resolve to deviate from the guidelines, in whole or in part, if in a specific case there is special cause for the deviate and a deviation is necessary to serve the company's long-term interests, including its sustainability, or to ensure the company's financial viability. The Board makes the decision on deviation from the guidelines. As set out above, the Remuneration Committee's tasks include preparing the Board of Directors' resolutions in remuneration-related matters, which includes any resolutions to deviate from the guidelines. In such a case, the Board of Directors shall, in the company's remuneration report, disclose the deviation and the reasons therefor.

Explanation for deviations from the government's principles
The deviation from the Government's principles for terms of employment for senior executives of state-owned companies was decided on by the owner at the 2024 Annual General Meeting. The deviation entails use of a generally accepted ranking model instead of the definition of senior executive of a subsidiary in the principles for remuneration. The Board is of the opinion that the following, special reasons exist for deviating from the principles.

Like other international groups, Vattenfall governs its operations from a commercial perspective and not according to the legal company structure. For commercial and legal reasons, the Vattenfall Group has approximately 300 subsidiaries. Through application of the Government's principles for subsidiaries, a very large number of executives would be considered to be senior, without them having any significant influence on the Group's earnings.

The proposed deviation reflects these circumstances. The criteria used to define what constitutes a senior executive are the individual subsidiary's size based on sales, the number of employees and number of steps in the value chain, as well as the requirements on the individual executive for innovation, knowledge, strategic/visionary role and international responsibility.

The International Position Evaluation (IPE) model is used as support for determining in a systematic manner which positions can be considered to be senior. The Board's conclusion is that, in addition to the members of the Executive Group Management, executives in positions of IPE 68 or higher should be considered to be senior.

Proposed distribution of profit
The Annual General Meeting has at its disposal retained profits, including profit for the year, totalling SEK 137 684 210 929. The Board of Directors proposes that the profits be distributed as follows:

To be distributed to the shareholder:	SEK 7,000,000,000
To be carried forward:	SEK 130,684,210,929

The proposed distribution corresponds to a dividend of SEK 53,15 per share. The dividend is proposed to be paid on 9 May 2025.

Statement by the Board of Directors pursuant to the Swedish Companies Act, Chapter 18, Section 4
Based on the Parent Company's and Group's financial position, earnings and cash position, the Board of Directors is of the opinion that the proposed distribution of profits will not lead to any material limitation of the Parent Company's or Group's ability to make any necessary investments or to meet their obligations in the short and long term. In view of the above, the Board of Directors finds the proposed dividend, totalling SEK 7,000,000,000 to be carefully considered and justified.

The Board of Directors' and the President's assurance upon signing the Annual and Sustainability Report for 2024
The undersigned certify that the consolidated accounts and the Annual Report have been prepared in accordance with International Financial Reporting Standards (IFRS), as endorsed by the European Commission, for application within the EU, and generally accepted accounting principles, respectively, and give a true and fair view of the Parent Company's and the Group's financial position and earnings, and that the Administration Report for the Parent Company and the Group presents a fair overview of the development of the Parent Company's and the Group's operations, financial position and earnings and describes significant risks and uncertainties that the companies in the Group face. In addition, the undersigned certify that the sustainability statement and the statutory sustainability report according to the Swedish Annual Accounts Act, as defined in the ESRS Content index on pages 132–133 and on the GRI Index on page 150, have been prepared in accordance with the European Sustainability Reporting Standards (ESRS) and in reference to the GRI standards, and have been adopted by the Board of Directors.

Solna, 20 March 2025

Mats Granryd, Chairman of the Board

Pär Ekeroth | Nina Linander | Christian Levin | Carola Puusteli

Ingemar Engkvist | Per Lindberg | Robert Lönnqvist

Rolf Ohlsson | Jeanette Regin | Fredrik Rystedt

Anna Borg, President and CEO

Our auditor's report was submitted on 24 March 2025
PricewaterhouseCoopers AB

Eva Carlsvi
Auditor-In-Charge,
Authorised Public Accountant

Aleksander Lyckow
Authorised Public Accountant

Sustainability at Vattenfall

Sustainability is the business

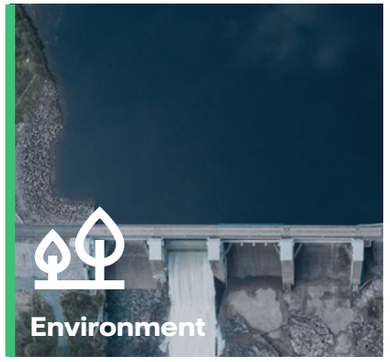
The transition to a net-zero economy is one of the greatest challenges of our time. It touches all aspects of society, as sustainable economic development, social progress and climate issues are interlinked.

The net-zero economy transition, with the energy system at its core, paves the way into a sustainable future – for people as well as for businesses.

The decarbonisation of our assets and customers, and the build-out at scale of new fossil-free electricity and distribution sources, are the greatest contributions we can make to the energy transition. They form the basis of our commitment to reach Net Zero in 2040.

Not only do we need to secure the financial sustainability that allows us to invest in the large-scale, high-paced transformation, but we also recognise that our transformation should benefit society, local communities, and biodiversity as well. This is very closely linked to the concept of a "just transition".

In this report we present our material sustainability topics, the impacts, risks and opportunities associated with them, and the connected policies, actions, metrics and targets.



Highlights in 2024

-5%

Reduced absolute Scope 1-3 CO_2e emissions by 5% compared to 2023 and 28.3 Mt since 2017.

Read more on pages 89-95 →

58%

of composite materials in decommissioned wind turbines are reused, refurbished, repurposed, or recycled.

Read more on pages 101-103 →

1.4

Lost Time Injury Frequency reduced to 1.4 from 2.1 in 2019.

Read more on pages 108-111 →

1,004

managers and other relevant employees attended integrity training.

Read more on pages 123-124 →

"Achieving fossil-free living requires solutions and ways of working that clearly consider environmental, social and economic aspects."

Anna Borg, President and CEO of Vattenfall

ESRS 2 General disclosures

Vattenfall strives to openly and transparently report on its material sustainability topics. Transparent reporting we believe, serves to demonstrate our commitment to operating sustainably and forms the basis for dialogues with our stakeholders, building trust and ensuring accountability as we report on key issues and the steps we take to address them.

About this report

Statutory sustainability reporting
The sustainability report was approved with a decision by the Board of Directors on 25 March 2025.

Vattenfall is subject to statutory sustainability reporting in accordance with the Swedish Annual Accounts Act. The statutory sustainability report is found in the following sections of the Vattenfall Annual and Sustainability Report (ASR) and meets the reporting requirements for the environment, social responsibility, personnel, human rights, as well as anti-corruption and bribery: pages 76–152, except page 149.

The report is structured in four sections as stipulated by the European Sustainability Reporting Standards (ESRS); General information, Environmental, Social and Governance. The sustainability notes following on page 126 are an integral part of the General information, Environmental, Social and Governance parts of the statement. Cross references to information in these notes are made from each part and the sustainability notes constitute a continuation of the respective part of the statement.

Important changes to previous years
For 2024, Vattenfall has switched the reporting framework from Global reporting Initiative (GRI) to the ESRS, meaning that the materiality assessment methodology, as well as the structure and content of the report, has undergone significant changes.

Comparative figures
Vattenfall has included comparative numbers for those data points where the comparison to previous years is unaffected by the new ESRS requirements. We have excluded comparative figures for data points where previous data has not been reported or which would require re-statement of previously reported numbers.

Basis of preparation
Conformity with standards and regulations
The sustainability statement is prepared in accordance with the ESRS issued by the European Financial Reporting Advisory Group (EFRAG). The data points and narratives follow the disclosure requirements that were deemed material through an information materiality assessment process (see page 85) following the double materiality assessment (see pages 84–85). Vattenfall applies the EU Taxonomy Regulation (EU20/825). For more information about the basis of preparation of the EU taxonomy reporting, including comparative numbers, see pages 134–145.

Inclusion of non-material information
Vattenfall has chosen to include some information pertaining to non-material topics as they are requested from stakeholders for usage on an aggregated level, which we assess is not the same thing as being material information for users of the sustainability report as referred to in the ESRS. The non-material information is not part of the formal Sustainability statement in accordance with ESRS, and are grey-marked in order for the reader to be able to separate this information from the formal sustainability statement. For simplicity, the non-material disclosures are being reported in line with GRI 2021 as in previous years to allow for external review. The GRI context index for these disclosures is found on page 150.

Principles of consolidation
The sustainability statement is consolidated according to the same principles as is outlined in Note 3 to the consolidated accounts hence, the consolidated quantitative ESG data comprises the parent company Vattenfall AB and subsidiaries controlled by Vattenfall AB. Joint operations are also included with Vattenfall AB's proportionate share. Associates, joint ventures and entities in the value chain of the Vattenfall group are not included in the consolidated ESG data points unless required by a specific topical standard[1] or due to a Vattenfall-identified material entity-specific disclosure or target. Deviations to this are specified in accounting policies in relation to specific circumstances in accordance with BP-2 and can be found in the Sustainability notes. The subsidiary undertakings that are included in the consolidation and exempted from Sustainability reporting following this report, if applicable, can be found in Note 25 to the consolidated accounts.

Value chain scope
This sustainability statement covers Vattenfall's upstream and downstream value chain for disclosures where this is relevant. For key overarching assumptions and limitations with regards to the value chain, see page 82. For assumptions and limitations with regards to the supply chain in terms of individual metrics, they are specified in the section Accounting policies and notes (page 126–131) in relation to the metrics in question.

Unbundling of the electricity distribution business
In accordance with legislation both within the EU and in the UK, operations of the electricity distribution network are separated from sales and generation of electricity, so-called unbundling (see page 65). These businesses are included in our own operations for the double materiality assessment (DMA) and in the reporting throughout this sustainability statement. With regards to steering, the unbundling means that the Distribution System Operators (DSOs) shall according to law have effective and independent decision-making rights. Hence, while the DSOs within the Vattenfall Group typically apply the same governing documents as the rest of the Group, they must be approved by these subsidiaries themselves and published in their local management system in order for Vattenfall Management System instructions (see page 64) to be valid. Before an instruction is approved, Vattenfall performs an "unbundling check" to ensure that nothing in the content conflicts with the unbundling rules (or clarify that the electricity distribution business is exempt from certain rules in the instruction). Vattenfall has not identified any notable impacts on this sustainability statement due to effects of the unbundling. The Distribution System Operators (DSOs) in the Vattenfall Group are Vattenfall Eldistribution AB, Vattenfall Networks Ltd, Västerbergslagens Elnät AB and Gotlands Elnät AB.

Detailed accounting policies
For more in-depth information on accounting policies, assumptions and disclosure gaps, see Sustainability notes pages 126–131.

1. Emissions linked to joint operations, joint ventures or other associates are included when Vattenfall demonstrates operational control of the asset. For further information see page 146.

List of datapoints in cross-cutting and topical standards that derive from other EU legislation

General Disclosures

Disclosure	ESRS	Data point(s)	Title	Regulation	Material	Page
General	GOV-1	21d	Board's gender diversity ratio	SFDR	Y	109
	GOV-1	21e	Percentage of independent Board members	SFDR	Y	62
	GOV-4	30	Statement on due diligence	SFDR	Y	80
	SBM-1	40d i	Activity in fossil fuel sector	SFDR	Y	N.A. phased in
	SBM-1	40d ii-iv	Activity in chemical, controversial weapons and/or tobacco industry	SFDR	N.A.	N.A.

Environmental Disclosures

Disclosure	ESRS	Data point(s)	Title	Regulation	Material	Page
Climate change	E1-1	14;	Transition plan for climate change mitigation	EU Climate Law	Y	91
	E1-1	16g	Exclusion from EU Paris-aligned benchmarks	Pillar 3; Benchmark regulation	Y	93
	E1-4	34	Emission reduction targets	SFDR; Pillar 3; Benchmark regulation	Y	94
	E1-5	37	Energy consumption and mix	SFDR	Y	147
	E1-5	38	Energy consumption from fossil sources disaggregated by sources (only high climate impact sectors)	SFDR	Y	147
	E1-5	40–43	Energy intensity associated with activities in high climate impact sectors	SFDR	Y	147
	E1-6	44	Gross scopes 1, 2, 3 and Total GHG emissions	SFDR; Pillar 3; Benchmark regulation	Y	146
	E1-6	53–55	Gross GHG emissions intensity	SFDR; Pillar 3; Benchmark regulation	Y	146
	E1-7	56	GHG removals and carbon credits	EU Climate Law	Y	146
	E1-9	66	Exposure of the benchmark portfolio to climate-related physical risks	Benchmark regulation	Y	N.A. phased in
	E1-9	66a	Disaggregation of monetary amounts by acute and chronic physical risk	Pillar 3	Y	N.A. phased in
	E1-9	66c	Location of significant assets at material physical risk	Pillar 3	Y	N.A. phased in
	E1-9	67c	Breakdown of the carrying value of its real estate assets by energy-efficiency classes	Pillar 3	N	N.A.
	E1-9	69	Degree of exposure of the portfolio to climate-related opportunitie	Benchmark regulation	Y	N.A. phased in
Pollution of air, water & soil	E2-4	28	Emissions to air, water, and soil	SFDR	N	N.A.
Water & marine resources	E3-1; E3-4	9, 13, 14, 28c, 29	All disclosures	SFDR	N	N.A.
Biodiversity & ecosystems	E4 IRO-1	16a-c	Activities in biodiversity-sensitive areas, impacts related to land degradation, desertification and soil sealing, and operations affecting threatened species	SFDR	Y	98
	E4-2	24b-d	Policies related to biodiversity and ecosystems	SFDR	Y	96
Resource use & circularity	E5-5	37d; 39	Resource outflows (non-recycled waste; hazardous waste and radioactive waste)	SFDR	N	N.A.

List of datapoints in cross-cutting and topical standards that derive from other EU legislation

Social Disclosures

Disclosure	ESRS	Data point(s)	Title	Regulation	Material	Page
Own workforce	S1 SBM-3	14g; 14f	Risks of incidents of child labour and forced labour	SFDR	N	N.A.
	S1-1	20	General approach to human rights in own workforce	SFDR	Y	106, 108
	S1-1	21	Policies are aligned with internationally recognised instruments	Benchmark regulation	Y	106, 108
	S1-1	22	Policies addressing human trafficking, forced labour and child labour	SFDR	Y	106, 108
	S1-1	23	Policies on accident prevention	SFDR	Y	106, 108
	S1-3	32c	Processes to remediate negative impacts and channels for own workforce to raise concerns	SFDR	Y	109
	S1-14	88b&c	Health and safety metrics	SFDR; Benchmark regulation	Y	110
	S1-14	88e	Health and safety metrics	SFDR	Y	110
	S1-16	97a; 97b	Remuneration metrics (pay gap and total remuneration)	SFDR; Benchmark regulation	N	Note 11 and 42[1]
	S1-17	103a; 104a	Incidents, complaints and severe human rights impacts	SFDR; Benchmark regulation	N	N.A.
Workers in the value chain	S2 SBM-3	11b	Risks of incidents of child labour and forced labour	SFDR	N	N.A.
	S2-1	17; 18	General approach to human rights for workers in the value chain	SFDR	Y	106, 112
	S2-1	19	Non-respect of UNGPs on Business and Human Rights principles and OECD guidelines	SFDR; Benchmark regulation	Y	106, 112
	S2-1	19	Due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8	Benchmark regulation	Y	106, 112
	S2-4	36	Severe human rights issues and incidents connected to value chain workers	SFDR	Y	114
Affected communities	S3-1	16; 17	General approach to human rights for affected communities	SFDR; Benchmark regulation	Y	106, 116
	S3-4	36	Severe human rights issues and incidents connected to affected communities	SFDR	Y	116
Consumers and end users	S4-1	16; 17	General approach to human rights for consumers and end users	SFDR; Benchmark regulation	Y	106, 118
	S4-4	35	Severe human rights issues and incidents connected to consumers and end users	SFDR	Y	119

Governance Disclosures

Disclosure	ESRS	Data point(s)	Title	Regulation	Material	Page
Governance	G1-1	10b; 10d	Business conduct policies, whistleblowing and corporate culture	SFDR	Y	123–124
	G1-4	24a; 24b	Incidents of corruption or bribery	SFDR; Benchmark regulation	N	N.A

1. Refers to the Notes to the consolidated accounts.

ESRS disclosure requirements incorporated by reference

	Disclosure requirements	Section in the report	Page	Description
BP-2	The undertaking shall provide disclosures in relation to specific circumstances	Corporate Governance Report	65	See "Vattenfall's organisation" about unbundling
GOV-1	Composition of the administrative, management and supervisory bodies	Corporate Governance Report	68–71	Board of Directors and executive group management CV's
	The number of executive and non-executive members	Corporate Governance Report	68–71	Board of Directors and executive group management CV's. Composition of Board
	Representation of employees and other workers	Board committees & board composition	69	Board committees and board's composition
	Experience relevant to the sectors, products and geographic location	Corporate Governance Report	68–71	Board of Directors and executive group management CV's. Appointment of the Board.
	Gender diversity of the Board of Directors	Corporate Governance Report	68–69	Appointment of the Board of Directors
	Percentage of independent board members	Corporate Governance Report	68–69	Application of the code and composition of the Board of Directors
	Responsible body for oversight of impacts, risks and opportunities	Corporate Governance Report	60–62	Board of Directors' duties
	Board responsibilities	Corporate Governance Report	60, 63	Board of Directors' duties, CEO and Group Management
	Description of management's role in the governance processes	Corporate Governance Report	63–66	CEO and Group Management. Internal Audit Internal Goverance Internal control for sustainability topics is part of regular risk and control processes. IRO's identified in the DMA of 2024 will be integrated into the Risk Management Reporting System
	How supervisory bodies oversee target-setting and how these are monitored	Corporate Governance Report, CEO and Group management	63–65	Vattenfall's organisation and CEO and group management
	Description of management and supervisory bodies knowledge	CEO and Group Management. No specific controls on management for sustainability topics in place.	68–71	CV's and Board's duties
GOV-2	Description of processes to identify and assess material impacts, risks and opportunities	Corporate Governance Report	61–62	See "Board's yearly meeting" and "Audit committee"
	How governance bodies consider impacts, risks and opportunities regarding strategy, actions and procresses	CEO and Group Management section and Board of Directors	60–63	See "CEO and Group Management", "Board of Directors" and "The Board's main items of business in 2024" [1]
GOV-3	Sustainability linked incentive schemes and remuneration	Corporate Governance Report	66	See "Guidelines for remuneration of senior executives"
GOV-5	Process of risk management and internal control in relation to sustainability reporting	Corporate Governance Report	62	See "Audit Committee"
	Risk assessment procedure	Corporate Governance Report	62	See "Audit Committee"
	Main risks and mitigation actions	Corporate Governance Report	62	See "Audit Committee"
	Internal controls relating to findings in risk assessment	Corporate Governance Report	62	See "Audit Committee"
	Description of periodic reporting of findings in (d)	Corporate Governance Report	62	See "Audit Committee"
MDR-P	Description of the key contents of the policy, including its general objectives and which material impacts, risks or opportunities the policy relates to and the process for monitoring	Corporate Governance Report	64	See "Vattenfall Management System"
E1 IRO-1	The assessment of how its assets and business activities may be exposed and are sensitive to these climate-related hazards, creating gross physical risks for the undertaking.	Risk Management	46	See "Enterprise Risk Management"
E1-2	The most senior level in the undertaking's organisation that is accountable for the implementation of the policy	Corporate Governance Report	63	See "CEO and Group Management",
S1-9	The gender distribution in number and percentage at top management level	Corporate Governance Report	70	Board of Directors and executive group management CV's. Composition of EGM

1. Sustainability matters are regularly addressed in various forums during the reporting year. In 2024 the following item was added to the Board's agenda: "Sustainability items, focusing on fulfilling requirements due to new legislation based on the EU directive CSRD". In addition, Board of Directors and EGM were identified as key stakeholders in the DMA, and thus involved in the elaboration of material sustainability IRO's. As it is the first year of ESRS reporting, Vattenfall did not have a formal list of material IRO's for the administrative, management and supervisory bodies to review.

Governance of sustainability matters

We embed the governance of sustainability matters into our structures and processes. We accomplish this by establishing oversight and monitoring systems for sustainability matters and ensuring that the necessary expertise is in place.

Role of governance bodies in sustainability matters
The role of the Board of Directors (BoD) is outlined in detail in the corporate governance report (see page 60). In summary, the BoD is responsible for setting Vattenfall's operational targets, defining strategies to achieve them, and establishing systems and processes to control operations and manage risks. The table below provides cross-references to information on Vattenfall's governance bodies, including their roles, composition, and responsibilities. The corporate governance report on page 64 provides a detailed description of internal governance, and the roles of administrative, management, and supervisory bodies regarding business conduct matters within Vattenfall. The integrity organisation and Internal Audit hold expertise on such matters, while the Head of Strategic Development and Head of Legal are responsible for sustainability and compliance issues. The BoD and Management possess general knowledge and rely on subject matter experts within the organisation.

Overview of sustainability policy
The President and CEO of Vattenfall addresses sustainability matters, either independently or alongside internal governance bodies, including the Executive Group Management (EGM), which sets the Group's overarching direction. Within the EGM, the Head of Strategic Development leads on sustainability topics under the CEO's mandate from the BoD. The Group's Head of Sustainability reports directly to the Head of Strategic Development on sustainability matters. Vattenfall's CEO follows up on sustainability related challenges, progress, and future actions, together with top management in each business area, in annual deep-dives. For more information on the CEO and Group Management responsibilities, see page 63. In addition, the Board shall, according to its Rules of Procedure, also identify how sustainability issues impact the company's risks and business opportunities and it allocates stakeholder engagement issues to the CEO. Sustainability aspects such as environmental impact and human rights are integrated into the Board's strategic oversight and the business planning process. For more information, see page 60. The table below provides references to more detailed information.

Sustainability-related performance in incentive schemes
Vattenfall offers various variable pay programmes depending on the type of employee. EGM members are not eligible for variable pay as variable remuneration for senior executives is prohibited as stipulated in the ownership policy for state-owned companies in Sweden. However, most other managers in Vattenfall are eligible for a variable pay programme called STI, where half of the payout is based on the company's and the other half on individual'performance. The company's performance is measured by three equally weighted KPIs of which one relates to Vattenfall's CO_2 emissions. Hence, sustainability related metrics account for at least 15% of the proportion for variable remuneration. Sustainability-related metrics may also be included in the individual performance metrics for roles where applicable resulting in that the share of sustainability-related metrics could be higher for certain individuals. The STI programme is reviewed and approved by the Board of Directors annually.

Risk management and internal controls over sustainability reporting
Vattenfall works with internal controls across the organisation to identify and mitigate both financial and sustainability-related data quality risks. Our risk management framework and internal controls for sustainability reporting are outlined in the risk report (see page 47) and the corporate governance report (see page 65). For more detailed information where this information can be found, see table below.

Beyond these controls, Vattenfall has an organisational structure and data support systems in place. Vattenfall has for many years prepared sustainability reports in accordance with the GRI standards and an organisation including clearly defined roles and responsibilities, processes and internal controls deemed necessary to prepare the sustainability report free of material misstatement have been developed. However to be able to reach the same level of quality assurance as the financial reporting, Vattenfall has identified the need to develop a CSRD risk and control matrix also for its sustainability reporting and a project for establishing a more formal CSRD control framework will be initiated during 2025.

Statement on due diligence
As described in the strategy section of this report (and page 75), "sustainability is the business". As such, and with regards to Vattenfall's commitment to follow the six OECD due diligence steps, the elements of due diligence are integrated into governance, strategy, business model and operations centrally at Group level as well as in the respective business areas. Every three to five years, a third party due diligence assessment is conducted, identifying salient human rights and environmental risks. The latest assessment was carried out in 2021. Processes on human rights and environmental due diligence are furthermore integrated in internal governance structures and steering documents. A more detailed description of how the due diligence process is operationalised throughout the business and in the context of each topical area – environment, social and governance – is incorporated into the relevant sections of the sustainability statement. For reference, see table below.

Due diligence

	Disclosure requirements	Core elements of due diligence	General disclosures Page 80	Environment Page 87	Social Page 106	Governance Page 123	Entity specific Page 120
GOV-4 Statement on due diligence	Composition of the administrative, management and supervisory bodies	Embedding due diligence in governance, strategy and business model	Introduction to general section, IRO interaction with strategy and business model	Introduction environment IRO interaction with strategy and business model (E 1, E 4) Identification and assessment of IROs (E 1, E 4) Policy & Governance (E 1, 4, 5)	Introduction social IRO interaction with strategy and business model (S 2, S 3, S 4)	Policy & governance	
		Engaging with effected stakeholders in all key steps of the due diligence	Interest and views of stakeholders	Impacts, risks and opportunities (E 4) Policy & Governance (E 4)	Introduction social IRO interaction with strategy and business model (S4) Processes (S1, S2, S3)	Introduction social Policy & governance	
		Identifying and assessing adverse impacts	Double Materiality Analysis, Strategy, business model and value chain	Impacts, risks and opportunities (E 4) Identification and assessment of IROs (E 1, E 4)	Introduction social Processes (S1, 2, 3) Impacts, risks and opportunities (S1, S2, S3, S4)	Policy & governance	
		Taking actions to address those adverse impacts		Actions E1, E4, E5	Introduction social Actions (S1–4)	Actions	
		Tracking the effectiveness of those efforts and communicating		Targets & Metrics (E1, E4, E5)	Metrics and Targets (S1, S2) Introduction social	Metrics and Targets	Metrics and Targets

Strategy, business model and value chain

Value chain overview

Upstream

The upstream part of the value chain consists of three different parts: fuel and commodities sourcing, goods and services, and financial services.

As an integrated utility, a large part of our value chain consists of the fuels and commodities sourced for the operation of our power plants, as well as for some customers.

The second part of our upstream value chain consists of the goods and services needed to keep Vattenfall running. We source a variety of goods ranging from office laptops to generators and an equally diverse range of services such as logistics, engineering, and several other bundled services.

This part of the value chain also includes services we source from external contractors, and materials for the assets under construction.

The last part of our upstream value chain includes financial services, which for example include insurances, treasury activities and pensions. For more information about our supply chain, please see page 113.

Own operations

Vattenfall's operations can be divided into six different parts, with the biggest being our power and heat generating facilities. This part contains all activities with regards to energy production, both from fossil and fossil-free sources.

Separate from our power and heat generation facilities, though closely related, are our other owned assets. These are assets that do not directly generate electricity, such as storage activities and flexibility services.

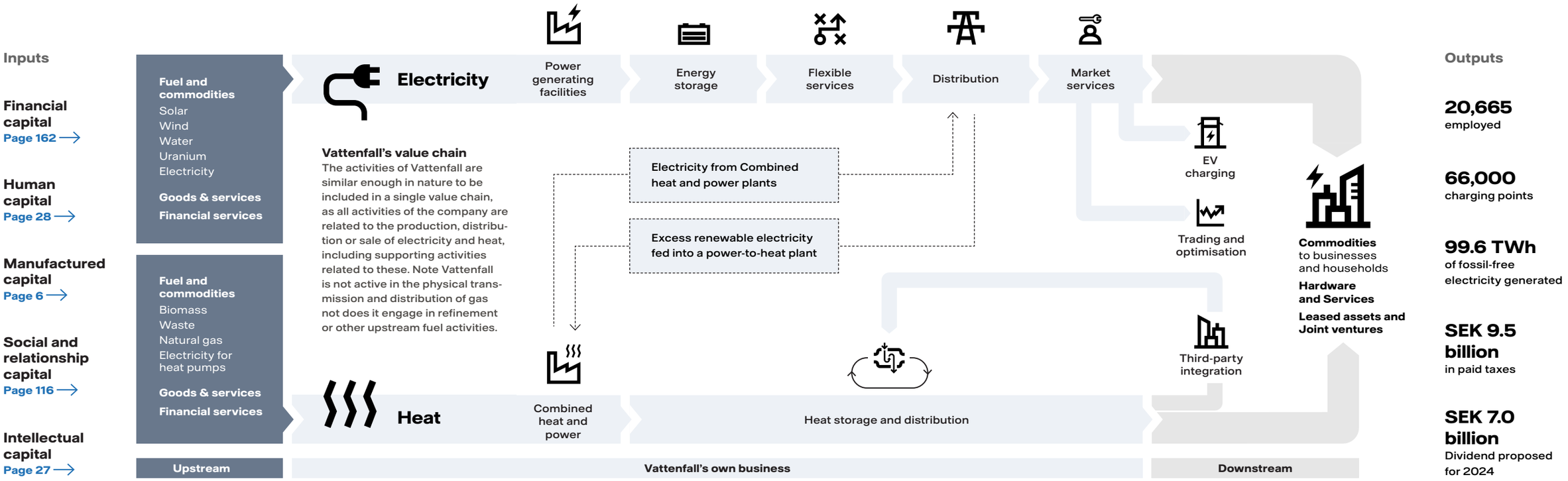
There are also operations related to grids and networks, which include our district heating networks, Swedish electricity distribution activities and InCharge e-mobility charging network. As these activities differ significantly, they have been identified as separate parts in our value chain.

Lastly, service activities have been bundled to cluster activities such as our network solutions, contracting with end customers and trading activities together since they activities which enable and optimise the other parts of our operations. For more information about our operations, see page 33.

Downstream

Downstream activities include all the commodities, services and joint ventures that Vattenfall produces as output for its customers and partners. The majority of the activities pertain to the sale of commodities such as gas, electricity, heating and cooling that are delivered to businesses and consumers. It also includes access to electricity and heating connections.

Hardware and services are a smaller, but still significant part of our value chain. It includes the hardware we install at our end



Strategy, business model and value chain, cont.

customers, such as rooftop solar panels, heat pumps, gas boilers, smart meters and EV chargers, but also Power-as-a-Service activities.

The smallest part of the downstream activities are the leased assets, which consist of amongst others, vessels, interconnectors and storages. Finally, Vattenfall forms joint ventures occasionally with strategic partners.

Business model overview

Products, services, markets and customers

Vattenfall is an integrated utility mainly within the fossil-free electricity value chain. Our core activities revolve around electricity and heat generation, distribution as well as customer sales of electricity, heat and gas. Vattenfall also provides energy-related services to customers, such as energy efficiency solutions, energy storage, and electric vehicle charging. Vattenfall's workforce is concentrated in northwestern Europe, with the three largest countries being Sweden, the Netherlands and Germany (see page 109).

Sustainability is fully integrated into Vattenfall's strategy, and some sustainability matters are also part of Vattenfall's strategic targets described on page 13. For internal steering purposes, the strategic targets are broken down into more specific targets for each business area and sometimes also for individual business units. In addition to this, Vattenfall has targets and goals for material ESG topics throughout the business. Details on some of these can be found under each topical section.

Portfolio changes during 2024

The most significant change in Vattenfall's portfolio in the last reporting year is the divestment of the district heating business in Berlin, which means that Vattenfall no longer has heat sales or distribution activities to households and businesses in Germany. It also means that Vattenfall no longer has any coal-related activities in any markets. In addition to this, Vattenfall has divested its consumer electricity sales business in Denmark (Vindstod).

This has also had an impact on Vattenfall's workforce that decreased by 341 full-time equivalents from year-end 2023. There were no other significant changes to the portfolio.

Disclosures relating to specific activities

Vattenfall produces heat and electricity from gas and sells gas to customers for final consumption. The revenues from those activities were SEK 15.6 and 37.9 millon, respectively in 2024. Vattenfall has oil-fired reserve power plants in Sweden, the generated volumes from these activities were negligible during 2024 (< 0.1 TWh of electricity and heat, respectively). Oil is also used for the start up of biomass-fuelled power plants. It is impracticable to split out revenues for this, but the scope is naturally very limited and hence with negligible revenue impact.

Vattenfall is not active within chemicals production, controversial weapons or cultivation, and production of tobacco. Vattenfall is not involved in activities that are banned in certain markets.

Value chain assumptions and limitations

Vattenfall's entire value chain has been assessed on topics which have a material contribution to our business. To be included in the assessments such as the DMA, a value chain part needs to have a distinguishing character in our business, a sizeable contribution to overall company performance, a significant number of people working on it, or a noticeable effect on people or the environment.

While many of these topics are not measurable, there are practical examples that illustrate their application. Major business components, such as the production, distribution, and selling of power and heat, are included. Suppliers are also considered whenever they have a significant impact or size on our business, regardless of their tier. Additionally, minor business components, such as our customer benefit shop, are aggregated into the overall hardware and services category. As our core products and services do not get resold, there are no material Tier 2 customer relationships to consider

Interests and views of stakeholders

Understanding, responding to, and being able to balance the varied views, interests and priorities of Vattenfall's different stakeholder groups (see Table 1) is an important part of our strategy and business model, as stakeholder views are a key input into considering which business opportunities we pursue, as well as how we conduct those businesses. This is fundamental not just to maintain our license to operate, but also to be able to sustainably create value both for the company and for our stakeholders as well. Accordingly, Vattenfall aims to consistently engage with our stakeholders in a meaningful and inclusive way.

Given the wide range of stakeholders throughout our value chain and the different markets and business areas we operate in, our stakeholder engagement necessarily takes many forms to best adapt to the stakeholder, relevant local conditions and regulations, and business context. Some are centrally organised, for example between investors and the corporate Investor Relations team, while the majority are local or project-based.

In many instances, regular, formal touchpoints are complemented by ad-hoc interactions. The Vattenfall Project Governance Principles, which apply throughout the Group, serve as a framework to ensure that the diverse local interests are duly acknowledged, represented, and catered to in our projects.

Vattenfall's administrative, management and supervisory bodies are informed of the interest and views of stakeholders both through presentations of materiality analyses, as well as on a case-by-case basis in relation to specific projects or matters of concern raised at management level. Furthermore, the opinions of certain stakeholders, such as employees, are followed up on an annual basis, in accordance with the follow-up cycle for strategic matters.

For detailed information regarding Vattenfall's key stakeholders and the types of engagement activities carried out in relation to the different categories of stakeholders, please refer to Table 1.

Table 1. Interaction with stakeholders

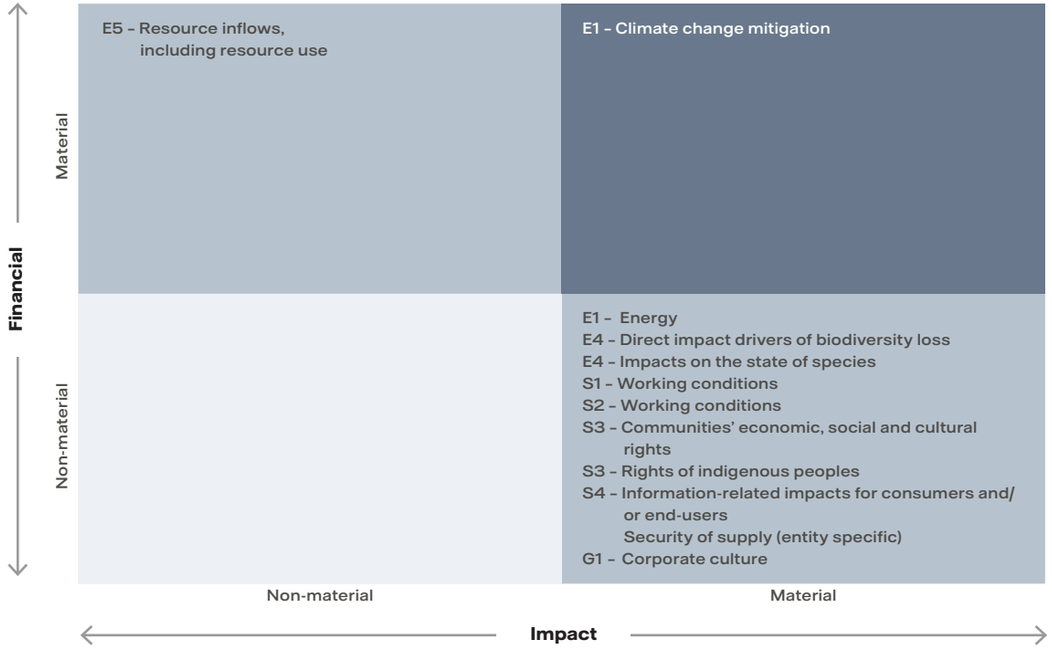
Stakeholder group	Examples of how we engage
The Owner	• Annual General Meeting • Quarterly dialogues
Employees	• Surveys • Workers' councils • Training and development
Consumers & end-users	• Customer support processes • Consumer panels • B2B events
Local communities	• Consultations • Community engagement meetings • Open door events • Community benefit funds • Round-table discussions
Suppliers and partners	• Bi-annual supplier summit • Supplier dialogues • Site visits and audits • Targeted trainings
Industry peers	• Industry coalitions and partnerships • Memberships in trade associations
Investors	• Industry events • Capital markets day • Questionnaires
Policy makers and regulators	• Open dialogue with policy makers • Open consultations • Proactive outreach
Non-governmental and international organisations	• Dialogues and meetings
Academic institutions	• Research partnerships • Labor market fair • Students
Nature (silent stakeholder)	• Dialogues with NGO's • Environmental Impact Assessments • Research and ecological data collection on impacted species

Double materiality assessment (DMA)

Vattenfall conducted a Double Materiality Assessment (DMA) in 2024, in accordance with the ESRS 1 guidelines. The DMA was executed by a dedicated project team comprising experts from various domains including Sustainability, Environment, Risk, Legal, and Finance, and supported by an extended team of representatives from all business areas. The analysis resulted in a list of material IROs, which can be found in Table 2. The results help us shape our strategic focus areas to ensure that we meet the expectations of our stakeholders in the future.

All sub-topics in AR16 of ESRS 1 have been assessed based on an evaluation of all related IROs. We also identified two sector-specific topics that we believe are related to the sub-topics in ESRS 1 but not sufficiently covered by those, namely: security of supply and nuclear waste. Security of supply was deemed as material and is reported after section S4 (see page 120) as the impact relates to end-customers. Nuclear waste was assessed as non-material, details on this assessment can be found in the section *Non-material topics* on the right hand side. There is however some information regarding our handling of nuclear waste in the section Resource Outflows which is part of our disclosures for Resource use and circular economy E5. Our material topics and sub-topics can be found in the matrix below.

Figure 1. Materiality assessment outcome



Value chain and stakeholder assessment

To achieve a complete and thorough materiality assessment, a value chain and stakeholder analysis has been performed. During this process all business activities of Vattenfall have been mapped out, including up- and down-stream activities and geographies, and analysed to assess the impact on sustainability topics. For each activity in the value chain, clustering has been applied when the activities contained no significant differences with regards to our impact. Other than this, no prioritisation was applied at this stage to ensure that no bias would be applied before the scoring phase. As Vattenfall focuses mainly on the production and supply of energy, there was no need to split the assessment into multiple value chains.

Process

A mapping of all relevant impacts, risks and opportunities (IROs) was performed by group-level experts, where the process started with joint workshops to ensure that all experts had the same understanding of the process and the level of detail in the mapping. To properly and thoroughly assess all IROs, information was included from internal policies, business plans, strategy documents and internal expertise covering our full value chain. After the workshops, sessions were held in smaller groups of topical experts to further detail out the mapping of the IROs. During this mapping phase, and also further on in the process, a balance has been struck between level of detail and added value, where we attempted to be as thorough as

Non-material topics

E2 – Pollution

Mainly at our heat operations at Vattenfall, we have a negative impact from non-GHG emissions of NOx, dust or particulate matter (PM) into the air. However, these impacts are strictly regulated in all our markets, and we take necessary actions and remain below the limits. Impacts to pollution of air along our supply chain are also considered in this sub-topic, but not material at this moment in time. The potential impact of oil, chemical, or hazardous substances leakage from Vattenfall's operations to soil and water is known, regularly monitored, and managed with precautionary actions. However, these impacts are not considered material for Vattenfall in any given reporting year.

E3 – Water and marine resources

Vattenfall withdraws water at hydropower plants and for storage in dams; however, this is temporary in nature and primarily considered as a flow-through process. At thermal plants, the majority of water withdrawn is used for cooling and subsequently discharged back to its sources. All water withdrawals and discharges at thermal operations are regularly monitored and reported, and a supply chain assessment on water use is planned. More than 90% of the freshwater withdrawn during operations is returned to water resources. While water remains an important topic for Vattenfall, it is not considered material for the company. Water related KPI and metrics can be found on page 105.

Entity specific – Nuclear waste

Vattenfall has assessed nuclear waste as a non-material topic. Nuclear waste management is strictly regulated by authorities and all activities for handling the waste are fully-funded.

In Germany, Vattenfall's responsibilities are limited to dismantling activities, as all responsibilities for intermediate facilities and final repositories are handled by the state. In Sweden, the nuclear waste management system has been developed over decades and includes licensed waste handling at nuclear plants and a joint transport and final disposal system managed by SKB. The system is governed by rigorous regulations, resulting in significant investments in multiple passive barrier systems to ensure waste management. The risk of environmental impacts outside design criteria is very low due to the extensive passive barrier systems. Hence, based on this, our overall judgement is that the irremediable environmental impacts are minimal.

From a legal perspective, Vattenfall's exposure to environmental risks related to nuclear waste management extends until the final closure of the repositories. Then the state takes over the responsibility, in accordance with the law, which states that the operators bear the responsibility until the waste has been taken care of and all repositories have been finally closed off (around the year 2080), after which the responsibility is transferred to the state.

Double materiality assessment (DMA), cont.

possible to guarantee sufficient quality of the output. The identified risks have not been mapped or prioritised against other risks or included in risk-assessment tools. This process to identify IROs considered Vattenfall's entire value chain, including geographies, activities, sectors, and for G1, transaction types and structures. For details on the IRO identification processes for E1, E4, E5, see pages, 128, 129, 131 respectively, the non-material disclosures for E2 and E3.

Eventually a total number of 227 IROs were identified, which were all mapped towards the value chain to assess completeness. These IROs were further checked and verified by business representatives, ensuring that the IROs are reflecting current status and that nothing material has been missed. During this process both positive and negative IROs were assessed, and the ultimate direction that had the biggest impact.

Methodologies and assumptions

Definitions for severity and likelihood were determined by Group-level experts based on their understanding of the ESRS framework and their experience in the topic. Definitions were established for the assessment of impacts for Environmental, Social and Governance topics to ensure a proper match to the topics. The definition of likelihood has been set by experts from risk management and has been applied in a unified way for the assessment of impacts and financial effects.

Next, all impacts were assessed based on a combination of severity and likelihood, with an exception for human rights-related impacts where likelihood was ignored if the IRO was material from a severity point of view. Risks and opportunities were assessed based on a combination of likelihood of occurrence and the potential magnitude of financial effects on Vattenfall in the short-, medium- and long-term. The assessments were based on pre-defined scorings for likelihood of occurrence, severity of impact and the potential magnitude of financial effects.

Cumulative financial effects have been considered in the assessment and wherever possible, the financial assessments relate to magnitude of financial effects on Vattenfall's company EBIT and company equity. However, as materiality is not always confined to quantitative aspects, scorings also rely on qualitative factors and ranges of possible financial effects (for example caused by impacted reputation/brand). Furthermore, linkages between impacts and financial effects have been considered as well as dependencies on natural and social resources.

Scoring

Phase 1 – Group level experts

Once IROs were identified, group-level experts assessed the IROs based on criteria according to the ESRS guidelines. The individual scores were combined into a single score per IRO, which formed the basis for discussions in the phase 2 workshops and phase 3 interviews.

Phase 2 – Workshops

As the first phase only contained assessments from group-level experts, a second phase was initiated where 8 workshops were held with 64 representatives from across the business. During these workshops the Phase 1 scores were shown on sub-topic level after which the participants discussed the correctness from their business' perspective and gave their feedback on whether the scores needed to be changed. The information from these workshops was used by the project team to recalibrate the scores. After the results of the workshops, alignment sessions were held with both Vattenfall's Executive Group Management, as well as the Board of Directors to align on the progress.

Phase 3 – Interviews

After the second phase was finished, a total of 22 internal and 4 external key selected stakeholders were interviewed, to gather input on the recalibrated scores from an overall company perspective. The internal stakeholders were selected in collaboration with the business, and next to Vattenfall's Executive Group Management also consisted of heads of strategic functions such as Environment, IT, R&D and Procurement. External stakeholders were selected in collaboration with external advisors, where it was ensured their area of expertise covered the entire range of ESRS topics, and were selected from a range of NGO's, customers and governmental bodies. The feedback from the individual interviews was used to recalibrate the scores into the final assessment.

Thresholds

After the initial scoring phase a preliminary threshold was applied to ensure that a preliminary materiality could be determined both for the Human Rights calculation exception as well as for input for the workshops. After all scoring has been finalised, based on the feedback from the interviews and the project's steering committee, the threshold was calibrated to ensure the score and the outcome was representative for Vattenfall.

Finalisation and endorsement

The DMA project has followed the Vattenfall Project Governance Principles and results have been validated according to internal processes, including formal approval from the project's Steering Committee, the Executive Group Management and the Board of Directors. In addition, the DMA has been subject to review by our external auditors, and has been integrated as an annual recurring assessment in our management processes, with the aim to ensure that the analysis and our impact, risks and opportunities reflects the most accurate view of Vattenfall. In addition, during the writing phase of this report, content experts have been thoroughly involved to assess whether the material IRO's are still accurate towards year's end. As sustainability is at the core of Vattenfall's strategy, impacts, risks and opportunities relating to sustainability matters are part of regular management processes. Investigation into the possibilities of integrating the DMA-process to identify, assess and manage impacts and risks into Vattenfall's overall Enterprise Risk Management framework has been initiated. However, the process to identify, assess and manage opportunities in accordance with the DMA is not yet integrated to Vattenfall's overall management process.

Changes in the assessment process and material IROs

This is the first year we perform a DMA in accordance with ESRS 1, hence there are no changes to report. Similarly, as this is the first year of reporting in accordance with the ESRS, the materiality assessment methodology has been changed in its entirety. Hence, there are no changes to report.

Material information

After the finalisation of the double materiality assessment, an assessment of the individual disclosure requirements was made by content experts. We have followed the same principles for all types of disclosures (data points, narratives and semi-narratives) where information related to non-material topics have been assessed as non-material. Within material topics, individual disclosure requirements have been assessed towards the list of material and non-material IROs to assess whether the disclosure should be included in the reporting or not.

For a complete list of data points included in the report, see pages 132–133 in Sustainability notes.

IRO interaction with strategy and business model

Impacts

Sustainability has been integrated into Vattenfall's strategy for many years and most of our material impacts (both positive and negative) are important for the success of our business. More details are provided in each topical section. Vattenfall has adhered to the time horizons stipulated in ESRS 1 when assessing impacts, for the long-term horizon our processes are generally somewhat less mature.

Impacts on the environmental side are strongly connected to Vattenfall's business model as an integrated utility. For instance, energy-infrastructure tends to be quite large. Our electricity networks require significant land use and our hydro power plants impact surrounding ecosystems. On the social side, our impacts are sometimes originating from our business model, such as affected communities in relation to our generation assets, whereas others are more strongly linked to the cultural aspects of our strategy such as corporate culture.

Current financial effects

Vattenfall's financial reporting is currently not structured in a way that isolates the impact that the sustainability matters have on its financial position, performance and cash flow. None of the identified material risks and opportunities are likely to lead to material adjustments to the carrying amounts of assets and liabilities reported in Vattenfall's consolidated financial statements within the next year.

Anticipated financial effects

Vattenfall has used the phase-in provision and hence no disclosures of anticipated financial effects are made in this report.

Table 2. Material impacts, risks and opportunities (IROs)

Material Topic	Type	Description	Actual or potential	Time horizon Short, mid, or long term[1]	Presence in the value chain		
					Up-stream	Own operations	Down-stream
E1 – Climate change (Pages 89–95)	▬	**Direct and indirect GHG emissions:** Vattenfall impacts the climate directly and indirectly through emissions of greenhouse gases, with the largest impact coming from scope 3 emissions.	Actual	All	●	○	○
	▼	**Transition risks:** Failure to meet Vattenfall's climate targets pose a material risk for its brand, reputation, access to capital, and attractiveness to talent and customers. However, Vattenfall's ability to reach these targets is heavily dependent on the pace of societal decarbonisation.	Actual	All	●	○	○
	▲	**Opportunities in the energy transition:** The climate transition offers growth options for Vattenfall, mainly related to potentially higher demand for our main product, electricity, but also from higher value of integration between Vattenfall's products as well as additional services related to managing electricity consumption.	Actual	All		○	○
	▼	**Challenges to the energy transition:** Revenue growth may be impacted by challenges related to the roll-out of the energy transition such as slow permitting processes or lack of balancing power.	Actual	All	●	○	○
E4 – Biodiversity and Ecosystem (Pages 96–100)	▬	**Land transformation related to own operations and supply chain:** Vattenfall's operation and our upstream value chain use and transform land for energy infrastructure projects which typically leads to a negative impact as one type of nature is replaced with another.	Actual	All	●	○	
	▬	**Impact on biodiversity due to climate change:** Direct and indirect GHG emissions leading to impacts on habitats and ecosystems	Potential	Long term	●	○	○
	▼	**Project execution risks related to species:** Actual or potential negative impact on species could lead to disruptions in the form of delays in permitting, which could lead to new projects being delayed or even cancelled and could impact both revenue growth, increase costs or lower the valuation of projects in the pipeline.	Potential	All		○	
	▬	**Threatened species:** Impact on threatened migratory species like birds and fish due to increased mortality from hydropower plants, distribution grid or windfarms.	Actual	All		○	
E5 – Resource use and circularity (Pages 101–103)	▼	**Scarcity of resources for the energy transition:** Limited availability of rare, low emission and recycled materials could lead to Vattenfall not being able to secure the materials needed or price increases for those materials. This could lead to delayed or cancelled projects as well as higher input costs which could impact both revenue growth and project returns.	Actual	All	●	○	
S1 – Own workforce (Pages 108–111)	▬	**Unhealthy working conditions:** Unhealthy working conditions leading to accidents, illness or dissatisfaction among our employees.	Potential	All		○	
	✚	**Health and Safety for own employees:** Safe and healthy working conditions leading to engaged and satisfied employees.	Actual	All		○	
S2 – Workers in the value chain (Pages 112–115)	▬	**Health and Safety in the supply chain:** Supply chain workers risk being injured if Vattenfall's suppliers or sub-suppliers provide inadequate equipment and/or PPE, or have poor safety measures.	Actual	Short term	●		
S3 – Affected communities (Pages 116–117)	✚	**Inclusive ownership:** Providing inclusive ownership options to share financial and other benefits of the projects with the local community.	Actual	Mid and long term		○	○
	▬	**Community engagement:** Communities' voice, concerns and opinions are not identified, leading to unrepresentative initial scope of adverse/negative community impact and insufficient impact mitigation/prevention.	Potential	Short and mid term			○
	▬	**Direct negative effects on the living situation:** Negative impact on communities in the areas such as shadow flicker and noise pollution from wind turbines.	Actual	All			○
S4 – Consumers and end-users (Pages 118–119)	▬	**Data protection:** Data breaches including customer data.	Potential	Short term		○	
Entity specific (Page 120)	▬	**Security of supply of electricity:** Interruptions of the supply of electricity to businesses and households which could lead to both bodily and economical harm.	Actual	Short and mid term		○	
G1 – Business Conduct (Pages 123–124)	▬	**Poor corporate culture:** Negative corporate culture can lead to corruption, briberies, silence culture, lack of transparency and trust.	Potential	All	●	○	○
	✚	**Good corporate culture:** Good corporate culture and clear understanding of our core values leading to engaged employees as well as positive interactions with communities, customers and suppliers.	Actual	All	●	○	○
	▬	**Corporate culture in the supply chain:** Negative corporate culture in our suppliers. Negative corporate culture can lead to corruption, briberies and antitrust issues which all can affect Vattenfall if being made part of it, as well as customers and society.	Potential	All	●	○	○

▼ Risk ▲ Opportunity ✚ Positive impact ▬ Negative impact

1. Time horizon: Short term: <1 year, Mid term: 1–5 years, Long term: >5 years

Environment

Vattenfall monitors and reports on key environmental topics that impact our business and those we influence significantly. This allows Vattenfall to focus on the important topics identified and guides our strategy to minimize negative environmental impacts, capture opportunities and meet stakeholder expectations now and in the future.

Stornorrfors hydro power plant

Policies and governance

Vattenfall's environmental matters are primarily governed by the company's Environmental Policy and Environmental Management System. These apply to the Vattenfall Group and encompass our own operations as well as our upstream and downstream value chain where relevant. Our main markets are in Sweden, Germany, the Netherlands, Denmark and the United Kingdom, whereas the value chain has a global dimension. The Environmental Policy and Environmental Management System apply to Distribution System Operators unless in conflict with unbundling laws and regulations. The Environmental Management System is part of Vattenfall's Corporate Management System (see page 64 for more details).

Vattenfall's Environmental Policy outlines the overall direction for how the company manages its impact on the environment, with special focus on our material environmental matters: climate change, biodiversity and ecosystems, resource use and circular economy, as determined in the double materiality process (see page 84).

The overall purpose of Vattenfall's Environmental Policy and Environmental Management System is to ensure the prevention, mitigation and remediation of actual and potential impacts, and to ensure that risks are addressed and opportunities pursued. Vattenfall's Environmental Policy is publicly available, while our Environmental Management System and related policies are internal steering documents. Vattenfall's Code of Conduct for Suppliers and Partners also sets requirements on the management of material environmental matters for our supply chain (for further information, see page 112).

Vattenfall's CEO, together with the Executive Group Management, has the overall accountability for the environmental impact of Vattenfall. Legal accountability follows the organisational structure of legal entities. The Environmental Policy is approved by the Board of Directors, and implemented through the Environmental Management System.

The Corporate Environmental Management System is implemented in local environmental management systems where applicable. All business areas conduct an annual environmental management review to monitor adherence to the corporate environmental policy and management system. At the review, targets are also monitored and reviewed. At year-end 2024, nearly 100% of Vattenfall's production and distribution portfolios had certified environmental management systems in accordance with ISO 14001, with the exception of, for example, a small number of backup power units. The ISO14001 certifications are audited annually by a third party, with recertification occurring every three years.

Vattenfall's environmental risks are an integrated part of the Enterprise Risk Management system, and opportunities are included in the yearly strategy and business planning process (see page 47).

EU Taxonomy

The EU Taxonomy Regulation (EU 2020/825) establishes a common classification system that defines when an economic activity can be considered sustainable, also referred to as taxonomy-aligned. Its ultimate aim is to steer investments into activities that help achieve the ambitions of the EU Green Deal. The taxonomy requires large non-financial companies to disclose the share of capital expenditure (capex), turnover, and operating expenditure (opex) that are eligible and aligned under the taxonomy.

Outcomes 2024
In 2024, the majority of Vattenfall's capex and opex were assessed as being eligible and aligned to the technical screening criteria set out in the Climate Delegated Act (Commission Delegated Regulation (EU) 2021/2139, and Commission Delegated Regulation (EU) 2023/2485) and the Complementary Climate Delegated Act for nuclear and gas (Commission Delegated Regulation (EU) 2022/1214).

88% of Vattenfall's capex during 2024 was aligned under the taxonomy, of which capex related to wind accounted for 31%, and transmission and distribution of electricity accounted for 35%. Other important investments were made in electricity generation from existing nuclear and district heating/cooling distribution grids. Investments in Vattenfall's generation of heat and electricity from gas represents the absolute majority of not aligned capex.

39% of Vattenfall's turnover is eligible, of which 32% is aligned. The majority of Vattenfall's taxonomy-aligned turnover relates to electricity generation from wind, hydro power and nuclear, transmission and distribution of electricity as well as storage of electricity. Turnover related to Vattenfall's generation of heat and electricity from gas represents the absolute majority of not aligned turnover. Turnover not being eligible consists primarily of sales of electricity, gas and heat to customers that are not produced by Vattenfall, regardless of how they are produced. Taxonomy turnover is highly affected by market prices on electricity and results from hedges related to electricity production. See page 135 in the Sustainability notes section for more information.

80% of Vattenfall's opex in 2024 was aligned. The majority of Vattenfall's taxonomy-aligned opex relates to electricity generation from wind, hydro power and nuclear and transmission and distribution of electricity. Opex related to Vattenfall's generation of heat and electricity from gas represents the absolute majority of not aligned opex.

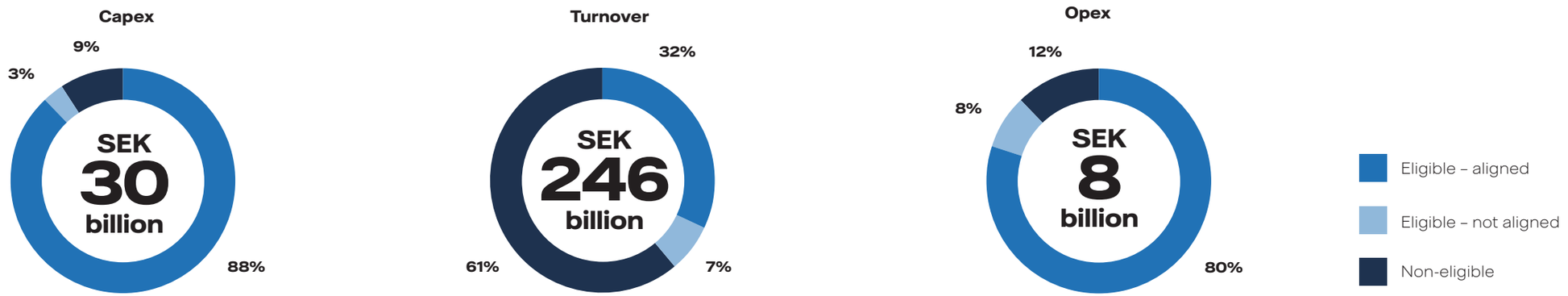
Important to note is that non-eligible activities according to the taxonomy regulation do not necessarily mean that they are not sustainable. It only indicates that the activity is not covered by, hence not assessed, under the taxonomy framework.

SeeFigure 2, and the KPI tables including comments on pages 134–146.

Material changes 2024
In the beginning of May 2024, Vattenfall's Heat Berlin operations were divested to the State of Berlin. This means that from May 2024, Heat Berlin is not part of Vattenfall's EU Taxonomy reporting any longer. The main impact is seen through a reduced amount of eligible not aligned turnover linked to gas activities of Heat Berlin.

For detailed information on the alignment assessment and accounting policies, please go to the section EU Taxonomy Notes and tables on pages 134–146.

Figure 2. Capex, turnover and opex for 2024



E1 Climate change

Material IROs[1]	Type
Direct and indirect GHG emissions	Impact (–)
Transition risks	Risk
Challenges to the energy transition	Risk
Opportunities in the energy transition	Opportunity

1. For more information see page 86.

Impacts, risks and opportunities

Vattenfall has direct and indirect material impacts linked to greenhouse gas (GHG) emissions caused by the use of fossil fuels throughout the value chain. Within Vattenfall's operations (Scope 1), the largest impact results from the use of fossil gas in power plants. Outside Vattenfall's operations (Scope 3), emissions are mainly associated with the sales of fossil gas used by our customers and the GHG footprint of electricity sourced on the market and sold to end customers. Additional supply chain emissions contributing to our footprint stem from fuel sourcing and the materials used to construct new assets such as concrete and steel.

To reduce GHG-emissions across its value chain, Vattenfall relies on the overall transition of the energy system, the decarbonisation of other sectors, and demand and attractive conditions for fossil-free products and services. Consequently, some aspects of Vattenfall's decarbonisation plan are beyond the company's control. Failure to meet these targets pose a material risk to its brand, reputation, access to capital, and attractiveness to talent and customers.

The speed of the energy transition, and other obstacles also pose a material transition risk. Factors such as lengthy permit procedures or a lack of system capabilities, such as a shortage of balancing power, impacts the potential to expand renewables at a pace sufficient to mitigate climate change and to reach Vattenfall's climate targets.

While climate change poses a threat to companies and society, the energy transition also offers material opportunities for Vattenfall in terms of growth. Mainly, potentially higher demand for electricity, our main product, and increased integration value between Vattenfall's products, as well as additional services associated with managing electricity consumption.

Acute and chronic physical hazards, such as rising temperatures and extreme weather events, will impact Vattenfall's assets and value chain, altering the risk landscape. Physical climate hazards are linked to security of supply, as they may cause disruptions in electricity generation and transmission. Adaptation to physical climate change, and acute and chronical physical climate related risks, are however assessed as non-material in the double materiality assessment due to the low probability of material impacts and the implementation of mitigation measures.

IRO interaction with strategy and business model

Management of identified IROs are embedded in Vattenfall's strategy and business model where direct and indirect emissions are tackled via investments in the energy transition as well as engagements with actors in the value chain to reduce emissions. These activities also cover capturing opportunities in the transition. For risks linked to the transition we aim to take a leading role by investing in the needed solutions as well as educating and advocating for fossil-free solutions and the wider decarbonisation of society.

During 2024 a resilience analysis was conducted with the aim to provide insights on how physical and transitional climate risks affect Vattenfall's assets, operations, and upstream and downstream[2] value chain over different time horizons and to describe the resilience of Vattenfall strategy and business model in relation to climate change.

Physical climate risks - Climate adaptation

Acute and chronic physical climate change hazards such as rising temperatures and extreme weather events will impact Vattenfall's assets and value chain[2]. Physical climate hazards are interlinked to security of supply as it may result in disruption of electricity generation and transmission.

The current analysis is based on the hazards described in Commission delegated regulation (EU) 2021/2139. A screening is done to identify the relevant hazards, and related risks linked to our operations are then identified by internal experts. The assessment takes into account likelihood, magnitude and duration of the hazards where relevant, and geographical characteristics. The analysis is reviewed annually, taking into account material changes linked to our operations and scientific developments. Climate risks are explicitly included in our Enterprise Risk Management process, as well as taken into consideration in investment decisions for all large long-term projects and commitments.

Vattenfall has assessed physical climate risk scenarios based on the Representative Concentration Pathways (RCP) developed by the Intergovernmental Panel on Climate Change (IPCC). The climate scenarios portray potential future emissions scenarios and changes to physical climate parameters. The RCP 4.5 and RCP 8.5 scenarios were chosen as they represent two different possible future outcomes, which provide a relevant range for which different risks can be assessed. See Table 3 for information about the scenarios.

Physical climate risks are assessed based on the following timeframes: Short-term 0–1 years (based on Group financial model timelines), Medium term 1–5 years (based on Group financial model timelines and aligned with business planning timeframe), and long term (until 2050 or aligned with the lifetime of assets where relevant).

Table 3. Physical climate scenarios

	RCP 4.5 Scenario (+2°C)	RCP 8.5 Scenario (+4°C)
Description	Intermediate climate scenario based on limited emissions and with international climate policies, where the global temperature increase stabilises at just below 2.0°C by 2100. Emissions peak around 2040 and then decline.	High-end scenario, where emissions continue to accelerate, and the temperature increase stabilises at just below 4°C by 2100. Climate change projections based on RCP 8.5 are typically more severe than under RCP 4.5 and can be used as a worst-case scenario.
Assumptions	• Population slightly below 9 billion by 2100 • Low agricultural land use due to increased yields and lower meat production • Extensive focus on reforestation • Low energy intensity and powerful climate policies.	• Population increase to 12 billion by 2100 • High methane emission and high agricultural land use due to land needs for grazing and crops • High dependence on fossil fuels • High energy intensity, limited climate policies.
Outcomes[3]	The average temperature and precipitation are projected to increase, especially in the Nordic and in winter. For Sweden and Finland, the average winter temperature could increase by 2–5°C and the maximum daily rainfall by up to +20%. The snow season will be shorter, and the spring flood more distributed.	The average temperature and precipitation are projected to increase and effects are more pronounced for the RCP 8.5 scenario. For Sweden and Finland, the average winter temperature could increase by approximately 3–7°C, and the maximum daily rainfall by up to +24%. Impacts on the snow cover and spring flood are larger than for RCP 4.5.

3. Refers to outcomes in Northern Europe

2. No Exclusions in upstream and downstream, however granularity of data is substantially lower than for own operations at this point in time.

E1 Climate change, cont.

Transition risks – Climate mitigation

Transition risks arise from the global shift towards a low-carbon economy, impacting projects and assets. Given the extensive lifetimes of many of Vattenfall's assets, long-term trends and uncertainties are significant for strategic decision-making. To address this, Vattenfall's corporate strategy team uses a broad range of energy transition scenarios covering the period from 2023 to 2060. These scenarios aim to capture key uncertainties and trends in the European power sector, exploring different pathways towards a decarbonised Europe. This covers macro-economic trends, policy, market design as well as technological developments.

The three energy transition scenarios are described in Table 4. The scenarios reflect varying degrees of governmental support for the energy transition, different paces of electrification, rates of phasing out fossil fuels, build-out rates for fossil-free technologies, and varying carbon and fuel prices. Vattenfall's scenario analysis, conducted annually, is used to inform investment decisions, fair value assessments, impairment tests, and strategic planning. The latest analysis, completed in 2024, focused on critical assumptions about how the transition to a lower-carbon and resilient economy might affect its surrounding macroeconomic trends and technology deployment assumptions.

Results of the resilience analysis

The results from the resilience analysis are used to assess whether measures in place are sufficient to manage identified risks and ensure business resilience, and serve as input to Vattenfall's strategy, investment decisions, and current and planned mitigation actions.

Climate change is already affecting Vattenfall's assets and operations, and its impacts are expected to increase. The overall conclusion of the assessments conducted to date is that we are well equipped to adapt to a changing climate. For physical risks impacting energy infrastructure or critical functions, adaptation measures for managing risks are in place and work is continuously ongoing to mitigate risks and reduce vulnerability to external disruptions. To a large extent this work is also driven by today's weather-related risks and the natural variability of physical parameters, such as wind, flooding, droughts, or wildfires. The changing climate means that, where relevant, the margins and efforts are adjusted to account for larger changes and variability. This involves both adapting hydropower dams to be able to manage larger future flows; ensuring cooling solutions for exposed infrastructure; and weather-proofing the grid. It also means a sharper focus on improving our understanding and resilience through better forecasts for production planning and by strengthening our preparedness for extreme weather events. For examples of physical risks identified in the assessment, see Table 5.

During 2024, an analysis was commissioned to model how key climate parameters such as temperatures, sea-level, and precipitation are projected to change according to the IPCC climate scenarios RCP 4.5 (medium GHG scenario) and RCP 8.5 (high GHG scenario). This assessment is based on geospatial coordinates specific to Vattenfall's locations and focuses on the key identified physical climate risks. The findings of this analysis will further verify our existing risk inventory and strengthen our work on climate scenario analysis for our operations.

Climate change is at the core of Vattenfall's strategy and business model where electrification using fossil free energy is one of the key solutions. Decarbonising our own operations as well as our value chain emissions is a part of our value proposition and essential in order to align with Vattenfall's Owners Directive which stipulates that we should be a leader in the energy transition. In terms of transition risks, Vattenfall is aligning its strategy and business model towards a future where climate change is limited to 1.5°C. Resilience analysis conducted covers the overall development of Vattenfall's business activities and used internally to inform business decisions, including investments.

Vattenfall is addressing the challenges faced in the future in several ways, for example by, investing in fossil-free generation capacity, electricity grid build out, developing smart energy management devices, advising and supporting consumers on reducing their energy consumption and partnering with companies in hard-to-abate sectors such as concrete and steel to develop sustainable solutions.

Policies and governance

The senior management responsibilities, policies and management systems that govern environmental topics (see page 87) also apply to the management of climate. The Environmental Policy and Environmental Management System, set the overarching foundational principles and steering for climate change. The ambition is to align business activities with the Paris Agreement's 1.5 degree global warming limit, as well as manage and adapt to climate risks and climate change. The policy's scope focuses on emission reduction of emissions in the value chain with the ultimate goal of achieving net-zero emissions alongside developing fossil-free energy capabilities to support the transition of society and increase energy efficiency.

The Code of Conduct for Suppliers and Partners (see page 112) stipulates that suppliers and partners should systematically address climate change within their operations. This includes actively identifying, managing, and reducing their direct GHG emissions (Scope 1 and 2). Suppliers and partners are encouraged to apply a similar management approach for their indirect emissions (Scope 3), which includes, but is not limited to, purchased materials, transport-related activities, and waste disposal. Suppliers and partners should additionally implement climate adaptation measures where applicable. They are also encouraged to develop and track progress towards their GHG emission reduction targets, preferably in line with the Paris Agreement's 1.5-degree scenario and covering all material emission sources.

Vattenfall's CEO decision making process (see page 63) explicitly includes steering to secure that all new investments are assessed against physical and transition risks. For existing assets and business activities, climate risk assessments and the use of relevant climate scenarios are governed by policies for environmental risk management, securing both assessment and documentation requirements for legal frameworks such as the EU taxonomy are met.

The use of climate offsets and carbon removals are governed by a policy steering both the types and use cases for climate offsets in Vattenfall. All offsets need to follow selected external certification frameworks and offsets are not counted towards climate targets or replace the need for emission reductions.

Table 4. Energy transition scenarios

Energy transition scenario	Description and timeframe
Controlled transition	Government-steered energy transition reaching net zero in 2050 and aligned with efforts to limit global temperature rise to 1.5˚C
Supported market transition	Energy transition with selective government support reaching net zero delayed in 2055 reflecting a moderate level of climate action.
Delayed transition	Energy transition is hindered by geopolitical or operational hurdles, net zero is only reached in 2060. There would be insufficient climate action and higher global temperature rises.

Table 5. Examples of physical climate risks

Description	Potential consequences	Measures
Extreme rain fall events resulting in high river flows	Increased need for spilling water in hydropower plants, risk of debris and landslides along rivers	Adjusted regulation of flow, investments to increase dam and spillway capacity
Infrastructure damage from extreme weather events	Wind-felling of trees from reduced ground frost, increased risk of forest fires due to more frequent droughts	Continuous work to strengthen the electricity grid and infrastructure, increased preparedness
Warmer temperatures affecting heating and cooling demand	Reduced heating demand in winter, increased cooling demand in summer	Financial projections are managed as part of the long term market outlook and business planning
Snow and icing problems affecting infrastructure	Increased snow/icing problems in the northern Nordic region, reduced problems in the south	Continuous work to strengthen the electricity grid and infrastructure, increased preparedness
Supply chain disturbances due to climate change	Increasing risk for supply chain disturbances from e.g. water scarcity, storms, flooding	Diversification of the supply chain; risk mapping and supplier dialogues on vulnerabilities

E1 Climate change, cont.

Strategy - transition plan
Vattenfall is aiming to be a leader in the energy transition by enabling fossil freedom as a profitable energy business. This means aligning and adapting our business in accordance with what is required to limit global warming to 1.5°C in line with the Paris Agreement. For Vattenfall, this requires a dual approach of decarbonising our own operations and supply chain, while simultaneously investing in solutions for a fossil-free energy system contributing to the decarbonisation of society. Vattenfall's transition plan is based on:

Securing a fossil-free energy supply
Reducing own emissions in line with the 1.5°C-target trajectory[1] and operating as well as adding new fossil-free generation capacity to the market. New capacity comes both from capacity upgrades of existing fossil-free power plants as well as bringing new fossil-free generation capacity to the energy system via own investments or together with partners.

Connecting and optimising the energy system
Vattenfall owns, invests and operates critical infrastructure and flexibility assets in the energy system. As the decarbonisation of the energy system progresses, there is an increasing need to balance intermittent energy sources, such as wind and solar. The need to connect new consumption and generation as well as invest in the electricity grids are increasing due to the electrification of society.

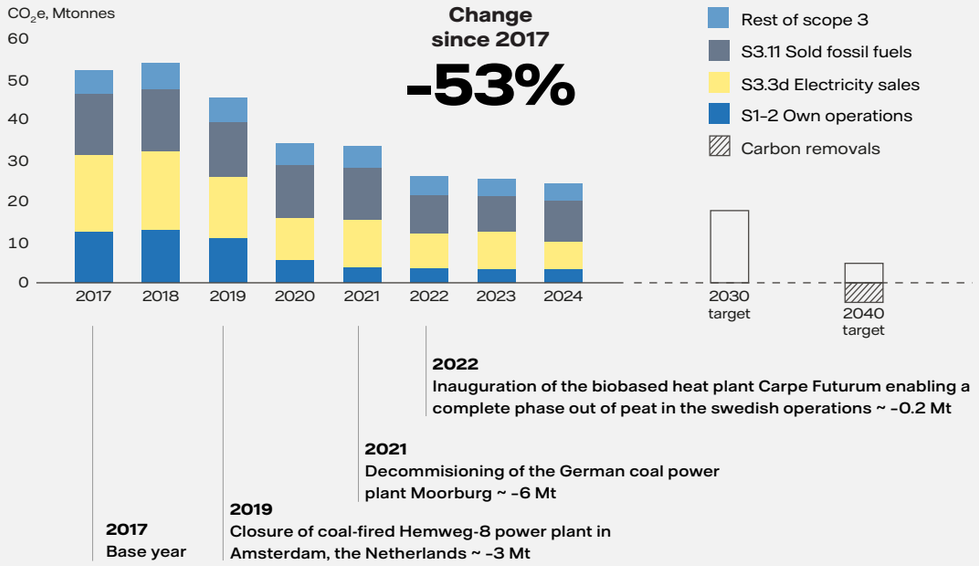
Driving decarbonisation with our customers and partners
To move towards net zero, supplying fossil-free energy and supporting infrastructure is not enough. Therefore, we aim to use our market position and our products to drive further decarbonisation in society through collaborating with suppliers, customers and partners.

The work is guided by verified and science-based climate targets, aiming for reductions to 2030 and ultimately net zero by 2040. Net Zero means at least a 90% emission reduction and any remaining emissions needs to be neutralised using carbon removals. Vattenfall require that carbon removals used in future should have high credibility and be approved for use by SBTi. Permanence of removed carbon and transparency of methods are cornerstones to our requirements for carbon removals. See page 94 for full details on Vattenfall's climate targets.

To reach our targets, action is needed across all areas of Vattenfall's business, such as phasing out fossil gas in operations, investing in fossil-free energy and using our position to drive decarbonisation throughout our value chain. To date, Vattenfall has successfully reduced emissions in line with existing target trajectories. Our roadmap to net zero by 2040 and our key decarbonisation levers are presented in Figure 3 and Table 6.

1. Following the sectoral decarbonisation approach for the power sector as defined by SBTi.

Figure 3. Vattenfall's roadmap to Net Zero and key decarbonisation levers



Contributions of decarbonisation levers Total share of decarbonisation until 2040		Expected contribution 2017-2030 Mtonnes CO_2e	Expected contribution 2030-2040 Mtonnes CO_2e
17%	**Achieved closure of coal in own operations**	-9	n/a[2]
5%	**Reduce fossil emissions from natural gas and waste to heat**	-1	-2
33%	**Increase fossil-free electricity sales**	-14	-4
26%	**Reduce emissions from sold fossil fuels**	-14	-5
11%	**Reduce supply chain emissions**	-1	-4
<9%	**Carbon removals for residual emissions**	n/a	< 5

2. Not applicable as Vattenfall has already achieved this decarbonisation lever

E1 Climate change, cont.

Table 6. Vattenfall's decarbonisation levers and approach towards net zero by 2040

Lever	Emission scope[1]	Emission source	Importance	Decarbonisation approach	Actions supporting the transition
Reduced use of fossil fuels in heat and power plants	Scope 1	Fossil gas used in power plants	●●●	Phase out of fossil gas in electricity by: • Replacing fossil gas with biogas and/or hydrogen • Reduction of overall production volumes in fossil-based assets as more fossil-free electricity enters the system.	Continued expansion of fossil-free energy through: • Investments in new fossil-free assets • Capacity increases and lifetime extension of existing fossil-free assets.
		Fossil oil and gas in district heating	●●●	Phase out of fossil fuels in district heating by: • Integration of third-party waste heat • Replacing fossil fuels with biomass, bio-fuels • Heat pumps and heat storages.	• Implementing efficiency measures for existing assets • Building out our district heating.
		Fossil share of emissions from waste incineration	●●○	Phase out of fossil-based plastic in waste stream • Work proactively to influence the fossil content of waste.	• Introduction of a CO_2 fee for fossil waste in selected markets • Implementing technology to track fossil waste streams (FossilEye).
		Other use of fossil fuels	●○○	Phase out fossil fuels in vehicle fleet: • Electrification of own transports and the use of biofuels.	• Electrification of own vehicle fleet.
	Scope 2	Use of fossil-based electricity	●●○	Use fossil-free electricity for own consumption and for operation of heat pumps and power-to-heat in district heating.	• Renewable energy certificates for purchased electricity.
Connecting and optimising the energy system	n/a	n/a	●●●	Enable decarbonisation outside of our value chain by connecting customers and new generation capacity.	• Work with flexibility solutions such as battery storages and develop and invest in distribution grid capacity and security of supply • Offer services for demand/response flexibility.
Reduced emission from supply chain	Scope 3.1 & 3.2	Use of resources driving emissions in supply chain	●●○	Focus on decarbonising key emission drivers by circularity measures and the use of fossil free alternatives.	• Increase the use of fossil-free materials with at least 10% near-zero steel and concrete by 2030.
	Scope 3.3	Upstream emissions in fuel supply chains	●●○	Phase out of fossil fuels and increase supplier requirements.	• Phase out of fossil fuels in own operations in line with climate targets • Continuous engagement with nuclear fuel suppliers, including use of comprehensive sustainability questionnaires.
Fossil-free electricity sales	Scope 3.3d	Sale of fossil electricity	●●●	Secure volumes of fossil-free electricity for customers, by sourcing fossil-free electricity.	• Continued expansion of fossil free energy • Increase share of fossil free electricity in core markets, target of fossil free sales in 2030 in the Netherlands and 2040 for Germany.
Reduced emissions from fossil gas sales	Scope 3.11	Sale of fossil gas	●●●	Transition fossil gas sold to end customers by: • Introducing and offering fossil-free gas such as biogas • Offering alternative heat sources such as heat pumps and district heating.	• Strengthen position as an energy intermediary, offering solutions such as heat pumps, e-mobility, and solar cells for our customers • Increase biomethane blend-in for sold gas in the Netherlands.

●●● Very important ●●○ important ●○○ Less important

1. Greenhouse gas emission scope definitions available on page 126–127

E1 Climate change, cont.

With current plans, projections and achieved emission reductions Vattenfall is progressing towards its climate targets. However, developments outside of Vattenfall's direct control, such as the pace of decarbonization across society could lead to risks of locked-in emissions. Examples include Vattenfall's fossil gas powered assets in the Netherlands that provide both energy supply as well as contribute to the stability to the energy system, and the fossil gas used by Vattenfall's customers that Vattenfall supplies. If there is a limited availability of alternatives to centralised and decentralised fossil gas assets in a market, either from a technical or commercial perspective, there is a risk for delays in the transition. Furthermore, emissions from supply chains, often linked to hard-to-abate sectors such as heavy industries and heavy-duty transports, pose a risk for locked in emissions, especially from a 2040 perspective. The pace of societal decarbonisation is affected by many factors, such as (geo)political developments, government policy, the (commercial) availability of fossil-free alternatives, technical feasibility and the cost to end consumers.

Vattenfall is trying to take the lead in addressing these challenges, for example by investing in fossil-free generation capacity, electricity grid build out, offering and promoting alternatives to fossil gas, advising and supporting consumers on reducing their energy consumption and partnering with companies in hard-to-abate sectors such as concrete and steel to develop solutions that support decarbonisation of those sectors.

Transition plan governance and financial details

The transition plan is central to Vattenfall's overall business strategy and the majority of investments go into fossil-free energy generation or activities enabling the transition such as strengthening distribution networks (see page 136). During 2024 overall investments in economic activities linked to coal, oil and gas accounted for less than 5% consisting mainly of investments in existing gas fired power plants, while no investments in coal were made (see page 160). The targets, being the central piece for steering for the climate transition plan, have been approved by both Executive Group Management as well as the Board of Directors.

Considering the future development of economic activities covered by the EU Taxonomy Regulation, the continued growth in fossil-free capacity and projects linked to the decarbonisation of society will contribute positively to the share of both taxonomy aligned capex and turnover. Turnover will however be impacted by factors such aselectricity spot prices, results of hedges and future ownership structure of new assets coming online. Vattenfall is not excluded from EU Paris-aligned benchmarks.

Markersbach pumped storage power plant

E1 Climate change, cont.

Targets and metrics

Vattenfall is committed to significantly reduce emissions towards 2030 and to aim for net-zero emissions in 2040. The climate targets cover all of Vattenfall's value chain and geographies with the aim to mitigate both negative impacts, limit transition risks and capture opportunities in the energy transition. The targets are fully in line with a 1.5°C trajectory and we have targets across all emission scopes verified by SBTi. This aligns our planned reductions with the climate neutrality target set out in the EU climate law. The targets are central to adhering to our environmental policy which states our commitment to align our business with the Paris Agreement. See Table 7 for full details on Vattenfall's climate targets.

Progress made during the reporting period

Vattenfall has achieved a 53% emission reduction compared to the 2017 baseline based on absolute scope 1, 2 and 3 emissions. For the reporting year, Vattenfall has reduced Scope 1-3 emissions by 5% compared to 2023, in line with expectations. A trend of slower emission reductions are expected for the coming years. Large individual decarbonisation actions (coal closures) have already been done. Supply chain emissions are expected to increase, as new fossil-free capacity is constructed to provide more fossil-free energy to the system. There is a challenging decarbonisation environment for gas sales. Decarbonisation efforts across Vattenfall will contribute to the reduction of emissions. This together results in a slower emission reduction overall. An overview changes per emission scope is displayed in Figure 4.

For more information about energy use, GHG emissions and accounting, GHG removals and GHG mitigation projects financed through carbon credits, internal carbon pricing, see page 126.

1. Target values are deemed to correspond to 1.5°C degree-aligned reference values.

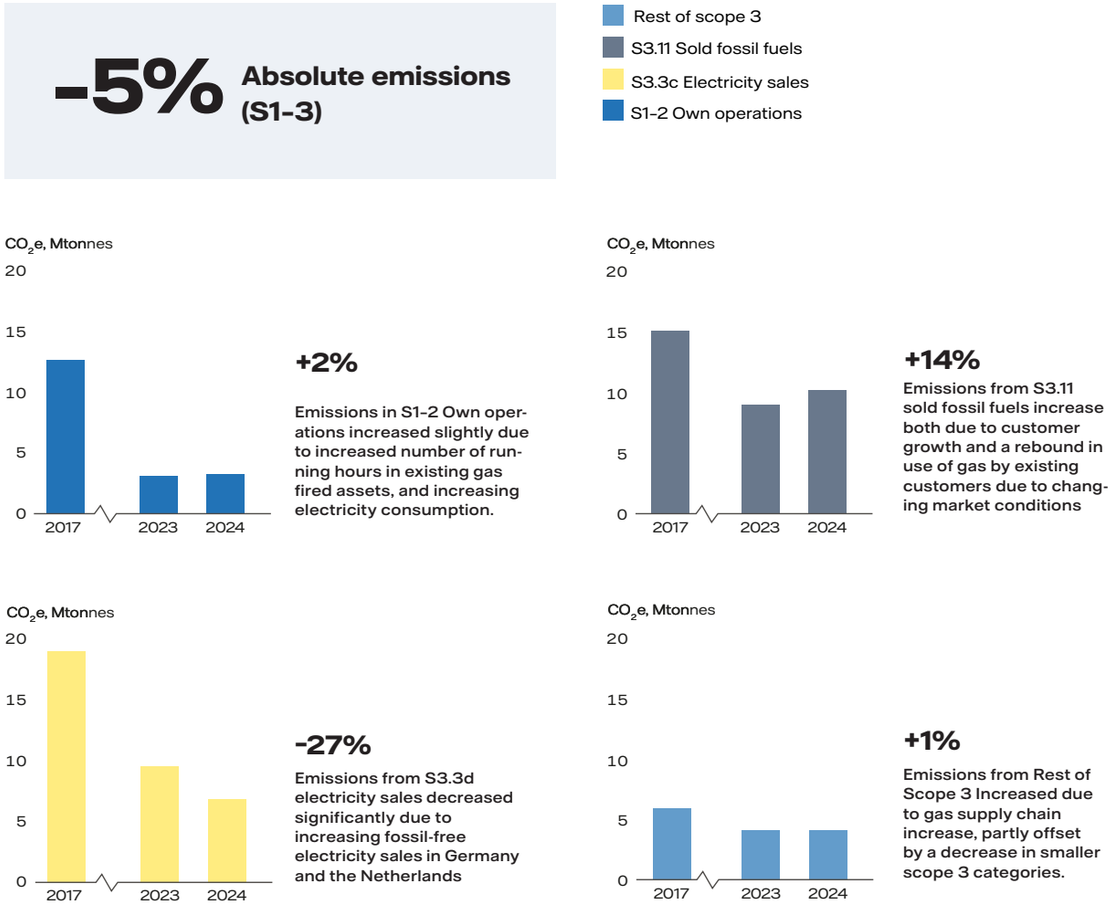
Table 7. Climate targets

Targets	Own operations	All sold electricity	Sold fossil fuels	Rest of scope 3	Total emissions
Target coverage[1]	Scope 1 and 2[2]	Scope 1 and 3 from all sold electricity	Scope 3 use of sold products for sold fossil fuels	All remaining Scope 3 categories	Absolute emissions Scope 1+2+3
Unit	gCO_2e/kWh	gCO_2e/kWh	$MtCO_2e$	$MtCO_2e$	$MtCO_2e$
2017 Base year	110	199	15.1	6.1	52.9
2025	62,1	n/a	n/a	n/a	n/a
2025 expressed as absolute (Mt)	6,9	n/a	n/a	n/a	n/a
2030	-77%[3] ●	-78.1%[3] ●	-54.6% ●	n/a	-65.6%
2030 expressed as absolute (Mt)	3.3	5.3[5]	6.9	n/a	18.2
2040	-91.7% ●	-95.4% ●	-90% ●	-90% ●	-92%
2040 expressed as absolute (Mt)	1.2	1.6	1.5	0.6	~4.7[6]
Methodology	SDA[4]	SDA[4]	Absolute contraction[4]	Absolute contraction[4]	SDA + Absolute contraction[4]

● Validated science based targets (SBTi).

1. All targets are gross targets, excluding use of emission removals and carbon credits for fossil CO_2e. Emissions included CO_2, CH_4, N2O, HFCs, PFCs, SF6 and NF_3 . Target levels expressed as absolute based on activity estimates and are not formal targets.
2. Combined target corresponding to 98% Scope 1 and 2% Scope 2 (market based).
3. Intensity target in line with SBTi requirements.
4. SDA = Sectoral decarbonization approach for the power sector, Absolute contraction = 4.2% absolute year on year reduction.
5. Target level includes only Scope 3 emissions.
6. Target level equals remaining emissions from each target 2040, to be neutralised through removals as required by SBTi.

Figure 4. CO_2e emissions along the value chain
Changes during the reporting year



All emssissions have been adjusted for the sale of Heat Berlin, page 147 provides a 10-year overview including emissions from divested operations.
A dissagregation of emissions scopes in line with GHG Protocol are found on page 146.
For all methodogical changes and accounting policies see page 126.

E1 Climate change, cont.

Key actions in 2024

During 2024 a number of actions were taken that directly or indirectly reduces GHG emissions, contributing to the transition of the energy system or the wider decarbonisation of society, see Table 8. For details on ongoing and planned projects, see page 24–25.

Key actions for the future

Vattenfall plans to continue to build out fossil-free energy generation that will contribute to the lowering of emissions of our generation portfolio as well as increasing the volume of fossil-free electricity available in the energy system. Examples include:

- During 2024 the owners of the Forsmark and Ringhals nuclear power plants in Sweden have taken a directional decision to extend the operating lifetime of the plants' reactors from 60 to 80 years. That would correspond to providing a total of more than 800 TWh of fossil-free electricity. An in-depth investigation phase awaits, which will include more detailed cost calculations and an analysis of identified risks in terms of expertise and suppliers, among other things. After this, a final investment decision can potentially be made. Most of the necessary investments are planned to take place in the 2030s.
- During 2024, Vattenfall signed an agreement to buy 7.5 million cubic metres annually of biomethane from European waste management company Renewi. The biomethane made from food waste will be added to the regular Dutch gas network where it will replace fossil gas. This leads to an annual greenhouse gas saving of approximately 11,000 tonnes.
- Vattenfall and Cemvision have entered an agreement for the development and future supply of near-zero emission cement. The new cement has the potential to reduce carbon dioxide emissions by 95% compared to conventional cement.
- For the ongoing German wind project Nordlicht, Vattenfall has taken the decision to use low-emission steel in 56 out of the 112 turbines which significantly reduces the carbon footprint of the towers. The steel is based on 100% steel scrap processed in an electric arc furnace, which in turn is powered by 100% renewable energy. This reduces the carbon footprint by 66% compared to heavy steel plates manufactured conventionally.
- During 2025, Vattenfall's new office building in Hamburg expects to receive the certificate "Umweltzeichen HafenCity". The building is equipped with 74 solar panels and is supplied with district heating from over 85% renewable energy and industrial waste heat.

Besides planned actions and targets Vattenfall has made the following commitments towards 2030:

- As part of the First Movers Coalition (FMC), 10% of annual procured steel is near-zero steel
- As part of the FMC, replace at least 5% with sustainable aviation fuel (SAF)
- As part of the FMC, 30% of heavy- and 100% of medium duty trucks from truck providers are zero-emission trucks
- As part of the FMC, 10% of procured concrete is near-zero concrete
- BA Wind has committed to using 50% low emission steel by 2030 and 100% by 2040, part of the SteelZero initiative
- Fossil Free Sweden: 100% fossil-free domestic transports, electrify own vehicle fleet and to install solar panels.

Table 8. Actions on climate change

Action	Lever	Scope and geography	Timeline for completion	Expected outcome and contribution to target/policy achievement[1]	CAPEX (BN SEK)	OPEX (BN SEK)	Relevant taxonomy code[3]
Investments in new fossil free generation including wind projects, examples including: • Hollandse Kust Zuid • Vesterhav • Bruzaholm	Increasing fossil-free electricity in the market. Reducing specific emissions	Own operations, all Vattenfall markets	2024–2030	• Reduced specific emissions S1 • Reduced scope 1 (indirect) • Reduced scope 3.3d • Reduced emissions in the energy system scope 4[2]	9.2	0.7	4.1, 4.3
Investments in bio energy, geothermal and heat pumps, examples including: • Lignum bio-based heat plant in SE • Investments in existing bioenergy plants and grids • Replacement of fossil oil in Nyköping	Reduced fossil emissions from gas and waste to heat	Sweden, the Netherlands and UK own operations and customers	2024–2030	• Reduced scope 1 emissions • Reduced scope 3.11 (indirect) connecting customers to solutions with low emissions	2.3	0.5	4.11, 4.15, 4.16, 4.20, 4.24, 4.25
Investments in existing fossil-free assets	Fossil-free electricity sales via securing sufficient volumes of fossil-free electricity	All Vattenfall markets	2024–2030	• Reduced specific emissions Scope 1 • Reduced scope 3.3d • Reduced emissions in the energy system scope 4[2]	3	3.1	4.5, 4.28
	Securing a fossil-free energy supply						
Increase of fossil-free electricity sales – increase from 2023	Fossil-free electricity sales	Downstream, focus on the Netherlands and Germany	2024	• Reduced of S3.3d	Not applicable	Not applicable	Not applicable
Strengthen electricity grids and investing in storage	Connecting and optimising the grid	Sweden and Germany	2024–2030	• Scope 4[2], enabling decarbonisation of customers	10.5	2.3	4.5, 4.28
Investments in charging networks	Driving decarbonisation with customers and partners	All markets	2024–2030	• Scope 4[2], reducing emissions at customers	1	0.06	7.4
Take action on supply chain decarbonisation • Use of fossil free-fuels and low CO_2 materials in construction of a new high-voltage line • Use of biodiesel, low-CO_2 concrete, and recycled plastic pipes in the Bruzaholm wind farm	Supply chain decarbonisation	All markets	2024	• Scope 3.3 reducing emissions in supply chains	Not applicable	Not applicable	Not applicable

1. The results of emission reductions for individual actions are not reported separately in addition to the annual reporting of emission outcome linked to each target area. This is due to uncertainties in the actual emission reductions for projects that have a direct or indirect reduction over several emission scopes.
2. Scope 4 are emission reductions happening outside of the reporting boundaries for the company, not counted towards internally set targets.
3. Amount linked to eligible, aligned non-aligend activities covered by the EU Taxonomy. See page 88.

E4 Biodiversity and ecosystems

Material IROs[1]	Type
Land use change in own operations and supply chain	Impact (–)
Impact on biodiversity due to climate change	Impact (–)
Project execution risks related to species	Risk
Threatened species	Impact (–)

1. For more information see page 86.

Impacts, risks and opportunities

Vattenfall has a negative impact on biodiversity and ecosystems through changes in terrestrial, aquatic, and marine environments when land is transformed for energy infrastructure projects. Vattenfall's operations also result in indirect land use changes within our supply chain.

The GHG emissions throughout our value chain also leads to an indirect long term negative impact on habitats and ecosystems.

Furthermore, management of biodiversity impacts is often an integral part of environmental permits. Therefore, risks could arise for Vattenfall linked to new projects and permit updates with potential consequences such as delays or stopped projects and changes in operating conditions for existing assets. Overall this could lead to lost opportunities or increasing costs.

Moreover, Vattenfall has operations that have an actual or potential negative impact on threatened species, including certain species of birds, bats and fish.

In addition to these challenges, there are opportunities to positively support biodiversity. For Vattenfall, the most significant contributions involve implementing nature-based solutions and habitat restoration projects, which enhance biodiversity and contribute to carbon sequestration and climate mitigation, aligning with the overarching goal to deliver fossil free energy. Whilst such opportunities have especially a positive impact on biodiversity and ecosystems locally, it is not possible to connect a financial materiality to it, and thus it is not considered material.

Energy production depends heavily on natural ecosystems. For example, solar and wind energy sources are reliant on climate regulation, while hydropower depends on the natural flow of water, influenced by surface water availability and flood protection measures, to ensure energy production. As dependencies on ecosystem services are highly interlinked with the impacts mentioned above, they are considered part of these and are not treated separately.

IRO interaction with strategy and business model

Biodiversity-related impacts, risks and opportunities in Vattenfall's operations are highly site-specific, with considerations often addressed at particular locations or projects. Despite the site-specific nature of these issues, their cumulative impact is significant at an overarching strategic level. Biodiversity considerations are integral to the strategy, influencing long-term planning and operational decisions. A list of material sites, as well as information on land use change and threatened species, can be found in the Metrics section (see page 98) and Sustainability notes (see page 129).

Policies and governance

Senior management responsibilities, policies and management systems that govern environmental topics (see page 87) also apply to biodiversity. The Environmental Policy and Environmental Management System set the overarching principles on biodiversity, including Vattenfall's material impacts, risks and opportunities (and dependencies) on biodiversity and ecosystems.

To address material impacts related to land-use change, freshwater-use change and sea-use change, the Environmental Policy and Environmental Management System emphasise adherence to the precautionary principle and that significant impacts are considered in Vattenfall's operations, project siting, and planning design. They also state that biodiversity management shall be conducted in accordance with the mitigation hierarchy and stipulate that where impacts cannot be fully avoided or mitigated, potential compensation and restoration measures shall be considered. The Environmental Management system also focuses on stakeholder engagement and research and development to build knowledge and reduce impacts. In areas where Vattenfall has projects and operations, opportunities to enhance biodiversity and positively impact local species and ecosystems are also to be assessed. The Environmental Management System stipulates that the long-term viability of regional populations of species shall not be endangered by Vattenfall's operations, projects, or new assets. High environmental values surrounding sites must be documented, and precautionary measures taken to prevent harmful impacts from operations. Sustainable resource management and efficiency shall be considered in all operations, including use of energy, fuel, raw materials, chemicals, waste, land and water. The Environmental Management System requires controlling pathways for introducing invasive species and eradicating or controlling invasive species located within onshore operating assets, to reduce their negative impacts on natural flora and fauna. It also includes a commitment not to cause significant harm to the designated features and conservation objectives of existing or proposed European Natura 2000 or Ramsar sites, applicable both within the site of operations and the wider area.

Social consequences of biodiversity and ecosystems-related impacts are also covered by policy and must be assessed for operations, projects or new assets. Engagement and consultation with stakeholders occur, for example, as part of Environmental Impact Assessment when considering potential compensation and restoration measures or implementing biodiversity projects in communities.

Environmental requirements (such as assessment of resources, manufacturing, transport and contractor management) shall be an integrated part of the specification, the evaluation and the audit of suppliers when purchases are made, and take a value chain perspective into account. Biodiversity aspects and management shall be considered in the evaluation of suppliers and technologies, using a risk based approach.

Code of Conduct for Suppliers and Partners also sets requirements that suppliers and partners should cease, avoid, prevent, and minimise potential adverse impacts on the environment and ecosystems caused as a result of their operations. Where negative environmental impacts cannot fully be ceased, avoided, prevented or minimised, compensation and restoration measures should be implemented where appropriate. Suppliers and partners are encouraged to conduct business activities that promote positive impacts on biodiversity, ecosystems, and the environment.

Policies are aligned with global goals and agreements, such as the United Nations' Sustainable Development Goals (12, 13, 14, 15 and 17). Related environmental topics, such as climate, are detailed in specific policy chapters. Pollution is discussed in the non-material section. Emissions to air, water and soil are covered by the Environmental Management System.

E4 Biodiversity and ecosystems, cont.

Strategy - transition plan

Resilience to biodiversity-related risks

Vattenfall has conducted a resilience analysis to better understand the relationship between its strategy and business model and its IROs. The analysis inform future actions, transition plan and and adaptation efforts. In 2022, Vattenfall completed a biodiversity footprint assessment (BFA) to measure the impact of its economic activities on biodiversity. The assessment covered direct operations and the entire value chain, including Scope 1, Scope 2, Scope 3 Upstream, and Scope 3 Downstream. For more information, see page 130.

Transition plan

The European power system is undergoing a rapid transformation in order to reduce GHG emissions and limit global warming. At the same time, the adoption of the Kunming- Montreal Global Biodiversity Framework puts nature protection and biodiversity as another urgency alongside with climate, with the aim to halt and reverse nature loss by 2030. Vattenfall is positioned at the intersection of these urgent global challenges and is committed to a nature-inclusive energy transition. In 2024, Vattenfall revised its biodiversity approach, defining actions and targets within a comprehensive framework that outlines the biodiversity transition plan for 2030. Targets are set based on the business context across different parts of Vattenfall, directing efforts toward areas of greatest impact. KPIs are established to drive concrete change for both nature and business (see page 98). The transition plan and the targets were developed in collaboration with biodiversity experts in the company. In addition, it has gone through approval where the Executive Group Management has approved the corporate ambition, structure and steering approach. We focus our efforts on the following areas:

Direct operations

The priority is to reduce biodiversity impacts from direct operations, both concerning new projects and existing sites. Additionally, the aim is to enhance biodiversity at existing sites to create additional biodiversity values. Reducing climate change pressure on biodiversity by delivering on Scope 1 climate targets is also an important action for direct operations (see page 91).

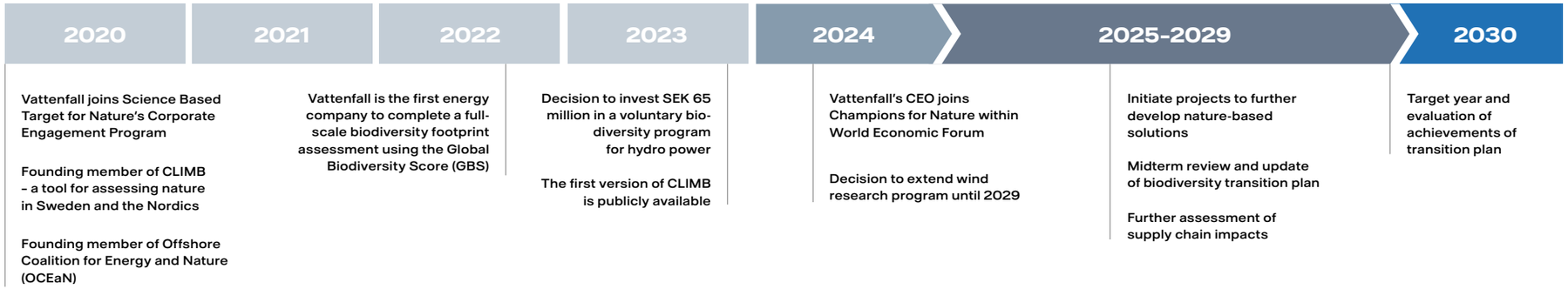
Upstream and downstream

As a result of the 2022 BFA described previously, the main focus of efforts until 2030 will be on biomass and uranium sourcing, raw material extraction and contractor requirements for the procurement of Goods & Services. The reduction of CO_2 emissions in line with the Net Zero target is an important contribution reducing impacts along the value chain.

Ecosystems and society

There is a clear link between well-functioning ecosystems, climate change, and human well-being. Besides mitigating direct and indirect negative impacts, Vattenfall strives to enhance biodiversity values in our sphere of influence through implementing actions to protect valuable nature and strengthen existing biodiversity values on our owned land. Additionally, we actively seek to establish new partnerships to improve our use of nature-based solutions and broader ecosystem improvement.

Figure 5. A timeline of Vattenfall's biodiversity work



How our transition plan contributes to international agreements and targets

Kunming–Montreal GLOBAL BIODIVERSITY FRAMEWORK

With the targets and actions that we define in our transition plan we aim to contribute to following targets in the Kunming-Montreal Biodiversity Framework:

- Target 1: Plan and manage all areas to reduce biodiversity loss
- Target 2: Restore 30% of all degraded ecosystems
- Target 4: Halt species extinction, protect genetic diversity, and manage Human-Wildlife conflicts
- Target: 8: Minimise the impacts of climate change on biodiversity and build resilience
- Target 15: Businesses assess, disclose and reduce biodiversity-related risks and negative impacts

The targets and actions will also contribute specifically to pollinating insects, migrating species in rivers and biodiversity enhancement in marine environments like sea beds, which is closely linked to objectives in EU Biodiversity Strategy for 2030.

E4 Biodiversity and ecosystems, cont.

Targets and metrics

Targets

To deliver on Vattenfall's transition plan and to achieve policy objectives, biodiversity targets are being developed across the different business areas. The targets aim to address the identified material IROs of the specific business areas operations. This year measurable targets for Vattenfall's Business Area Distribution are included in the report, see Table 9. For the coming year's reporting, further targets will be disclosed.

The targets are developed and set based on the areas outlined in the transition plan. More information about the methodologies and assumptions used for the targets can be found on page 130. If considered relevant for the process of setting biodiversity targets, appropriate consultations are conducted involving relevant stakeholders to respect local and affected communities. The aim is to constantly apply latest scientific evidence, and methods in developing and assessing progress of targets.

Table 9. Biodiversity targets

Target[1]	Base year and base year value	Target year and target value	Result 2023	Result 2024	Contribution to GBF target	Mitigation hierarchy and offsets
Implement measures and management plans in identified biodiversity hotspots in the regional power line corridors (250 km)	2021 (0% of the hotspots)	2026 (100% of the hotspots)	48%	61%	4	Restoration, enhancement, rehabilitation. Offsets were not used.
Implemented biodiversity measures at transformer stations	2024 (0 stations)	2030 (20 stations)	n/a	4 stations	4	

1. Ecological thresholds have not been relevant for setting targets

Metrics

Sites located in or near biodiversity sensitive areas

Table 10 provides an overview of the number of Vattenfall sites situated within a 1 km distance from biodiversity-sensitive areas (BSA). Sites with a potential for negative impact on these areas has also been assessed (material sites). Negative impact has been defined as sites with documented evidence of harm leading to detoriation of habitats or species for which the protected area has been designated. Today no such impact was documented. This will however be re-assessed during upcoming permit reviews for hydropower assets as part of the national implementatin of water framework directive. A detailed list of the material sites that are potentially negatively affecting BSAs can be found on page 130 in the Sustainability notes.

Table 10. Sites in or near biodiversity sensitive areas

Market	No. of sites	No. of sites within 1 km from BSA	No. of sites within BSA
Denmark	16	13	3
Finland	4	2	0
Germany	22	15	8
Netherlands	50	33	3
Sweden	137	53	2
United Kingdom	23	8	3

Sweden stands out with the highest number of sites close to BSAs, followed by Netherlands and Germany. This is partly because Vattenfall has the most sites in Sweden.

Table 11 show the number of kilometers of distribution lines that pass through protected areas (Swedish nature reserves, national parks, and Natura 2000 sites) and transformer stations overlapping or within a 1 km distance from protected areas.

Table 11. Distribution lines and transformer stations in or near biodiversity sensitive areas

Network type[1]	Total length (km)	Length in protected areas (km)	Percentage in protected areas (%)
Local network	51,946	1,317	2.7%
Regional network	15,346	728	4.9%

Total transformer stations[1]	Stations within 1 km of protected areas	Stations within protected areas
764	239	13

1. Vattenfall also operates a smaller distribution network in the UK, which has not been included in the assessment, due to a lack of data.

E4 Biodiversity and ecosystems, cont.

Red-listed species near sites
Table 12 show the number of unique red-listed species (not observations) within 50 km of Vattenfall's sites, divided by market and categorised by their level of risk according to the International Union for Conservation of Nature's (IUCN) Red List of Threatened Species.

Table 12. Red-listed species near sites

Market	Critically endangered	Endangered	Vulnerable	No. of sites
Denmark	11	14	81	16
Finland	3	6	40	4
Germany	14	41	86	22
Netherlands	7	16	81	50
Sweden	9	20	94	137
United Kingdom	27	33	103	23

The United Kingdom stands out with the highest number of red-listed species within 50 km of sites, including those in the critically endangered, endangered, and vulnerable categories. Germany and Sweden also have a significant number of redlisted species.

The data indicates whether a species is present within 50 km of a site, and Vattenfall's operations do not impact all of these species. In Table 13, the species and organism groups focused on within each respective business area are outlined.

Table 13. Operations and relevant species

Business area	Species and organisms
Wind	• Marine mammals: Harbour porpoise • Onshore birds: Golden Eagle, Capercaillie • Offshore birds: Black-legged Kittiwake, Guillemot and Razorbill (auks) • Bats: Nathusius' Pipistrelle, Common Noctule • Fish: Atlantic cod • Seaweed: Sugar kelp
Hydropower	• European eel • Freshwater pearl mussel • Lesser white-fronted goose • European crayfish • Saimaa salmon
Distribution	• Pollinators (butterflies & bees) • Meadow herbs that benefit from traditional management • Birds (mainly birds with broad wingspans, owls)

For new projects and in existing operations, we adhere to legislation and permit requirements. In certain cases, when required, species protection assessments are conducted, which include investigations of population size, range within specific ecosystemsand extinction risk. Managing species impact is also a part of voluntary biodiversity projects and research and development activities. Vattenfall continuously works with biotope restoration and species protection in different projects, including testing of how new technology can be used to mitigate impacts on several of the species mentioned in the Table 13.

Land and sea use change
Table 14 shows the land used for new projects. Although not differentiating between quality classes of ecosystems it provides an indication of the land use impact. No significant sea use change occurred during 2024.

Table 14. Land and sea use change

Metric	2024
Area of nature oriented land use change from new projects (Ha)	128

For information about data gaps, and metrics Vattenfall uses to evaluate performance and effectiveness in relation to material biodiversity impacts, risks or opportunities, see page 129.

E4 Biodiversity and ecosystems, cont.

Actions

Table 15 discloses examples of key actions conducted during 2024, representing significant contributions to strengthening biodiversity values across Vattenfall's markets. These actions are essential for achieving Vattenfall's policy objectives linked to nature. By reducing threats to biodiversity they support the global biodiversity framework and related targets for 2030. The activities are focused on enhancing biodiversity and have not been assessed for other significant negative sustainability impacts. Collaboration with different stakeholders is often an integral part of the activities, as demonstrated in the listed key actions.

These include:

- Universities and research institutions
- Suppliers and contractors
- Local authorities and communities

This approach increases the sharing of best practises and knowledge, positively impacting the areas in which we operate by creating job opportunities and improving natural conditions. The aim is to incorporate nature-based solutions and address important societal issues related to biodiversity loss, thereby increasing value for and gaining knowledge from affected local communities. As an example to support practices in the marine environment, Vattenfall has a membership in the Offshore Coalition for Energy and Nature. The coalition aims to accelerate offshore wind energy deployment and grid infrastructure while preserving and restoring marine ecosystems in European seas.

Vattenfall's approach towards the indigenous Sámi people in Sweden involves striving for early and continuous engagement with their representatives when they are affected by Vattenfall's plans and activities. Another practice is an internal company network that regularly shares knowledge and informs about relevant planned and ongoing activities in Sápmi.

Resources allocated to biodiversity

Actions have various resources allocated, including full-time equivalent (FTE) costs, resources as part of project development (such as investigations, implementation of mitigation and enhancement measures, consultants, and monitoring) and research & development budgets. There are no significant capital expenditures (capex) or operational expenditures (opex) beyond those included as an integrated part of the project budgets within the respective Business Areas and Staff Functions and these are not separately disclosed.

Table 15. Actions on biodiversity[1]

Key action	Timeline and future actions	Allocated resources
Nature-Inclusive Design (NID) in offshore wind farms Aligning with Dutch regulations stating that offshore wind farms should actively enhance the marine ecosystem, Vattenfall's NID approach at Hollandse Kust Zuid includes the installation of water replenishment holes within wind farm's foundations. These holes both serve a technical purpose and benefit marine biodiversity by offering shelter from currents and predators to species, such as Atlantic cod, edible crab, and sculpins. Each of the 139 foundations is equipped with four water replenishment holes, strategically placed near the seabed. It primarily involves actions and measures to support marine biodiversity.	• The project, which began in 2021, includes plans for monitoring the NID elements during 2024, 2028, and 2033. This ongoing monitoring is crucial for validating the hypothesis that these designs effectively benefit cod populations. The insights gained from these efforts will inform and refine the future design of the water replenishment holes, ensuring they continue to benefit marine ecosystem while maintaining their essential corrosion protection function. • During 2024, cameras for bird and bats monitoring has also been installed at the site, to trialling a thermal camera-based system for collecting evidence of birds colliding with offshore wind turbines.	Costs for monitoring include third party consultants or/and vessels and own personnel cost.
Biodiversity hotspots and tailored maintenance in the distribution grid Vattenfall have identified 980 biodiversity hotspots covering about 250 km of power line corridors in Sweden through a GIS-based analysis and field studies. Maintenance plans of the power line corridors have then been tailored so hotspots with high scores in the natural value assessment receive more attention. This initiative focuses on actions to enhance biodiversity, such as regular clearing of vegetation, creating open habitats for grassland species. A GIS-based analysis was also conducted on 90 substations to identify the substations with the greatest potential of biodiversity enhancement measures. Suggestions were then made on site-specific enhancing measures to benefit bumblebees, bees, and butterflies. One species that have benefitted are the marsh fritillary butterfly.	• The biodiversity hotspot analysis was conducted in 2017 and 2019 for the power line corridors, and during 2022 and 2023 for the substations. • Tailored maintenance plans for the powerline corridors were drawn up during 2018 and 2019. • Site specific maintenance plans for biodiversity enhancing measures were drawn up for five substations in 2023, and during 2024 these were implemented in four substations with work ongoing for the last one. • See the section on biodiversity targets for more timebound ambitions and upcoming focus for BA Distributions biodiversity actions.	Consultants and service contractors
Vattenfall's hydropower program for biodiversity Vattenfall is investing 65 million SEK to improve biodiversity around the rivers with its hydro power production. It is a voluntary commitment and involves collaboration with county administrative boards and universities. The program focuses on both upstream and downstream actions, which includes measures such as promoting shoreline vegetation and collecting eel at Lake Vänern. One key resource for the program's success is "Laxeleratorn", a large-scale laboratory focusing on improving fish migration measures and finding solutions that allow safe fish passage past powerplants with minimal effects on electricity production.	The program will be running from 2024–2028 and its collected knowledge will be crucial for future environmental assessments. It is being implemented alongside ongoing engagement in R&D. During 2024, several studies have been made on Trout and Salmon and different bypass designs are being tested to minimise rejection.	Research and measures in and around the rivers where Vattenfall operates hydropower production
Wind farm Pen y Cymoedd and restoring peatland Vattenfall has restored up to 1,500 hectares of peatland habitat in Wales to avoid disturbing birds during breeding season and encourage the return of sphagnum moss and other vegetation, which attracts animals, such as amphibians and songbirds. Also the aim is to improve the upland habitats within the site to raise the water table. This action is required as part of our permits, but Vattenfall has voluntarily provided substantial additional funding to Swansea University, on top of the GBP 3 million habitat management plan budget. The funding enables a research programme to understand the risks and opportunities of wind farm development and associated peatland restoration. This restoration project includes both upstream and downstream actions aimed at reversing environmental degradation and enhancing biodiversity.	The restoration started in late 2021. This key action is helping us to reverse the process of carbon leakage for the future and creating a carbon sink that captures and stores carbon. Functioning peatland ecosystems can also provide multiple ecosystem service benefits in addition to biodiversity increase, such as reducing flood risk. In around roughly 2034, the area will start to look like a healthy peatland ecosystem, rich in biodiversity and functioning as a carbon sink once again.	Research, implementation of habitat management plan and monitoring. Even though offsets are not specifically quantified as part of the project, the understanding is that the project will deliver significant enhancement over and above offsetting the small losses to habitats as a result of the wind farm infrastructure.

1. No offsets were used for key actions

E5 Resource use and circular economy

Material IROs[1]	Type
Scarcity of resources for the energy transition	Risk

1. For more information see page 86.

Impact, risks and opportunities

Vattenfall aims to reach net zero GHG emissions in the value chain by 2040. This means that in order to expand the asset base in line with our investment plan (see page 24), Vattenfall needs to both secure future resource needs and at the same time minimise environmental and social impacts in the value chain. Increased demand for key resources such as low-emission and recycled materials can impact the availability of these or increase their price. This could lower project returns or hamper business growth as well as put Vattenfall's decarbonisation targets at risk. Hence, resource inflows are a material risk.

To reduce impacts and risks linked to, as well as to minimize the generation of waste is an important topic for Vattenfall. However with decreasing operations within thermal operations, Vattenfall has not identified IROs that passes the threshold as material on Group level and the topic is therefore considered to be non-material. For more information about waste, see page 104.

The material inflows up until 2030 have been assessed based on the current project pipeline with the aim to identify high-risk materials. The analysis shows that material inflows are expected to increase significantly, particularly in relation to the build-out of wind power assets. To determine the potential risks associated with this, a risk assessment was conducted based on projected volumes, supply risk, and climate impact. In addition, social risks were assessed, without taking project volumes into account. Risks have been assessed with data from internationally recognized sources such as the EU Critical Raw Materials List, ILO Statistics and World Bank governance report. Further details on the method and data can be found in the sustainability notes on page 131.

Policies and governance

The senior management responsibilities, policies and management systems that govern environmental topics (see page 87) also apply to the resource use and circularity. The Environmental Policy and Environmental Management System set the overarching principles and steering on resource use and circularity, covering our own operations as well as our upstream and downstream value chain. Both focus on Vattenfall's material IROs related to resource inflow.

Through our Environmental Policy, Vattenfall commits to transform to a more circular business. This is done by managing resources from a life cycle perspective. When evaluating new projects, the use of resources shall be considered looking at the whole life cycle of the project, from business concept to end-of-life. Resources need to be managed with a high focus on resource efficiency and designing our assets for a long service life. We strive to source more sustainable or recycled materials and in that way move away from virgin resources. Components and materials that reached their end of life are managed by applying the logic of the waste hierarchy: prevent, reduce, reuse, recycle, and lastly, disposal, as the least preferred option.

Vattenfall has developed a Circular Economy Framework which focuses on four focus areas: circular sourcing, circular assets, circular innovation and circular capabilities (see Figure 6). We will continue to detail our framework over time by focusing on assessing the potential to set targets, collecting data for process monitoring and identifying key actions. "Resource inflow" is addressed in all four focus areas but is most prominently in circular sourcing and circular assets. We will initially focus on a few key materials: steel, concrete, aluminum, copper, polymers, and Rare Earth Elements.

Furthermore, Vattenfall's Code of conduct for suppliers and partners sets the framework that suppliers and partners shall avoid, minimise, or mitigate waste resulting from their business activities. Resources such as energy, water, land and raw materials should be used in an efficient, circular and sustainable manner.

Figure 6. Vattenfall's Circular Economy Framework including ambition and focus areas

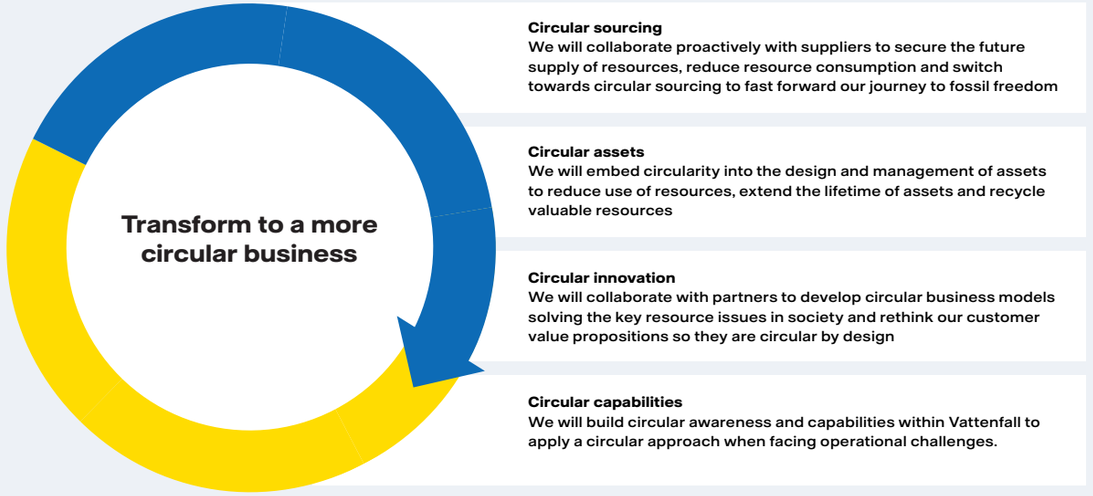


Table 16. Prioritised resources for circularity[1]

Risk assessed materials	Steel	Concrete	Aluminum	Copper	Rare Earth Elements	Polymers
Supply risk	●●○	●●○	●○○	●○○	●●●	TBD
Social risk	●○○	●○○	●●●	●●●	●●●	TBD
CO_2 emissions	●●●	●●●	●●●	●●●	●○○	●●●

●●● High risk
●●○ Medium risk
●○○ Low risk

1. Cobalt and Graphite could become a risk in the future related to procurement of batter-ies, but are not in scope of circularity at the moment.
2. Pending analysis.

E5 Resource use and circular economy, cont.

Targets and metrics

Targets

In 2025, Vattenfall will explore possibilities to develop a group-wide circularity target. Vattenfall has set circular outflow targets for permanent magnets and composite materials for its wind assets (see Table 18). As circular outflow targets are tightly connected to material inflow (i.e. it prepares for closing the material loop), they support our policy to increase sourcing of recycled materials. The targets have been set by Vattenfall on a voluntary basis but can be seen as contributing to the EU circular economy action plan.

In addition to Table 18, Vattenfall's climate targets (see Table 7, page 94) also drive circularity within our own operations and value chain, as the use of circular resources lower our carbon footprint.

Furthermore, Vattenfall is a founding member of the First Movers Coalition (FMC), which is a global public-private partnership to scale new technologies to decarbonise the transport and materials sector. See page 95 to read more about our commitments as part of the FMC.

Metrics

Vattenfall's key resource inflow relates to the use fuels in our own operations and materials used for the construction of new assets such as wind farms and distribution infrastructure, as well as the maintenance of existing assets. For resource inflows related to fuels, these are displayed in the ten year overview of sustainability data, on page 147. Due to their high-climate impact and connection to external commitments, steel and concrete use for new build projects are disclosed in Table 17. The extent of disclosures related to resource use will be revisited in 2025.

Table 17. Resource use

	Unit	2024
Steel	ktonnes	6
Concrete	ktonnes	16

Table 18. Circular targets

Topic	Target	Unit	Baseline	Outcome 2024
Permanent magnets of wind turbines[1]	100% circular outflow of permanent magnets from decommissioned wind farms by 2030. In 2024, Vattenfall committed to achieving a 100% circular outflow of permanent magnets from our decommissioned wind farms, from 2030 onwards. Vattenfall is dedicated to developing circular solutions to reuse, refurbish, repurpose, or recycle permanent magnets. As part of the targets Vattenfalls has formed strategic relationships with specialised recycling facilities and technology providers focused on rare earth element recovery: Caremag and Cyclic Materials.	%	n/a (no waste treatment took place yet)	n/a (target decided in 2024)
Composite materials of wind turbines[1]	50% circular outflow of wind turbine blades by 2025 100% circular outflow of wind turbine blades by 2030 Since 2021 Vattenfall committed to a landfill ban on decommissioned wind turbine blades from own wind farm. The targets are 50% circular outflow of wind turbine blades by 2025 and 100% circular outflow by 2030. A circular outflow means that blades are reused, refurbished, repurposed, or recycled. In 2024, these targets have been extended to all composite waste from wind turbines (including nacelle canopies and nose cones).	%	0%	58%[2]

1. Target scope: Targets aim to increase overall circularity for these resources targeting circular outflow. Targets relates to reuse and recycling within the waste hierarchy. Targets set are based on Vattenfall's outlook of wind farm decommissioning and recycling capacity of its partners and more broadly in Europe.
2. Progress for 2021–2024, 3 onshore wind farms decommissioned since 2021 and 133 tonnes of blade waste coming from operational windfarms.

E5 Resource use and circular economy, cont.

Actions
Table 19 displays actions planned or adopted during the reporting year. Most actions focus on circular souring and in that way support our policy of resource efficiency and increased use of recycled materials.

Resources allocated to circularity
Actions have various resources allocated, including full-time equivalent (FTE) costs, resources as part of project development and research & development budgets. There are no significant capital beyond those integrated as part of the project budgets within the respective Business Areas and Staff Functions and these are not separately disclosed.

Table 19. Actions linked to circular economy

Action	Scope of action	Planned completion date
Increased use of recycled steel Vattenfall and SSAB signed a Letter of Intent regarding deliveries of fossil-free steel (Dec 2023). Vattenfall and SSAB kicked-off their collaboration in early 2024.	Deliveries of fossil-free steel will come from: • SSAB Zero™ which is made of recycled steel and produced with fossil-free electricity and biogas • SSAB Fossil-free™ steel is produced by using HYBRIT® technology, with direct reduction of iron ore using fossil-free hydrogen – emitting water instead of CO_2. Number and size of deliveries are not determined yet.	This partnership supports our commitment to the First Movers Coalition (FMC) where targets for the use of near-zero steel are set for 2030
Increased use of recycled concrete Vattenfall and CemVision signed Letter of Intent in June 2024 for the development and future supply of near-zero cement.	• CemVision develops cement made from recycled residual materials from industries including mining and steel industries, manufacturing in a process where the CemVision's kilns are fuelled by fossil-free energy.	This partnership supports our commitment to the First Movers Coalition (FMC) where targets for the use of near-zero cement and concrete are set for 2030
Strengthen circular sourcing Sustainable Supply Chain Roadmap (SSCR)	• Vattenfall's Sustainable Supply Chain Roadmap (SCCR) includes circularity as a focus area where for example circularity award criteria are used in procurement tenders, also positively contributing towards climate targets.	2024 – Ongoing
Increased use of recycled steel Use of recycled steel in Nordlicht wind farm in Germany. Conditional agreement signed with Vestas in June 2024.	• Vattenfall and BASF signed a conditional offshore wind agreement with Vestas for the Nordlicht 1 and 2 projects in Germany. • The top sections of 56 out of 112 wind turbine towers will be made with low-emission steel, accounting for 24% of the mass of the heavy steel plates used for the wind farm. • The low-emission steel is fabricated using 100% steel scrap melted in an electric arc furnace powered by 100% wind energy.	Wind farm completion is planned for 2028
Application of various circular design measures Circular design measures included in the bid of offshore wind farm Zeevonk in the Netherlands. Permit awarded in June 2024.	• Zeevonk is an offshore wind farm in the Netherlands with 2 GW capacity which will be operational in 2030. • 47 circular design measures planned covering foundations, wind turbine and cables. • Maximum transparency about material use, environmental impact and value retention through the Circular Product Passport for the design, exploitation and decommissioning phase • Insight into the carbon footprint of the windfarm and effect of circular design measures on emission.	Wind farm completion is planned for 2030

Non-material environmental disclosures: Resource outflows - products and waste

A responsible management of waste at our projects and operational sites is crucial for our licence to operate. Waste is generated during the operation and maintenance of power plants, power grids and district heating networks, during project construction and during dismantling of assets and infrastructure at the end of their operational lifetime. Vattenfall manages and optimizes its waste according to the waste hierarchy (prevent, reduce, reuse, recycle, and lastly, disposal). This means there is a high emphasis on designing and using resources smarter to avoid waste generation. Where waste is unavoidable, promoting reuse is the first priority, followed by recycling, and then energy recovery. Disposal is considered a last-resort option. Through smart design, capturing by-products, and increasing recycling rates, we aim to minimise waste streams. Waste is identified, classified, and managed within the framework of applicable national laws. Resource outflows are monitored at site or by third party contractors and reported annually. Where waste is managed by third parties, they must follow our Code of Conduct for Suppliers and Partners.

Despite efforts to reduce and recycle waste, residual waste streams remain. In addition, some waste needs to be removed from the resource pool because of its harmful content. Other materials, such as plastics and cellulose, have a limitation on how many times they can be recycled. Vattenfall utilises industrial and municipal waste as fuel in our waste-to-energy plants in some of our district heating grids, allowing for energy to be recovered from residual waste streams. Furthermore, we capture by-products, when possible, allowing for future use.

Hazardous and radioactive waste is handled safely and in accordance with existing regulations. We operate our radioactive waste-management facilities under strict operating conditions and employees with access to radiologically controlled areas are trained in radiation protection. High-level, long-life radioactive waste, consisting primarily of spent nuclear fuel and core components, is carefully shielded during handling and transportation, and when stored, the waste is encapsulated to prevent radioactive contamination, with storage type and location being determined by the waste's radioactivity characteristics. To minimise our waste streams where feasible, the level of declassified waste from the decommissioning of our nuclear reactors in Sweden and Germany should be as high as can reasonably be achieved, taking into account consequential effects such as generation of secondary waste, adverse health and safety impacts, and other safety-related aspects. Having been successfully declassified, material can be used by other parties. For example, concrete from facilities at German nuclear sites have been reused as filling masses, diverting waste whilst simultaneously making this material available for use elsewhere.

Non-material environmental disclosures: Pollution

Vattenfall's main impact due to pollution comes from its thermal operations. Here the focus is focusing on reducing emissions of sulphur dioxide (SO2), nitrogen oxides (NOX) and particulate matter generated during combustion in power plants. During the construction, operation and decommissioning of our power plants and networks, necessary measures are taken to reduce noise, light pollution and emissions. Impacts and risks related to pollution are managed as part of existing permits and via certified environmental management systems. See page 147 for exact data on emissions of SO_2, NOx, and Particulate matter.

Chemicals are managed responsibly by taking technical and organizational precautions to prevent harm to employees and the environment. Vattenfall is continuously working to phase out harmful substances, despite this, in some contexts chemicals containing substances classified as substances of high concern are used. These substances are technically necessary in specific applications, but we are continuously working to find substitutes and reduce their use.

Figure 7.
Waste handling

Waste generated in operations[1] (ktonnes)

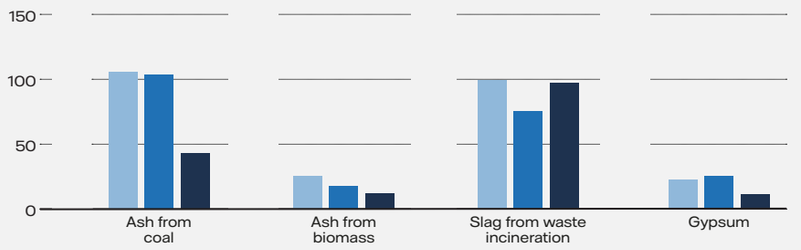
Non-hazardous Hazardous

16.8
Reuse & Recycle
14.2
2.5

24.4
Other recovery incl. incineration
4.6
19.7

1. Total waste amounted to 62,4 ktonnes. Residues and by-products generated from combustion are separately reported, see graph below.

Residues and by-products (ktonnes)



Over 95% of residual products such as ash, slag and gypsum are sold. The construction industry primarily reuses these secondary materials in concrete and asphalt production.

Radioactive waste storage

Page 148

21.2
Non-hazardous 1.5
Hazardous 19.7
Landfill (ktonnes)

Non-material environmental disclosures: Water

Vattenfall relies on water for its operations, to drive our hydropower plants and cool our thermal and nuclear power plants. We are committed to using water resources responsibly and sustainably, striving to optimise water-use, minimising impacts on water quality, and balancing the needs of hydro power production and flow regulation.

Withdrawal and discharge of water are subject to conditions set in the environmental permits. For key metrics on Vattenfall's water use, see Figures 9 and 10. The transition of Vattenfall's portfolio involves investments in renewable energy sources such as wind power and solar energy, divestments of fossil assets, fuel switches and power plant upgrades, all of which contribute to reduced freshwater usage for cooling at Vattenfall. Figure 9 illustrates how in 2024, we withdrew 552 million m^3 of freshwater, of which 551 million m^3 was subsequently discharged. The majority of the water withdrawn was used in cooling operations. In 2024, our water intensity[1] was 5.3 m^3/MWh, compared to of 6.5 m^3/MWh in 2023.

We have assessed which operational assets are located in areas under water stress, based on World Resources Institute's Aqueduct Water Risk Atlas (4.0). According to the assessment conducted in 2024, Vattenfall withdraws 4,073 million m^3 sea water and 0.2 million m^3 of freshwater from areas under high water stress, and 0.4 million m^3 from areas under extremely high water stress[2]. This is equivalent to 0.1% of Vattenfall's total freshwater use (figures exclude water used in our hydropower operations and have been adjusted for divested operations in Heat Berlin).

The assessment shows that Vattenfall's pumped hydro power plants in Thuringia, Germany and heat plants south of Stockholm, Sweden are located in areas classified as under high water stress. Pumped hydropower plants operate by temporarily withdrawing and pumping water to store in an elevated reservoir, later releasing it to generate electricity. No water is consumed in the process, apart from minor water losses due to evaporation. Our heat plants south of Stockholm use municipal water sources. Most of the water is used for cooling and partly in district heating networks. According to the Aqueduct water risk atlas assessment, Vattenfall's nuclear power plant in Forsmark, Sweden, is located in an area classified as under extremely high water stress. The Forsmark plant only uses limited amounts of freshwater in the plant's processes.

Within Vattenfall, hydro power accounts for approximately a third of total electricity generation. Hydro power operations and dams affect the landscape, water flows, and natural habitats in the area. We are working to reduce impacts on water resources and biodiversity in aquatic ecosystems. We invest in measures to strengthen local habitats and increase biodiversity, research to enable fish migration with limited production losses, and implement initiatives to lower the risks of erosion and sedimentation around our hydro power assets.

1. Based on freshwater withdrawal of our thermal (heat and nuclear) plants per unit of electricity and/or heat produced
2. Fresh water consisting of a mix between fresh surface water and purchased water

Figure 8. Operations in areas under water stress

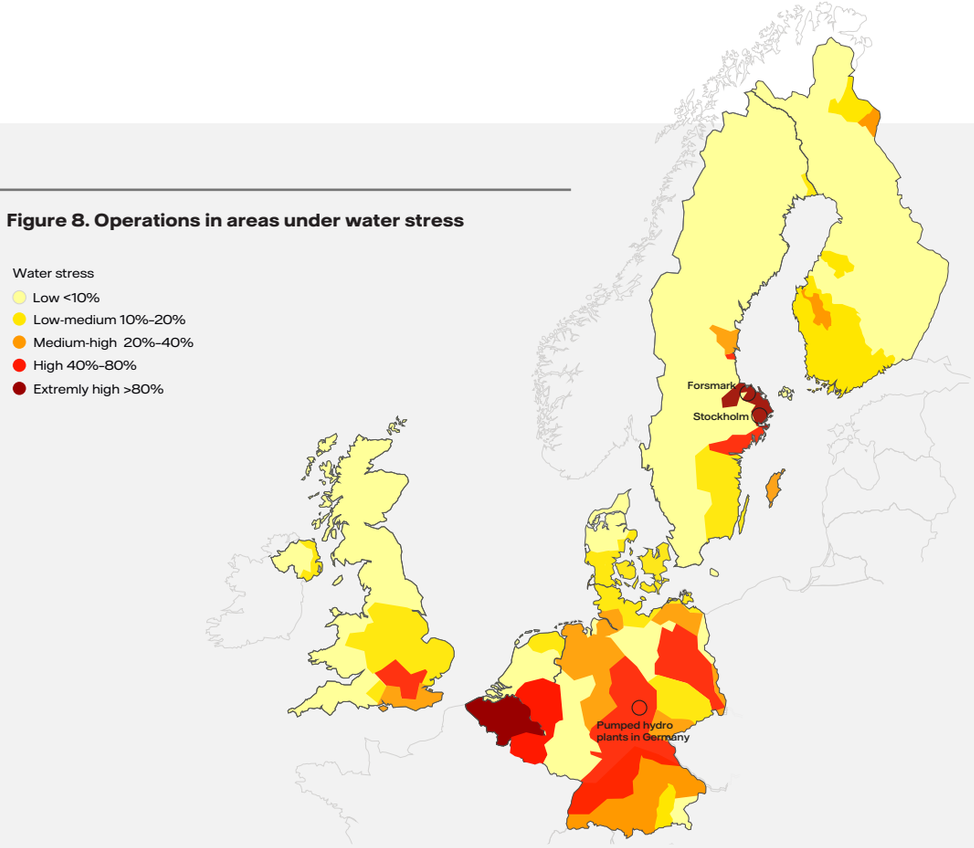
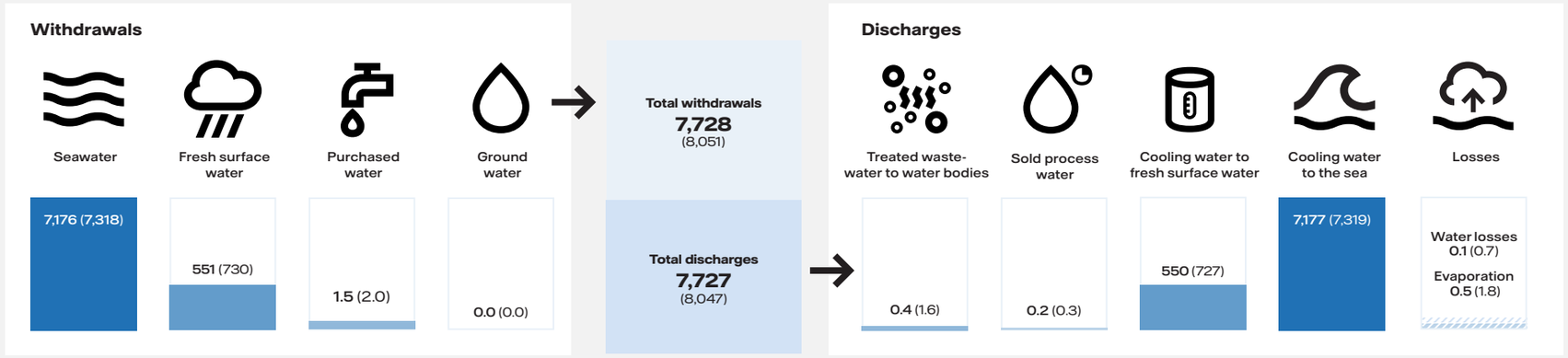
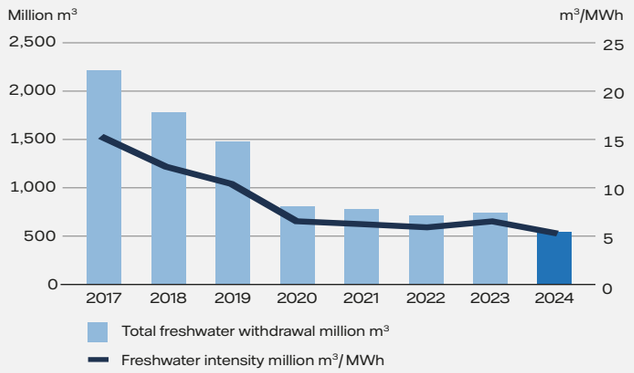


Figure 9. Total withdrawals and discharges of water by source[3], million m^3



3. Water consumption (Total withdrawals – Total discharges) equals to 1.4 million m^3

Figure 10. Total freshwater withdrawal and freshwater intensity



Social

Vattenfall believes that social sustainability strengthens the trust between companies, employees, and the communities they serve. It promotes ethical labour practices and respect for human rights, which are not only prerequisites to ensure responsible operations, but also drivers of innovation, creativity, and long-term success. Vattenfall is aware of the social impacts in our value chain, and we are constantly striving to better identify, assess, and manage our impacts, risks and opportunities. Sustainability is an inherent part of our strategy and business model and our efforts in managing social impacts are important to our journey towards fossil-freedom.

Vattenfall acknowledges that we have a responsibility to respect all internationally recognised human rights. Vattenfall's general human rights commitments include adherence to the UN Guiding Principles for Business and Human rights (UNGPs), the OECD guidelines for Multinational Enterprises and the principles of UN Global Compact, which includes a commitment to respect the rights expressed in the International Bill of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work.

Policies and governance

In practice, the responsibility for driving social sustainability performance, including compliance with relevant policies and legislation, lies within each business area and corporate function. The corporate-level sustainability team acts as a support function and centre of expertise towards the whole group and provides insights, guidance on prioritisation and direction, and other forms of capacity building on sustainability issues, including on human rights.

Human rights commitments and due diligence
Human rights risks and impacts are managed systematically and regularly following the OECD's six steps due diligence framework to identify, address and mitigate these risks:

- **Human rights commitments** are embedded through policies, including a human rights policy, covering human rights commitments and approach to human rights risks.
- **Risk assessments** are conducted to proactively identify and assess potential or actual adverse impacts in our own operations, supply chain and other business relationships, and corrective actions are defined and carried out. In addition to ongoing risk assessments of our suppliers, business partners and projects, we conduct an in-depth human rights assessment every three to five years. The interests and views of affected communities, value chain workers, and other relevant stakeholders are taken into consideration in the risk assessment via input, interviews or feedback sessions from stakeholders or their credible proxies. Our latest assessment in 2021 identified 16 salient human rights issues, based on severity, likelihood and relevance for business action. Of these, nine were prioritised in our Human Rights Action Plan.
- **Implementation** of actions to cease, prevent or mitigate adverse impacts. We actively track progress of all identified actions through our internal action tracker.
- **Monitoring and tracking** the implementation and results. Through an Annual Management Review, we review progress of our actions once a year, we assess the effectiveness of our governance, and we reassess our impact through our value chain to assess whether the prioritised human rights issues are still the salient issues for Vattenfall. In addition, we review the various Human Rights Action Plans on a business level.

The learnings from this annual review are used for further enhancement of our human rights work. In the human rights assessment, the interests of affected communities are considered through direct interviews with credible proxies. No further engagement is carried out on Group level in regards to tracking or follow-up on recommendations and actions resulting from the human rights assessment.
- **Communication** on how impacts were addressed and highlight of future actions. We report our progress in the Annual Progress Report, which is available on our external website.

Overarching policy documents
- Human Rights Policy
- Code of Conduct and Integrity
- Code of Conduct for Suppliers and Partners outlines minimum environmental, social, and governance standards for suppliers and partners.
- The Guide to the Code of Conduct for Suppliers and Partners supports our suppliers to achieve the requirements and expectations that are outlined in Code of Conduct for Suppliers
- Privacy Policy

All policies are made available through the Vattenfall webpage.

Accountability
Vattenfall's CEO, together with Executive Group Management, has the overall accountability for human rights within Vattenfall. The Human Rights Policy is updated and approved by the Board of Directors (BoD) annually, while the Code of Conduct and Integrity and the Code of Conduct for Suppliers and Partners are approved by the BoD following any significant changes. Human rights issues are discussed on an annual basis by the BoD and Executive Group Management.

Processes

Processes to engage with stakeholders
As described in the general section on interests and views of stakeholders (page 83), stakeholder engagement including dialogue with affected communities is of significant value to Vattenfall. The many ways in which Vattenfall engages with our own employees, affected communities, consumers and end users as well as workers in our supply chain, exemplify our commitment to operate responsibly, consequently, ensuring our capacity to further enable a transition to fossil freedom.

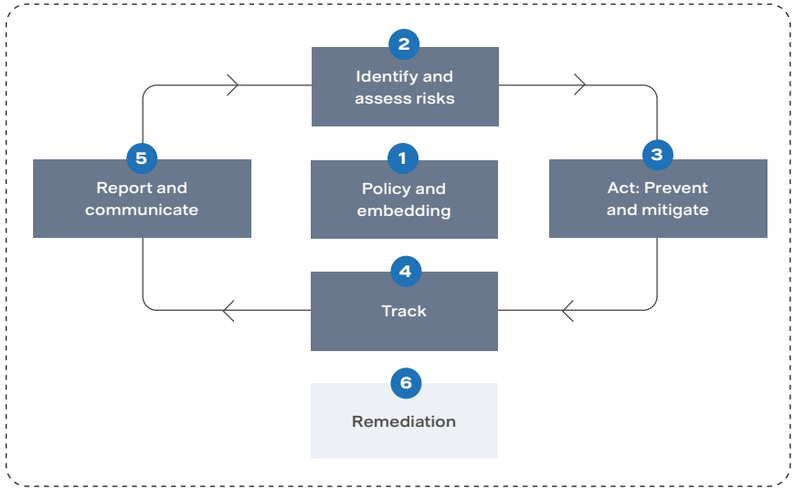
Processes to remediate
Vattenfall acknowledges the importance of providing for accessible grievance channels and remedy. At Group level, Vattenfall is committed to providing appropriate forms of remedy in cases where Vattenfall has directly caused or contributed to negative human rights impacts, related to our own operations and our supply chain. The type of remedy is determined on a case-by-case basis depending on the degree of severity and our connection to the impact. Currently, Vattenfall does not have a formal Group policy for remediation. Any remediation process is managed directly by the responsible business area and, if necessary, with cooperation of Vattenfall's Legal Department, with respect to confidentiality and anonymity of the complainant.

The nature of remediation processes varies across the different business areas and markets, as a result of different regulatory requirements.

Vattenfall provides multiple channels for rightsholders to raise concerns. At Group level, these include Vattenfall's web-based Whistleblowing Channel, Group Internal Audit department and Whistleblowing coordinators (details on page 124). Vattenfall supports the availability of our Whistleblowing channel in our business relationships (further details on page 113). On an operational level, we offer direct contact with project managers, stakeholder engagement managers or other staff, to raise concerns.

Currently, Vattenfall does not have a centralised or formal mechanism in place that allows for an assessment of the awareness and trust of our grievance channels or remediation processes. There is currently no system in place for the assessment of effectiveness of our mechanisms for remediation. Guidance on how to ensure compliance with the UNGP effectiveness criteria, and thus also the European Corporate Sustainability Due Diligence Directive, will be included in the development of our guidelines for stakeholder engagement (see page 117).

Figure 11. Human rights due diligence



S1 Own Workforce

Material IROs[1]	Type
Unhealthy working conditions	Impact (–)
Health and Safety for own employees	Impact (+)

1. For more information see page 86.

Impacts, risks and opportunities

Working conditions is an area where we assess that we have the largest impact. Specifically, within Health & Safety (H&S), where we go well beyond existing standards and regulations to secure the safety and well-being of all our employees. This is true both in terms of physical risks at our sites, but also other potential negative effects of unhealthy working conditions such as excessive workloads.

That said, Vattenfall's operations include some high-risk activities, mainly related to construction and maintenance of assets, where workers risk injuries if hazards are not correctly identified and mitigated. Additionally, Vattenfall acknowledges the material impacts of healthy working conditions by addressing topics such as mental health, work-life balance, and career development because it leads to engaged and satisfied employees. All people in Vattenfall's workforce across its value chain who could be materially impacted by us are in the scope of this disclosure. Due to the nature of their work, operational employees and non-employees working in the field are at greater risk of negative health and safety impacts. Vattenfall's negative impacts in this area are related to individual incidents and not of a systemic nature. Across all geographies, activities like site-specific health and safety inductions, the provision of standard or job-specific personal protective equipment, and even the introduction of new technologies like drones to reduce human involvement in high-risk work, serve to benefit the relevant employees and non-employees alike by creating safe working conditions and lowering incident frequency.

Equal treatment and opportunities are important topics for Vattenfall but are not material. We believe we maintain an inclusive culture where everyone has equal chances and development opportunities which is important for the success of the company (see page 121). In addition, Vattenfall has implemented prevention measures related to harrasment. Our workforce is employed in countries where the risk of violations of international conventions on labour rights and decent working conditions is low. These are also markets where local labour law enforcement is strong, in terms of fair wages, excessive working hours, and freedom of association for workers.

Other work-related topics such as forced labour or child labour are not material for Vattenfall, as breaches are very uncommon in the geographies in which we operate.

IRO interaction with strategy and business model

Vattenfall's strategy and business model involve construction and maintenance of certain assets, which brings about potential and actual negative impacts to health and safety (e.g. injuries). Addressing these risks and their root causes is fundamental to company success, which is why a safe work environment is a cornerstone in our efforts to empower our people and is one of our strategic focus areas (see page 109). Vattenfall has an ambition to achieve "world-class H&S" which we have defined as being at least the top three when benchmarked against our peers in the European energy sector. In order to achieve this, we believe that we need to have a mature and proactive company culture where people encourage each other to do their best while retaining a healthy work-life balance. Targets are set and followed up on, with results informing future strategic discussions and initiatives to address any gaps. Vattenfall believes it can execute its business model and achieve world-class H&S, so these impacts, risks and opportunities do not currently inform business model discussions.

A safe and healthy work environment is also important in order to attract and retain personnel. This will become increasingly important in the future as it is expected that the accelerating energy transition will create a shortage of people with the right competencies, meaning that our employee proposition will become crucial to execute on our strategy and business model.

Policies and governance

Senior management responsibilities, policies and management systems that govern social topics (page 106) also apply to the topics related to the own workforce. Vattenfall's H&S commitments are anchored in our Human Rights Policy, and relevant to our management of identified material impacts. They apply to all employees in the Group. The Human Resources Instruction describes the vision, governance and organisational set up of the People & Culture department.

Vattenfall aims to enable all employees and managers to deliver their best possible performance. A strong company culture with clear HR processes and roles is the foundation for a successful employee journey. All information relevant to employees and managers regarding processes and responsibilities along the employee journey is made available to all employees via Vattenfall´s intranet. This also includes information on how employees can address concerns and which communication channels are available. The most senior person in Vattenfall accountable for this policy is the Senior Vice President of People & Culture.

Vattenfall's workforce is employed in countries where the risk of violations of international conventions on labour rights and decent working conditions is low. These are also markets where local labour law enforcement is strong, in terms of fair wages, excessive working hours, and freedom of association for workers. Furthermore, Vattenfall's policies do not permit any forms of modern slavery including forced labour and human trafficking (see page 112, Modern Slavery Statement). Also, child labour is explicitly addressed in Vattenfall's Code of Conduct for Suppliers and Partners.

Vattenfall's Health and Safety Policy describes the overriding principles for H&S and commitments as an employer as well as what the company expects from its employees and non-employees in the H&S area. The Group-level H&S function is responsible for the production and annual revision of the policy. The CEO is responsible for the content which is subject to the Board of Directors' approval. The members of the EGM are responsible for implementing and cascading it in their organisations. Every leader is responsible for ensuring that their teams have the relevant knowledge, training, and resources to ensure full compliance. All employees are responsible for reading and following all aspects of the policy. Non-employees are responsible for adherence to the policy within the parts of their organisations that carry out work for Vattenfall. All H&S activities, including ways of working, guidelines, routines, and focus areas are based on systematic risk assessments regularly carried out in cooperation with employees. Our H&S policy states that work must stop, if an employee or contractor is in danger. Our safety management systems encompass all stages of the hierarchy of controls and in Intelex we report, log and manage hazards and incidents.

Furthermore, Vattenfall's dedication to creating a collaborative working environment is built on respect, fairness and integrity as stated in the Code of Conduct and Integrity. We promote diversity and inclusion and treat everyone with dignity and common courtesy. We must refrain from all forms of unacceptable behaviour such as bullying, discrimination, sexual (or non-sexual) harassment, racism, aggression, violence and verbal attacks. Speaking up is not only encouraged, it is expected. It is every employee's responsibility to report anything that does not seem appropriate or safe. In support of this commitment, Vattenfall has a series of internal instructions which describe how to act and mitigate harms if a case of discrimination is identified. These instructions also require hiring managers to shortlist at least one female and one male candidate, who are equally qualified, for increased managerial gender diversity. For more information on Vattenfall's Diversity, Equity and Inclusion efforts, see page 121.

Processes

Processes for engagement

The way Vattenfall manages its workforce and its reputation as an employer, from the perspective of current and potential employees, can impact the company's ability to attract and retain key talent, and thus affect the company's competitiveness and ability to innovate. Vattenfall's managers play a crucial role in motivating and promoting employees. They act as role models in relation to Vattenfall's values and must ensure the creation of diverse and well-organised teams and provide individual employees with a platform for regular exchange. All managers at Vattenfall have a responsibility to live a culture that promotes employee engagement. To ensure that all managers are

Description of Vattenfall's workforce

Vattenfall has used the following definition of employees and non-employees for the purpose of identifying material IRO's. Furthermore, the breakdown and composition of Vattenfall's workforce is reported below (page 110).

- **Employees** have a contract directly with Vattenfall.
- **Trainees** are new employees undergoing training for a particular job and role in Vattenfall, the training period is 12–24 months after which they take on a permanent role in Vattenfall.
- **Non-employees** are provided by third party. They are primarily hired personnel, consultants or contracted workers who perform work in various fields such as construction, service and administration.

Internships are offered to students and recent graduates and can be paid or unpaid. Interns work under the supervision of experienced professionals, allowing them to apply their academic knowledge in a real-world setting and develop their professional skills.

S1 Own Workforce, cont.

sufficiently skilled, regular training sessions and various leadership tools are made available for use. Employee dialogues take place at least 2–3 times a year as part of the performance management process. The dialogue includes discussions of health, work-life balance, working conditions and working hours. The results of the dialogue or performance talk are documented and analysed. For senior executives, Vattenfall hosts a conference that links individual development potential and aspirations with specific business challenges and targets. Meanwhile, in order to support all managers, they are provided with a toolbox regarding leadership and a supporting platform where information can be obtained on how health and wellbeing of employees is supported in each country as well as methods, tools and training opportunities to minimise the risk of low employee engagement or harmful working conditions.

In the My Opinion survey (see page 29), all employees can anonymously express and evaluate their working conditions, the accessibility of their line manager, awareness of trust structures or processes as well as concerns or needs. Employee representatives are involved in the planning of the process. The outcomes of the surveys are carefully analysed, and the results are used to shape and guide our people agenda.

Work-life balance is an important element in attracting and retaining engaged employees, and to this end, Vattenfall gives employees the possibility of (partial) remote working when tasks and responsibilities allow for this. Flexible working hours and hybrid work options are part of Vattenfall's work-life balance strategy and are embedded in various company agreements.

Good and constructive co-operation with unions and works councils and their involvement based on the respective laws is guaranteed in all countries where Vattenfall operates. In particular, the different types of involvement (e.g. information, consultation and initiative rights) are natural part of Vattenfall's co-determination culture. Unions and works councils play also an important role for issues such as occupational safety.

Due to different legal requirements and procedures in the different core markets, national H&S activities, measures and processes are handled via national decision and consulting bodies in which representatives of the business unit and employees take part. For example, in Germany, decisions on health are aligned and decided in the German Health Governance Council, and if required it will be presented to workers council committees. In Sweden for mandatory H&S activities, for example tender of occupational health service, alignment is done with the Swedish Forum for Work Environment and Health, where employee representatives take part. H&S activities, measures and processes concerning countries other than Germany, Netherlands, Sweden are handled and discussed in the H&S Leadership team which consists of H&S Directors from each Business Area and Staff Functions and the Vice President of Health & Safety.

Processes to remediate our workforce

For H&S concerns, employees and non-employees can report hazard observations mainly via the HSSEQ reporting tool Intelex and depending on the context also other systems. Furthermore, we have a robust process to learn from incidents. Generally, we provide potential remedies for those harmed and the incidents are followed up by Root Cause Analysis. Then, the insights are used to update H&S procedures, such as continuous assessment and risk identification processes, as well as to adapt training and implement new preventive and corrective actions. In addition to the health and safety specific reporting tools, the Group-wide whistleblowing channel is also available (see page 123).

Targets and metrics

Targets

Vattenfall has a target on Lost time injury frequency (LTIF) which measures frequency of work-related injuries resulting in people being unable to work one day or more on an annual basis. The scope of this target is own employees as defined above.

Unhealthy working conditions can lead to accidents where employees get injured, which results in absence from work. The outcome of these Lost Time Injuries could also be reduction in productivity, financial losses and even affect morale. LTIF is tracked and followed up in all Business Areas and on group level on a monthly basis. The target is 1.0 or lower in 2025, and 2024 it was 1.4 compared to 1.5 in 2023.

Furthermore, although not a strategic target, Vattenfall has a target on "World Class H&S plan fulfilment score", which is an internally created measure that tracks to which extent the yearly H&S targets for each Business Unit and/or Business Area have been reached. Vattenfall has H&S targets for all Business Area and Staff Functions, covering four focus areas: Management Accountability, Contractor H&S Management, Healthy Work Environment and H&S Culture.

Each focus area has several targets connected to them, resulting in a total of 12 targets and each unit sets up relevant activities in order to fill gaps and contribute to the targets. During the year, fulfilment scores towards these plans are measured and followed up on a quarterly basis. The target is 85 per cent and the result was 95.3 per cent in 2024 compared to 95.6 per cent in 2023.

Figure 12. Health and safety focus areas

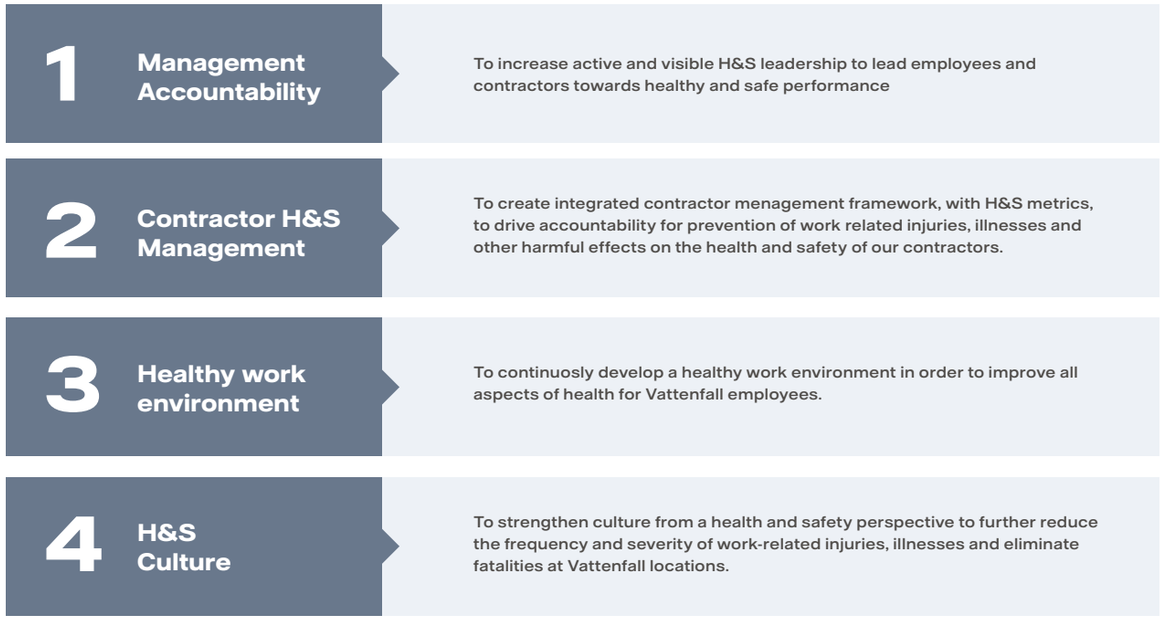


Table 20. Overview of Vattenfall's workforce

	Sweden	Denmark	Germany	Netherlands	UK	Other	Total	Of which part time	Of which temporary
Full time equivalents	11,433	631	3,415	4,105	496	574	20,655	1,505	897
Women	31%	28%	31%	28%	33%	37%	30%	59%	27%
Men	69%	72%	69%	72%	67%	63%	70%	41%	73%

The gender composition of the Board of Directors is 27% female, 73% male and the Executive Group Management has 44% women and 56% men. No other structured diversity analysis has been done. Biographies of members can be found on page 68–69.

S1 Own Workforce, cont.

Metrics

H&S is managed according to the principles of ISO 45001. All business units are certified according to ISO 45001 requirements, and the management systems are implemented and run by internal Vattenfall resources. The own workforce is covered by H&S management systems, these are both company-wide as well as local.

Vattenfall does not have metrics for work-related ill-health and fatalities from work-related ill-health as we currently do not have a way of measuring this. We monitor how reporting methodologies develop and intend to start reporting this when a robust way of reporting is identified.

Tragically in 2024, Vattenfall had one work-related fatality. Extensive investigations are being conducted to gain insights into the causes and to determine follow-up measures. It is of the utmost importance that similar incidents are prevented in the future. One preventive measure, which, began in 2022, was to roll out Critical Control Management, a fatality prevention program (read more on page 111).

Figure 13. LTIF internal employees 2020-2024

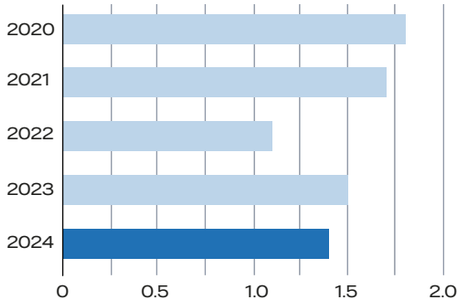


Table 21. Workforce H&S metrics

	Sweden	Germany	Netherlands	UK	Denmark	Vattenfall Total[2]
Employees						
LTIF[1]	1.97	1.31	0.29	1.20	0.93	1.4
Fatal accidents	1	0	0	0	0	1
High consequence LTI[3]	1	0	0	0	0	1
Total LTI	37	9	2	1	1	50
TRI[4]	74	15	21	2	4	116
TRIF[4]	3.95	2.18	3.06	2.40	3.73	3.28
Severity rate[5]	0.050	0.020	0.019	0.012	0.021	0.035
Lost days	944	138	129	10	23	1244
Worked hours	18,740,000	6,870,000	6,861,000	832,000	1,072,000	35,329,000
Sick leave per country	2.0%	3.0%	5.7%	1.1%	1.4%	3.1%
External (contractors)						
Fatal accidents	0	0	0	0	0	0
High consequence LTI[3]	1	0	1	0	0	2
Total LTI	38	18	5	2	4	67
TRI[4]	61	44	13	5	6	129

1. LTIF is expressed in terms of the number of lost time work injuries (per 1 million hours worked), i.e., work-related accidents resulting in absence longer than one day, and accidents resulting in fatality. Pertains only to Vattenfall's employees.
2. Incl other countries.
3. A high consequence LTI is an LTI with an actual or expected absence of more than six months.
4. TRI(F): Total Recordable Incident (Frequency).
5. (Number of days lost due to injuries employees, LTI) x 1,000 / total hours worked. Fatality = 200 days.

S1 Own Workforce, cont.

Key actions in 2024
To reach the targets, reduce Vattenfall's impacts and achieve its ambition of fostering a safe, inspiring, inclusive and caring workplace, the following actions have been addressed during 2024.

The effectiveness of the actions in this chapter are tracked in the annual employee survey My Opinion and risks and opportunities are assessed and followed up in risk assessments according to ISO 45001. More information on My Opinion can be found on page 29.

Time out/Stop work minimum requirement standard
During 2024, Vattenfall implemented a company-wide minimum requirement standard for "Time out/ Stop work" which means that work should halt or pause when anyone has a concern about an unsafe, unhealthy situation or action. This includes but is not limited to risk to a person's health or safety, or a risk to the environment. The pause is taken to correct the situation and conduct a new risk assessment before resuming work. The purpose is to encourage employees and contractors to be involved in hazard observation which increases the likelihood of hazards being identified, mitigated, or controlled being before any harm has been caused. It also serves to motivate managers, employees, and contractors to develop a culture that is honest and open, by actively encouraging and supporting those who react to unsafe and/or unhealthy situations and take action.

Time out/Stop work was also the theme for the ILO World Day for Safety and Health at Work where Vattenfall arranged an activity to engage all Vattenfall employees. These actions directly contribute to creating World Class Health and Safety and to maintain high H&S standards.

Critical Control Management
Critical Control Management (CCM) is a proven methodology to prevent fatalities and serious injuries by identifying and focusing on the controls which matter the most. CCM is a group-wide strategic project where rollout and pilots are underway in each Business Area. During 2024, all project members participated in extensive training. At the group-level, subject matter experts from all operating segments developed a risk assessment for each of Vattenfall's six highest risks. This was done by using the Bowtie risk assessment methodology in a workshop setting, where risks are analysed and controls are identified which prevent causes and mitigate consequences. In some areas, progress has been more rapid than planned and in others, as expected. The focus is now firmly on embedding CCM into existing processes and ensuring the critical controls for all top risks are known and routinely managed. The ambition is to have CCM fully integrated within all specifically targeted operations (e.g. high-risk activities) by the end of 2027.

On- and offboarding improvements
A key action during 2024 was the initiation of an onboarding and offboarding project and to improve the experience of employees and managers to encourage employee engagement.

With regards to onboarding, the aim is to better link existing systems and incorporate business-specific requirements into the onboarding processes. The aim is to give quicker and more clear introductions and securing the right framework conditions (authorisations, hardware, learning tools) for an efficient integration of each employee, especially in the first few days.

In terms of offboarding, empathetic offboarding leaves a lasting positive impression and ensures good relationship and a good employer brand. We are working on connecting systems with each other and using one common platform to ensure that all offboarding measures necessary for the business take place. The important part of this is to ensure that everyone is treated with respect and eliminate the risk of information and data being lost or leaving the company.

Strategic health and safety project to support contractors
The Vattenfall group wide H&S strategic project "Health and Safety Contractor management" aims to deliver defined and implemented requirements and support to drive health and safety performance for contractors in line with Vattenfall Health and Safety ambition to become World Class. The project's approach is to build on best practice from within Vattenfall, and working groups are accordingly cross functional and cross business. The project timeline stretches until end of 2025. While previous steps were focused on current state and modulling of future state, work carried out during 2024 has focused on drafting and peer reviewing of a standard. Focus in 2025 will be on the implementation of this standard.

Key actions for the future
Development of an organisation to support provision of external consultants
An organisation to support the provision of external consultants within Vattenfall has being developed at Group-level. During 2024, additional capacity and capabilities will be established to fulfil all requirements, for example in relation to compliance and the roll-out of a central process for all external workforce which is expected in 2025. This will enable a more structured process for reviewing the use of consultants in accordance with legal regulations and requirements as well as compliance with Vattenfall's values, which will strengthen and harmonise oversight of H&S-related issues.

Creation of Safety Leadership training program
Vattenfall is planning to create and roll out a Safety Leadership program to improve H&S standards. The aim is to reach a more mature H&S culture. The program will, among other things, clearly communicate the H&S vision, goals, and expectations and how to implement that in the line organisation and create leaders that lead by example and always demonstrate safe behavior.

Safety leadership is a critical component of any company culture with safety in focus. By demonstrating a commitment to workplace safety and exhibiting the key attributes of an effective safety leader, managers and supervisors can help create a safer work environment for everyone. This will lead to increased employee engagement, improved productivity, and a reduction in illness and injury frequency and connected costs.

Focused health strategy development
Vattenfall is aiming to place more emphasis on the health element of our Health and Safety strategy for the period 2026–2030. The aim is to get a company-wide structured framework on health goals and activities and to focus more on preventive initiatives. This is driven by the increase in mental health-related sick leave and we believe that strengthening our strategy around mental health will be of value.

There is no significant Capex or Opex for these actions beyond the resources already included as an integrated part of the relevant units' budgets. These are not separately disclosed.

S2 Workers in the value chain

Material IROs[1]	Type
Health and Safety in the supply chain	Impact (–)

1. For more information see page 86.

Impacts, risks and opportunities

In Vattenfall's assessment of specific impacts, risks and opportunities associated with our value chain workers, we have, among other things, examined our effects on value chain workers of price negotiations on wages and work-life balance, their ability to organise themselves and the respect of human rights. Setting unrealistic deadlines or tough price negotiations could lead to negative effects for the value chain workers. We perform thorough screenings and audits of selected suppliers to avoid suppliers who do not uphold the same level of respect for employees and their rights as we do.

The material impact for Vattenfall's value chain workers is associated with H&S aspects, where there are risks for injuries related to the provision of inadequate equipment or due to the lack of clear H&S guidelines. We aim to mitigate this risk by conducting and following up on screenings and audits, but there are limits to their efficacy, especially further out in the supply chain (indirect business relationships).

Equal treatment and other work-related rights are important topics within our supply chain, but are not material. First of all, the majority of our tier 1 supply chain is based in geographical regions where there is relatively strong compliance with human rights related legislation, which lowers the likelihood of this type of impact. Additionally, through thorough supplier screening processes, active collaboration with suppliers and providing access to our grievance mechanisms, we attempt to minimise the likelihood of negative impacts. We also strive to have a positive impact on our suppliers with regards to diversity and inclusion by including this as parameters for supplier selection, the effectiveness of which is measured on a case-by-case basis.

There is no significant Capex or Opex to manage these impacts beyond resources already included as an integrated part of the relevant units' budgets. These are not separately disclosed.

IRO interaction with strategy and business model

The material H&S impacts on workers are not widespread or systemic throughout Vattenfall's entire supply chain. These risks are rather related to specific business relationships and thus concentrated in certain geographies and product categories, including installations, construction, manufacturing and mining of raw materials. Considerations on actual and potential impacts, including from risks in specific geographies and product categories, inform strategic sourcing discussions, but Vattenfall believes we can adequately address them without needing to shift our business model.

The health and safety of the workers in the value chain is covered by our Code of Conduct for Suppliers and Partners and is part of our due diligence processes. Currently, concerns are handled through various mitigation channels, including corrective actions resulting from audits, follow up questions from screenings and other dialogues or trainings resulting from our annual supplier risk assessment. We do not experience limitations in our supplier base as a result of these measures. We are aiming to increase awareness with our direct suppliers that health and safety is very important for Vattenfall and thus reduce risks of incidents and accidents. The different categories of value chain workers potentially impacted by sub-standard health and safety conditions include;

- contractors providing labour intensive services on-site on Vattenfall premises;
- upstream supply chain workers, especially those involved in product manufacturing, or raw material extraction and processing;
- workers in the downstream supply chain involved in logistics and distribution, including road and marine transport;
- specifically vulnerable workers, such as migrant workers, young workers and women, identified as part of our risk assessment.

All value chain workers who could be materially impacted in connection to Vattenfall, are included in the scope of this disclosure.

Policies and governance

Senior management responsibilities, policies and management systems that govern social topics (page 106) also apply to the topic of workers in the value chain. Notably, H&S of workers in the value chain, is incorporated in each of the below mentioned policies. These policies are applicable to all value chain workers throughout the value chain, including first tier and beyond.

The Vattenfall Human Rights Policy together with the Human Rights Action Plan and the Human Rights Progress Report lay the ground for our due diligence work related to value chain workers' working conditions and health and safety throughout our value chain.

The UK Modern Slavery Statement is partially related to the health and safety of value chain workers. It sets Vattenfall's commitment to combat any form of modern slavery and human trafficking and outlines our process in identifying and mitigating any risks of modern slavery throughout our value chain, including associated H&S risks.

The Vattenfall Code of Conduct for Suppliers and Partners includes standards for suppliers and partners, on working conditions and H&S, and specifically addresses child labour. We expect our first tier suppliers and partners to comply with our code and ensure that their supply chains also meet these standards. Additionally, we require our suppliers to communicate the standards outlined in our Code to their work force, which makes the requirements applicable to value chain workers. The latest update to the code was done in 2024, including updates strengthening workers' rights across different topics, such as forced labor and H&S.

The Guide to the Code of Conduct for Suppliers and Partners covers a section on working condition and H&S, outlining examples of good practice.

Our audit process further described under Process to engage with Value Chain Workers, helps us to detect any cases of non-respect of international standard as well as national requirements, including related to the health and safety of our first tier suppliers' workers. In the reporting period, there were 139 cases of H&S-related findings (observations and non-conformities) at our direct suppliers sites, all of which have undergone mitigation measures.

Vattenfall's policy commitments related to working conditions and the health and safety of value chain workers through our value chain are embedded in an internal governance system. We have implemented a Compliance Framework at our Procurement function to ensure compliance with legislation, internal policies, commitments and instructions, as well as guidelines in all purchasing processes.

S2 Workers in the value chain, cont.

Processes

Processes for engagement

Vattenfall does not have a specific process to engage with value chain workers; rather, there are several processes that include engagement with value chain workers, their credible proxies or legitimate representatives on working conditions and health and safety issues. These processes include the whistleblowing procedure, the sustainability audit process, the counterparty screening process, the enhanced due diligence process, suppliers trainings, sustainability audits on sub-suppliers, and our collaboration in multi-stakeholder dialogues, all of which are described below. There is no single person responsible for engaging with value chain workers at group level, instead this responsibility is managed by the function undertaking the procurement or sourcing, or the contract owner, depending on the type of product and the phase of the respective process.

The whistleblowing procedure (described in detail on page 123) allows internal and external stakeholders, including all value chain workers, to report serious irregularities and other complaints at Vattenfall anonymously. This process is also applicable to value chain workers when reporting violations related to their working conditions.

In the sustainability audit process, we directly engage with workers in the value chain of potential first-tier suppliers before starting a contract with them. For high-risk suppliers with an estimated spend above EUR 100,000 (SEK 1.2 million), an on-site audit is conducted, in which value chain workers are interviewed regarding our sustainability requirements, including requirements on working conditions and the health and safety of the workforce. In addition, we strive to gain insight into the conditions of particularly vulnerable groups such as women, migrant and dispatch workers, through worker interviews. The supplier addresses any findings by providing and implementing a corrective action plan. When following up on the implementation of corrective actions, we assess the effectiveness of the engagement with the value chain workers. A surveillance audit is conducted on active suppliers at least every three to six years, depending on the sourcing stream (see Table 22 below).

The counterparty screening process helps us to understand the perspective of value chain workers in relation to issues such as H&S by reviewing public statements of legitimate representatives or reports of credible proxies. To ensure compliance to our Code, we aim to have all potential first-tier suppliers with an estimated spend above SEK 30,000 undergo screening for sanction lists, adverse media, ownership structure and politically exposed person. If any violations are detected, including any that relates to working conditions and the health and safety of value chain workers, we engage with our potential and existing first-tier supplier. This could involve managers and other representatives of value chain workers. All active high-risk suppliers with a contract value above EUR 10 million are continuously monitored.

When directly sourcing selected high-risk product categories, potential first-tier suppliers undergo an enhanced due diligence process which enable to evaluate suppliers more thoroughly based risk criteria specific to their product category. The criteria can include working conditions and the health and safety of value chain workers. The steps can vary depending on the suppliers' context but typically include supplier screening, desktop review of relevant external reports of credible proxies, traceability records and/or an overview of due diligence measures, and a full scope sustainability audit. The results of these due diligence steps are used to engage with the supplier on the findings and request clarification and/or correction where needed. This approach allows for a comprehensive risk assessment and ensures that human rights and sustainability are ingrained in purchasing decisions.

When conducting supplier training, we engage with representatives of first-tier suppliers and raise awareness on human rights due diligence which also covers content on working conditions and the health and safety of value chain workers in a broader sense. Trainings are conducted for first-tier suppliers without any defined frequency of engagement.

We audit second-tier sub-suppliers, especially when working with important wholesalers. During audits, we directly engage with value chain workers regarding several sustainability aspects, including working conditions and H&S, and require suppliers to take corrective action for any identified issues.

We are collaborating in multi-stakeholder initiatives with peers, NGOs and civil society aiming to directly engage with value chain workers on working conditions and H&S in the deeper supply chain beyond first-tier. Examples include the joint action on the aluminum supply chain and the prevention of labor exploitation at large construction sites in the German Energy Sector Dialogue and the copper supply chain in the International Responsible Business Conduct. In both there was an additional focus on interviewing particularly vulnerable groups or their representatives. There is no defined frequency for any engagement as they are purely event-based.

We are continuously improving our risk assessment and processes to engage with value chain workers. In 2025, we will develop a process to enhance the engagement with value chain workers at our first-tier suppliers. We will also focus on increasing our engagement with value chain workers beyond first tier increasing transparency in selected supply chains and through joint actions in multi-stakeholder initiatives.

Table 22. Thresholds and industry initiatives per sourcing stream

	Goods and services	Waste and biomass	Natural gas	Nuclear fuels
Threshold for screening	All counterparties with a contract value over SEK 30,000.	Differing thresholds to conduct screenings are applied across the organisation, which are currently being aligned.	All natural gas counterparties.	All nuclear fuels counterparties.
Threshold for sustainability site audits	Suppliers from high-risk countries and/or when providing high risk product categories with contracts over EUR 100,000 are regularly audited (every three years).	Differing thresholds for sustainability audits are applied across the organisation, which are currently being aligned.	There are no audits conducted on gas suppliers as we use the wholesale market to obtain gas for our own consumption and for our customers.	All nuclear fuel suppliers are regularly audited (every three to six years).
Industry Initiatives	Industry initiatives in Goods and Services are often product or industry dependent which is why Vattenfall participates in several of these, including the Solar Stewardship Initiative, International Responsible Business Conduct Agreement for the Renewable Energy Sector, and the German Energy Sector Dialogue.	The woody biomass that we purchased for third parties on the international market in 2024 was sourced only from certified suppliers within the EU. The certifications we rely on are: the Sustainable Biomass Program (SBP) and/or the Forest Stewardship Council (FSC).	Supported the development of the Gas Taskforce initiated a year earlier by the Responsible Commodities Sourcing Initiative aiming to investigate whether the model used to address sustainability risks of coal producers can be customised to become applicable for the natural gas supply chain.	Vattenfall is an active member of the World Nuclear Association (WNA), participating in the WNA ESG working group.

S2 Workers in the value chain, cont.

Processes to remediate value chain workers

There are several processes in place to remediate the potential negative impact on value chain workers' working conditions including H&S. The whistleblowing procedure allows all relevant stakeholders, including value chain workers, to raise their concerns, to alert us about serious risks of wrongdoing and report complaints.

As per our Code of Conduct for Suppliers and Partners, we require our suppliers to provide appropriate grievance mechanisms to all personnel and interested parties, including affected communities, to raise issues concerning the workplace, the environment, or the supplier's or partner's business practices. We also require our suppliers to have a remediation process in place, through which reported violations can be appropriately addressed. When conducting on-site sustainability audits, we verify the availability of such channels and follow up as needed, though we do not currently assess worker awareness or trust in the channels, nor track issues raised or addressed via these channels.

In addition, as part of the audit process that all high-risk suppliers undergo, any non-conformity, including those related to the working conditions and the health and safety of value chain workers, are included in a Corrective Action Plan. This plan outlines remedial/corrective actions, which are subsequently followed up on to ensure that the findings are effectively mitigated. Depending on the nature and severity of the finding, this could involve a desktop review or a follow-up audit. During the audit, we also ensure that the whistleblowing channel is made available and communicated to on-site workers. Our procedure for remediation in connection to the audit process, is defined in a number of internal guidelines, namely the Audit Guideline, the Red Flag Guideline and the Overtime Guideline. The Audit Guideline provides a general understanding of the steps the audit process consists of, clarifies the internal and external roles and responsibilities and aims to ensure quality in the audit process. It serves as a baseline for decisions how to follow up on certain types of findings, such as value chain workers' working conditions and the health and safety.

The Red Flag Guideline outlines the definitions of the Red Flags, including severe H&S hazards, and the steps that must be followed once a Red Flag is identified. When a potential red flag is detected, a working group is formed to evaluate the case and gather additional information if needed. The case is assessed to determine whether it is systemic or not. If it is not systemic, the issue is corrected and monitored for resolution If it is systemic, a relevant local organisation oversees the implementation of corrective action. The Overtime Guideline sets a common practice across Vattenfall to address overtime issues. It defines three severity thresholds of overtime and outlines a respective remediation plan based on the supplier segmentation.

During 2025 we will focus on improving and further standardise our process to remediate negative impacts on value chain works. By 2025, we will focus on improving access to channels for value chain workers, with a particular focus on those in high-risk contexts and in a closer tier of our value chain. In the following years we will furthermore work to improve the access to channels for all value chain workers also beyond first-tier suppliers. We aim to build trust in these channels, enhance our ability to assess whether the value chain workers are aware of and trust these, and our ability to measure the effectiveness of remedial actions taken. We will also improve data tracking of grievance reporting systems across our operations and geographies.

Targets and metrics

Targets

No formal target has been set yet, due to the complexity of collecting holistic H&S data from the supply chain. However, H&S is one of the prioritised topics for the qualification of first-tier suppliers and a requirement in sustainability auditing and screening and a relevant factor when awarding new suppliers.

Key actions in 2024

In 2024, we've taken various measures to identify and address impacts, risks, and opportunities related to the working conditions and health and safety of value chain workers. Most of our individual initiatives were targeted at working conditions at our Tier 1 suppliers, because transparency in supply chains and limited leverage beyond Tier 1 remains a challenge for our work in the deeper supply chains. In order to extend our reach beyond our Tier 1, we have collaborated with industry initiatives, which has enabled us to increase leverage and achieve greater impact. Some of our key actions were aimed at reducing risks, while others were focused on minimising negative impacts or evaluating and improving our due diligence processes. No quantitative data on progress is available, but qualitative information is below.

Collective actions on improving worker welfare

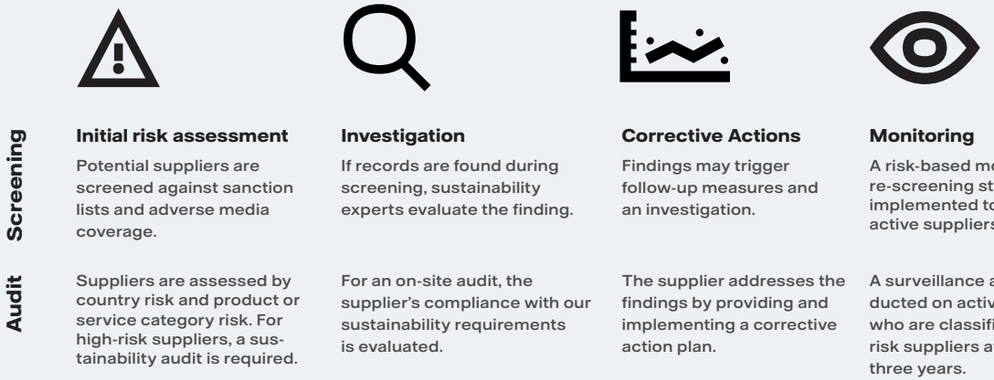
During 2024, Vattenfall took part in two collective actions aimed at addressing H&S risks and ensuring worker welfare during the construction and operations of energy generation sites, run by the German Energy Sector Dialogue and the International Responsible Business Conduct Agreement (IRBC) for

Table 23. Counterparty screenings, sustainability audits, and findings

	Goods and services (Procurement Organization)	Waste and biomass	Natural gas	Nuclear fuels
Number of counterparties	25,932	173	n/a	12
Screenings conducted	3,869	168	n/a	20
Number of screening findings related to value chain workers' H&S	4	n/a	n/a	2
Number of sustainability site audits conducted at (potential) suppliers	48	42	n/a	4
Number of audit findings related to value chain workers' H&S[1]	131	n/a	n/a	8

1. Includes observations and non-conformities

Figure 14. Due diligence process for suppliers and partners



Compliance with Vattenfall's Code of Conduct for Suppliers and Partners

Our approach is grounded in Vattenfall's Code of Conduct for Suppliers and Partners, which defines our reqirements and expectations to safeguard that our suppliers and partners share our values. The code is based on, amongst others, the UN Global Compact Guiding Principles and the OECD Guidelines, and is guided by the UN Sustainability Development Goal.

S2 Workers in the value chain, cont.

the Renewable Energy Sector respectively. Both multi-stakeholder initiatives have a focus on particularly vulnerable groups such as migrant workers. The two initiatives have collaborated in developing a toolbox of measures to identify and address human rights and risks, including health and safety of value chain workers, in our own operations and supply chain, including through stakeholder engagements. During the pilot phase in the first half of 2025, we will test the toolbox, track progress and check the effectiveness of selected measures. Based on the results of the pilot, a selected measure will be implemented on a broader scale going forward.

Collective action on Human rights in bauxite mining in Guinea

As part of our work in the multi-stakeholder initiative, the German Energy Sector Dialogue, which was initiated by the German Federal Ministry of Labor and Social Affairs, we joined the collective action on the human rights impact connected to bauxite mining in Guinea, a country that accounts for 26% of the global extraction annually. Bauxite is used to produce aluminum, which is a main component of various products that Vattenfall buys, including cables, overhead lines and wind turbines. During 2024, we have jointly conducted a human rights impact assessment on a selected mining site and the surrounding communities. The assessment has identified a number of salient human rights and environmental risks, including working conditions and H&S risk for potential value chain workers. Based on the findings of the human rights impact assessment, we are developing a concept for remedial measures focusing on establishing a multi-stakeholder dialogue structure and an ecological restoration that will be implemented in 2025.

Collective action focusing on responsible practices in copper mining in Peru

Vattenfall is an active member of the International RBC Agreement for the Renewable Energy Sector, where we participate in a joint action focused on responsible practices in artisanal and small scale copper mining (ASCM) in Peru. ASCM in Peru faces challenges such as conflicts over concessions, environmental damage, value chain workers' health and safety, and human rights violations as the informal sector's growth hinders formalization and responsible operation. Copper is a key component in several products Vattenfall procures, for example cables used to for transmitting electricity. The collaborative project began in 2024 with the goal of promoting a sustainable and fair copper supply chain. In 2025, the project aims to improve coordination and interaction within Peru's ASCM sector through stakeholder dialogues, the formalization of small-scale miners, and the facilitation of their participation in formal supply chains though improved due diligence. The project also prioritizes knowledge production, outreach, and advocacy.

Gap analysis on internal compliance procedures

In 2024, we have engaged with a third party to conduct a gap analysis of our enhanced due diligence process. The external partner has reviewed and evaluated our internal procedure that we use to investigate suppliers that provide selected high-risk product categories more thoroughly, and based on the gaps identified, recommended improvements to live up to current and upcoming legislation as well as deliver positive impact. Our enhanced due diligence process is one process we use to understand the perspective of value chain workers in relation to human rights risks, including to health and safety, by reviewing public statements of legitimate representatives or reports of credible proxies. The changes to our internal procedure have been implemented during 2024 and will be fully operational in 2025.

There is no significant Capex or Opex for these actions beyond resources already included as an integrated part of the relevant units' budgets. These are not separately disclosed.

Key actions for the future

Looking forward, key actions will continue to aim at reducing risks, minimising negative impacts, and evaluating and improving our due diligence processes.

Critically evaluating internal processes and procedures

We will continue to critically evaluate and enhance our own processes and procedures for engaging with value chain workers. Our current engagement approach with value chain workers involves various channels, including interviews as part of audits, visits at suppliers and supplier dialogues, that might not comprehensively gather all relevant value chain workers' views. By 2025, we will develop and establish a process to consistently engage with value chain workers of our Tier 1 suppliers. Going forward, we will explore, test and introduce additional procedures to extend our reach beyond Tier 1.

Continued involvement in multi-stakeholder initiatives

Our involvement at the joined actions in the multi-stakeholder initiatives German Energy Sector Dialogue and the International RBC Agreement for the Renewable Energy Sector will continue throughout 2025. Our aim is to reduce negative impact and advance positive impact connected to the value chain workers beyond Tier 1. By 2025, the German Energy Sector Dialogue working group on bauxite mining in Guinea will implement remedial measures that include an ecological restoration pilot and the establishment of a multi-stakeholder dialogue structure. The working group on small scale copper mining (ASCM) in Peru from the International RBC Agreement for the Renewable Energy Sector will implement a forum for stakeholder dialogues, introduce a procedure to formalise small-scale miners, and facilitate their participation in formal supply chains though improving their due diligence processes. The working groups addressing H&S risks and ensuring worker welfare during the construction and operations of energy generation sites, will initiate the testing phase of a selected measure of the toolbox, track progress and check its effectiveness.

Pilot project on enhanced transparency

We are going to launch a pilot project to enhance transparency in selected supply chain to understand the impacts, risks and opportunities connected to human rights, including working conditions and H&S, beyond our Tier 1 suppliers. During 2025, we will test different software solutions that display supply chain tiers connected to specific product categories and support in our supply chain research with a focus on high-risk countries and industries. If the testing phase is successful, the implementation phase may start by end of 2025. Our aim is to identify ways to evaluate and mitigate risk, minimize negative impact and deliver on positive change connected to value chain workers beyond Tier 1.

Enhance cross-functional compliance activities

Our aim is to enhance our cross-functional compliance activities by leveraging intelligence from various departments, including Sustainability, Environment, Procurement, Health and Safety, Credit Risk, and Legal. We plan to implement a structured and comprehensive compliance coordination that will enable us to align and standardise our due diligence processes, risk controls, and compliance efforts more effectively. This will help us achieve greater consistency and efficiency in our compliance activities and further mitigate any potential risks.

Continued work on management of Impacts, Risks and Opportunities

We will continue to focus on additional impacts, risks and opportunities that we anticipate will become increasingly important in the future, such as forced labor, working time and adequate wages in the value chain. Regarding forced labor, we are planning to continue our enhanced due diligence on selected high-risk product categories, collaborate with IT solutions provider ATEA related to electronics, and gain a deeper understanding of the challenges through the implementation of the supply chain transparency tool. The procurement organisation will work to determine the root causes of excessive overtime and how we can mitigate them in our processes. We will also investigate to initiate a pilot on responsible contracting on a selected supplier or market. Additionally, we are also planning to gradually introduce living wages in our supply chain, first at our on-site contractors and then successively extend this practice to selected supply chain tiers.

There is no significant Capex or Opex for these actions beyond resources already included as an integrated part of the relevant units' budgets. These are not separately disclosed.

S3 Affected communities

Material IROs[1]	Type
Inclusive ownership	Impact (+)
Community engagement	Impact –)
Direct negative effects on living situation	Impact (–)

1. For more information see page 86.

Impacts, risks and opportunities

Vattenfall has identified material impacts in relation to affected communities, more specifically regarding communities' economic, social and cultural rights and rights of indigenous peoples. Vattenfall's operations have consequences for communities in adjacent areas, varying from visual and sound effects from wind turbines to the construction of overhead powerlines. While the impacts of our operations cannot be fully mitigated, Vattenfall aims to operate in an inclusive way and actively engage in dialogues with local communities to minimise our negative impact and to create conditions for communal benefits. This is achieved for example by listening to the wishes of communities, investing in community funds, or by employing local workforce. As the impact can be quite significant on local communities, we consider this topic material. No material risks or opportunities have been identified as material in relation to affected communities.

When we develop projects in a certain area, we are actively engaged with local communities to mitigate impacts on social, cultural and economic rights. However, our positive and negative impact on communities' civil and political rights is limited, why civil and political rights is not a material topic for Vattenfall.

Vattenfall's operations have particular impacts on the indigenous peoples in the north of Sweden – the Sami both historically and as a result of growth plans for the future. Impact include the disruption of the daily livelihoods and customs of the Sami population, for example their reindeer herding, by adversely impacting tangible or intangible indigenous assets and heritage of cultural significance. Therefore, our impact with regards to this is assessed as material. The rights of the Sami are considered on project-level, mainly through active engagement in two-way dialogues. By fostering an open and respectful dialogue, Vattenfall hopes to achieve conditions which are mutually beneficial.

IRO interaction with strategy and business model

The transition to a fossil-free society will impact us all, but can have more profound effects on some communities and individuals. To mitigate such effects, there are societal and regulatory safeguards, such as permitting processes, put in place. Given the nature of our growth investments, affected communities can and do impact our strategy directly as both project timelines and project feasibility can be impacted by considerations for and dialogues with affected communities.

Understanding the social implications of our actions, Vattenfall places a strong emphasis on human rights. By prioritising human rights and ensuring due diligence as a fundamental element of our work in the energy transition, Vattenfall aims to make sure that the benefits of the transition are shared broadly and fairly and that no one is disproportionally burdened by the changes.

Table 24. Types of communities and impacts

Type of community	Value chain	Impact
Local communities living around our operations	Vattenfall's own operations	**Negative impact:** Impacts from renewable energy developments such as noise, shadow flickering, visual interference, interference with communication **Positive impact**: Enhance community acceptance and engagement through options for inclusive ownership (for example, Klaverspoor wind farm, and Vesterhav wind farm in Denmark, see details on page 117)
Communities of indigenous peoples	Vattenfall's own operations	**Negative impact:** impact in reindeer herding due to development of renewable energy (wind farms)
Local communities (incl. indigenous peoples) in supply chain	Upstream supply chain	**Negative impact:** communities impacted by suppliers' operations, including extraction of metals and minerals

Engagement with affected communities as well as the rights of indigenous peoples are identified as two of Vattenfall's salient human rights issues. For example, with the growth in renewables, including expansion of onshore wind assets in the north of Sweden, having a respectful and compliant dialogue with Sami communities is central to our strategy.

All affected communities likely to be materially impacted by Vattenfall are included in the scope of disclosure under ESRS 2 SBM-3. For detailed information, see the value chain visualisation (page 81) and Table 2 (page 86).

The impacts of Vattenfall's operations on communities in our value chain varies in relation to the different types of communities. See overview in Table 24:

Impacts on communities close to Vattenfall's operations, including impacts on Sami population and reindeer herding are systemic in the sense that these are impacts that are closely linked to Vattenfall's strategy and business model. In order to push the energy transition forward with a strong focus on renewables, certain types of negative impacts on communities living or working close to our operations are unavoidable.

Policies and governance

The senior management responsibilities, policies and management systems that govern social topics (described on page 106) also apply to the topic of affected communities. Vattenfall is aware of the impacts our own operations, as well as operations in our supply chain, can have on affected communities, including indigenous peoples – positive and negative. Therefore, management of our material impacts related to affected communities, including indigenous peoples, is central in Vattenfall's work to strengthen adherence to international human rights standards. Our human rights due diligence work in relation to affected communities, including indigenous peoples, is governed through several policy and steering documents. Vattenfall's commitment to address human rights impacts, is set out in the company's Human Rights Policy. The Human Rights Action Plan further complements the Human Rights Policy and describes how Vattenfall aims to improve our ability to address these risks and better align our governance systems with best practice. Our progress is reported in the Annual Human Rights Progress Report. The Human Rights Policy is applicable to all affected communities, and the commitments cover all rightsholders throughout our full value chain. Rightsholders include, but are not limited to, our direct employees, employees of suppliers and contractors, customers, environmental and human rights defenders, and local communities along our value chain. The interests of key stakeholders are taken into consideration through credible proxies as part of the process of policy updates – the policy is sent out to relevant human rights NGO's. Furthermore, stakeholder interests are considered as part of the third-party human rights assessment carried out in 2021, through interviews. .

Vattenfall has identified community engagement, livelihoods and cultural heritage as a salient human rights issues. Specific commitments regarding affected communities are stated in the Human Rights Policy, including the following dimensions:

- Respect for affected communities' rights, interests, concerns and development aspirations through meaningful stakeholder engagement.
- Compliance with local regulatory standards regarding consultation and social impact assessments.
- Provision of stakeholder-appropriate channels to raise concerns during and after projects are completed, with a particular attention given to seldom heard or vulnerable groups.
- Furthermore, the topic of indigenous peoples has also been identified as salient. Specific commitments are set out in the Human Rights Policy, including the following dimensions:
  - Conducting our activities with special attention to the rights of indigenous peoples and strive to minimise negative impacts.
  - A commitment to free, prior and informed consultation processes.
  - Stakeholder engagement processes to minimise the risk of negative impact on indigenous peoples, including on reindeer husbandry, as well as best practice guidelines to respect Indigenous peoples' rights.

Additional commitments regarding how we engage with affected Sami communities in our own operations are affirmed in a separate public document – our Approach towards Indigenous Peoples in Sweden.

Vattenfall expects its suppliers and partners to comply with its Code of conduct for Suppliers and Partners (CoCfSP) The CoCfSP includes human rights commitments specifically in relation to affected communities and indigenous peoples. Suppliers and partners are, according to the code, expected to ensure that their respective supply chains adhere to equivalent standards.

Except for monitoring of our whistleblowing channel (that allows for human rights complaints related to our own operations or in the supply chain), Vattenfall does not have available aggregated information on Group level regarding potential cases of non-respect for international human rights frameworks.

S3 Affected communities, cont.

Processes

Processes for engagement

Currently, Vattenfall does not have a Group-wide approach for community engagement. A process to develop a Group guideline for stakeholder engagement has been initiated during year 2024. The purpose of the guideline is to ensure a coherent approach towards engagement with affected communities throughout all of our business areas and on a project level, as well as further alignment with regulatory requirements. In addition, minimum requirements for evaluation of effectiveness will be included in the guidelines.

Vattenfall recognises that each location and project is unique, and thus our local engagement approach is designed to be flexible to suit each situation and context. The process for engagement with affected communities is therefore organised differently in each business area. There is no single person responsible for stakeholder engagement at Group level, instead this responsibility formally lies with the respective business and project manager. Every business area is well aware of this risk and carries out local consultation processes, in accordance with relevant local legislation, with affected communities to understand their priorities and concerns before a project is initiated. This means that landowners, representatives of the local community and the immediate environment, and the neighbours are explicitly consulted through various process consultations and informed by establishing transparent and clear communication channels according to the needs of the local stakeholders. Currently, no assessment on the effectiveness of our stakeholder engagement activities is carried out.

We provide project-specific feedback channels where the local stakeholders can express their concerns. In addition, Vattenfall has a Group-wide whistleblowing channel, where any irregularities may be reported, see page 123 for further details. Inclusion of perspectives of vulnerable groups is part of Vattenfall's stakeholder engagement practices, and will also be reflected in the guidelines for stakeholder engagement. Furthermore, vulnerable groups are also taken into consideration as part of our five year human rights risk assessment, described on page 106.

Vattenfall is aware that our activities could impact indigenous peoples, particularly the Sami, located in the areas in which we operate. To minimise the risk of negative impact on the indigenous peoples, including on reindeer husbandry, we have clearly defined stakeholder engagement processes and policies in relevant business areas, as well as Group-wide best practice guidelines to respect indigenous peoples' rights (mentioned above), which all employees are expected to follow. The mode of engagement with the Sami community is highly regulated in Swedish law — setting the framework for Vattenfall's engagement processes. Vattenfall strives to comply with relevant legislation and regulations for consultations with the Sami community and we more specifically commit to a "free, prior and informed consultation processes" in all of our activities which may impact indigenous peoples. In addition to legal requirements, Vattenfall invites affected communities to provide input in regards to preferred modes of engagement and communication. Modes of engagement often include open house events or individual meetings with legitimate representatives. We encourage indigenous peoples to reach out to us in case of perceived improprieties, through operational level grievance channels, such as project websites and direct contact with local stakeholder managers. The whistleblowing channel is also available.

Processes to remediate

For general social disclosures on processes to remediate, please refer to general section for the social topics as well as the governance section (page 107). Remediation processes, specifically in relation to indigenous peoples, are carried out on a case by case basis. Vattenfall strives to take into consideration the customs, traditions and legal systems of affected Sami communities. Such considerations are managed on a project level, in for example consultations with the legitimate representatives of affected Sami communities and through negotiations on remediation measures. In such consultations, different forms of remedies are negotiated, with the aim to mitigate and remediate the negative impacts on Sami livelihoods – including aspects of customs and traditions.

In all contact with Sami communities, Vattenfall strives to consider Sami customs, traditions and legal systems, in accordance with the principles of the Approach towards Indigenous Peoples in Sweden. The guidelines apply to all engagement with the Sami, including processes for remediation.

Targets and metrics

Vattenfall has no formal metrics or targets for our human rights work related to affected communities.

While our aim is to continuously improve, monitor, track, and transparently report on our ability to manage human rights risks and to have a positive impact, it is challenging to develop targets and metrics, mainly due to the difficulties of measuring the effectiveness of our engagement activities. For disclosure on how we monitor and track our progress, see information on general governance for social topics on page 107.

Key actions

Community engagement is decentralized throughout the different markets and business areas. As part of Vattenfall's due diligence processes, appropriate actions to respond to negative impacts are identified mainly through stakeholder engagement with affected communities in each project, conducted in accordance with local legislation. For our own operations, this is relevant in relation to planning, land acquisition and exploitation, use of natural resources and management of environmental impacts. For environmental impacts, due diligence is furthermore carried out in the Environmental Impact Assessments. Currently we are working on an inventory of the different tools and methods for stakeholder engagement used in the different markets and business areas. The inventory will support us in identifying potential gaps as well as developing necessary tools to enhance and align our engagement activities and management of negative as well as positive impacts in relation to affected communities. Vattenfall has no Group mechanism for tracking or assessing the effectiveness our positive impacts on affected communities. When we do track and assess positive impacts it is done on a case by case basis as part of specific projects.

Affected communities are impacted, positively and negatively along Vattenfall's entire value chain. Below actions highlight the ways in which Vattenfall has worked on managing our positive and negative impacts through community engagement, during 2024 as well as our planned focus for 2025. These community engagement activities are relevant in our own operations as well as downstream in our value chain.

Delivering positive impact through social investments and inclusive ownership schemes

Vattenfall continues to make efforts to benefit local communities as well as to advance our inclusive ownership schemes in relevant markets. One example is a nearly 140MW windfarm project, Klaverspoor, in the Netherlands. The project will generate fossil-free equivalent to the consumption of about 150,000 Dutch households and a quarter of the profits will be invested in local energy projects. Vattenfall has placed high priority on ensuring that, together with surrounding wind projects, the project benefited the surrounding community. The project offered 25 per cent ownership to the Energietransitie fonds Brabant with the expected outcome that the profits will benefit the energy transition in the surrounding communities.

An example where Vattenfall goes beyond legal requirements to offer ownership to affected communities, is the Danish wind farm, Vesterhav (Vesterhav Syd and Vesterhav Nord), inaugurated in September 2024. The wind farm is expected to produce 1.5 TWh of fossil-free electricity per year, equivalent to the annual consumption of 350,000 Danish households. The wind farm is located off the Danish west coast and consist of 41 turbines. With the aim of enhancing decision-making for individual shareholders in the wind farm, Vattenfall facilitated information meetings with local banks and potential co-owners and has made significant efforts to reach out to and include potential co-owners with no previous investment experience. Such efforts are expected to increase the interest of affected communities to invest in wind farms, while also positively impacting general attitudes towards future projects.

Mitigating and preventing negative impact through Group-wide stakeholder engagement guidelines

With the aim of supporting a consistent approach for engagement with affected communities, Vattenfall has during 2024, initiated the development of Group level guideline for stakeholder engagement, including indigenous peoples. The guidelines will be applicable in Vattenfall's own operations, across relevant business areas and markets and provide a set of minimum standards for how Vattenfall engages with affected communities. In addition to these guidelines, work is ongoing to conduct an inventory of existing stakeholder engagement tools and subsequently mapping the need for developing additional tools to be implemented across the business areas. The guidelines are estimated to be finalized during 2025. This work is expected to enhance our stakeholder engagement activities as well as compliance with relevant legislation

Mitigating negative impact and new models for remediation in relation to indigenous peoples

Vattenfall, in cooperation with Sami communities affected by our operations in northern Sweden, have in 2024, included new forms of mitigation measures and remedies in our contracts. Vattenfall has elaborated on ways of moving beyond the provision of financial compensation exclusively, by engaging in dialogue with landowners to assist in the enhancement of conditions for reindeer grazing. In addition to diversifying forms of remediation, the approach is also part of Vattenfall's efforts to understand and meet the needs of affected Sami communities. In addition to mitigating negative impacts on Sami communities, these efforts are also expected to contribute to a continued positive and meaningful dialogue with relevant communities.

There is no significant Capex or Opex for these actions beyond resources already included as an integrated part of the relevant units' budgets. These are not separately disclosed.

S4 Consumers and end-users

Material IROs[1]	Type
Data protection	Impact (–)

1. For more information see page 86.

Impacts, risks and opportunities

Vattenfall has over 13 million customers, both businesses and consumers across northwestern Europe, who trust us to deliver heat and/or electricity to their business locations and homes. Data and digitalisation is key to deliver these and Vattenfall relies on data to process transactions, deliver services and provide customers with relevant information. The use of personal data is integral to delivering high-quality products and services, but with it comes the critical responsibility to safeguard that data. Privacy is a fundamental right under the EU Charter of Fundamental Rights EU, and further regulated under the General Data Protection Regulation (GDPR) and local legislation in countries where we operate. Vattenfall is committed to ensuring transparency and proactively work to ensure lawful and fair processing of personal data when conducting our business. For Vattenfall, compliance with data protection is not only a regulatory requirement, but also an essential component for maintaining our customers' trust and security. Vattenfall is prepared for a wide range of adversaries that can constitute a threat to our assets, operations, and reputation, including risks of cyberattacks and other nefarious actions with the objective to steal or compromise this data. However, there are still potential negative impacts on consumers and end-users that have a business relationship with Vattenfall, either through a consumer or business energy contract. As this is about data subjects' integrity, freedom and fundamental rights, this impact is assessed as material.

Naturally, there are more impacts, risks and opportunities related to consumers and end-users. In particular, personal safety of our products and goods such as our charging stations and in-home heating solutions could potentially cause physical harm. However, the technologies and products Vattenfall place in homes are safe with minimal risk to the end-users, and hence the probability of this is very low. Similarly, social inclusion of the communities in which we work is an important topic. Vattenfall collaborates with local municipalities in several ways such as on energy poverty and promoting inclusion by solving language gaps, but our impact on social inclusion is still rather limited on community level.

IRO interaction with strategy and business model

In order to fulfil its strategy, Vattenfall needs to collect and process personal data from consumers, and the protection of personal data is of highest importance to Vattenfall. The protection and processing of personal data at Vattenfall is based on our privacy vision that customers, employees and business partners in contact with Vattenfall are confident that it is mindful of and accountable for their right to privacy and control over their personal data. As an example, we regularly interact with consumers and end-users that want to exercise their data subject rights and work diligently to incorporate their feedback into our operations. This, together with the regular channels to raise concerns, ensures that the rights, views, and expectations of our consumers and end-users are central to our business model and strategy.

Risks related to privacy are assessed to ensure that we follow regulations in relation to the different types of data that we process on our consumers and end-users, when providing our services. Relevant risks are also assessed on a case by case basis when managing data breaches, to ensure that relevant measures are taken. While data-related threats are increasing on a societal level, handling this type of threats is a standard part of our business and we do not anticipate the need for any adjustments to our overarching strategy or business model in relation to this.

Policies and governance

The senior management responsibilities, policies and management systems that govern social topics (described on page 106) also cover the protection of consumers and end-users personal data. Furthermore, these policies apply in all Vattenfall markets and to our suppliers upstream in the value chain. In addition, Vattenfall's commitment to protect personal data is set out in Vattenfall's Privacy Notices. These Privacy Notices include information on how the different companies within Vattenfall Group process personal data, including also how consumers and end-users can contact us to exercise their rights or receive more information.

Vattenfall's work with data protection is further regulated and available in the Vattenfall Management System, see page 64, where roles and responsibilities are defined, as well as thereto connected activities and reporting lines. The work is executed by three lines of defense: line management, supported by Data Protection Coordinators (DPCs), which serves as the first line; the Group Data Protection Office (Group DPO) provides the

S4 Consumers and end-users, cont.

second line of defense together with local DPOs and thereto supporting resources within the group-level Legal department, offering advice, frameworks and follow up; The Internal Audit department forms the third line of defense, providing assurance. The first and second line of defense both follow the Privacy Process and Privacy Cycle, described below, to ensure that data protection is implemented, including also to prevent and manage data breaches.

Vattenfall has also established a Group Data Protection Management system, dedicated to ensure group wide compliance implementation and follow up. The framework is based on ISO 27001, ISO 27701, and consists of an overall Privacy Process and complementing guidelines, templates and trainings. The Data Protection Management System and framework is reviewed on an annual basis to ensure that support is provided in relation to identified risks, new legislation, or external guidelines issued by, amongst others, the European Data Protection Board (EDPB). This management system is closely aligned with the Vattenfall Group Security Management System (Group SMS) that builds on the business centric steering model and defines governance, roles and responsibilities and intent of the security work at Vattenfall. The Group SMS is based on the ISO/IEC 31000, ISO/IEC 27000 family of standards and ISO/IEC22301. Standards and Guidelines are developed to meet business needs, rules, regulations and certifications.

The Privacy Process is a part of the Group Data Protection Management system and ensures a common approach to the management of processing personal data at Vattenfall. This supports our business to ensure GDPR compliance in their processes, and daily work, including when developing or procuring new services or products. In addition to the Privacy Process, there are guidelines, templates and trainings adapted specifically for Vattenfall's handling of personal data.

Vattenfall has implemented a Privacy Cycle, that is based on the Plan/Do/Check/Act (PDCA) methodology and is designed to ensure alignment with the Security Cycle. The Privacy Cycle governs group wide annual activities for implementation and follow up on data protection compliance, and clarifies the thereto connected responsibilities of the local business units, the DPCs, and the DPOs. The cycle ensures that a risk-based approach is applied as required by the GDPR, with the focus being based on an annual risk assessment performed on group level. This further enables the creation of local annual plans on privacy and ensures standardised follow up and reporting procedures to DPO and management, tracking the effectiveness of our work within data protection. In addition to the actions within the Privacy Cycle throughout the year, new local legislation are monitored within the countries where we operate.

Processes

Vattenfall's approach to data protection emphasizes continuous adaptation and improvement of our processes to keep pace with a rapidly evolving digital environment.

Processes to remediate

Data Breach Management Process

In the event of a data breach, Vattenfall has a specific process for data breach management, which also applies to data breaches reported by externals. This process ensures efficient and timely handling of data breaches, and includes the identification, monitoring and analysis of breaches, documentation requirements, external reporting to relevant authorities and information to consumers according to legal requirements. The process also entails identifying and implementing remedial actions. If information to consumers is required, it can either be communicated directly to the affected individuals, or via other public channels such as our website, depending on the case at hand. The information also contains defined channels through which the affected individuals has the possibility to contact Vattenfall, if they have questions or concerns. These channels can be the relevant DPO and customer service representing the relevant Controller of the affected personal data. The process contributes to our continuous goal to mitigate any impact on our business and consumers. Retaliation against consumers using these channels is not permitted, and can be reported to DPO, which monitors compliance.

Targets and metrics

Vattenfall's ambition is to minimize data breaches by working proactively according to the above, and by ensuring efficient management of the ones that do occur, to reduce any negative impact.

As described above, the Privacy Cycle includes defining metrics for each year, that are further developed in local annual privacy plans by different the operating segments. Vattenfall then continuously follows up on data breaches throughout the year, and metrics on the number of reported data breaches are reported in the Annual Data Protection Report to ensure priority. However, these metrics are confidential due to their business sensitive nature.

Actions

Vattenfall works continuously to strengthen our policies and processes, increase the internal awareness, offer greater customer transparency, and follow up on data breaches to ensure that personal data is protected. Some examples of our actions this year are listed below.

Actions in 2024

Updated internal processes

Our policies and processes have been updated with several new guidelines and templates to ensure that there is relevant and adequate support for employees working with personal data. Furthermore, an updated internal site has been launched to increase usability and ease of access to the our policies and processes.

Group wide data protection awareness training

A new group wide awareness training on Data Protection has been launched and is mandatory for all employees. It aims to increase awareness of general data protection requirements, and to reduce the risk of human errors that can result in data breaches. We have also arranged the annual conference for all DPCs and DPOs to connect and share best practices. Furthermore, we have launched a quarterly onboarding training for new DPCs to support the implementation of our policies and processes and ensure awareness of data breach management processes. In addition, dedicated trainings on specific data protection topics are held by DPCs and DPOs.

Privacy notice updates

Our continuous work to maintain transparency in our customer-facing interfaces has resulted in updates to privacy notices.

Follow-up on data breaches management

Management of data breaches has been followed up throughout the year, in close alignment with the security organisation, to ensure consistent management, and that any gaps are detected and remedied.

Our key actions for the future will continue to focus on strengthening processes, increasing awareness and transparency and ensuring our ability to manage data breaches.

There is no significant Capex or Opex for these actions beyond resources already included as an integrated part of the relevant units' budgets. These are not separately disclosed.

Entity specific disclosure: Security of supply

Material IROs[1]	Type
Security of supply of electricity	Impact (–)

1. For more information see page 86.

Vattenfall Distribution business distributes close to half of all the electricity produced in Sweden and operates around 139,000 km of electricity distribution grids in Sweden. We invest in and conduct maintenance of the electricity network as well as monitor the electricity network t In this way we ensure that our customers have a reliable supply of electricity all hours of the day, all year round.

Impacts, risks and opportunities management

Our customers and society demand a reliable supply of electricity. The energy transition and the electrification of industry and transport also require a reliable electricity supply. Critical societal functions such as hospitals, railroads, sewage systems depend on electricity to function as well as more personal items in our daily lives such as mobile phones, stoves and refrigerators. Minimising power outages leads to less disruption for business and households, financial damages and damages to network equipment. To achieve a reliable electricity supply you need a robust electricity grid.

IRO interaction with strategy and business model

Ensuring security of supply is a core part of our strategy, business model and risk mitigation effort within business area Distribution (see pages 41–42). The disclosures below include the Swedish Distribution System Operators and exclude the Independent Distribution Network Operator (IDNO) in the UK as the impact was considered non material in comparison. The energy transition, with increasing electrification and the need to connect additional decentralised wind and solar power to the electricity network, will increase the challenges in maintaining a high security of supply. Weather-related hazards are one of our largest business risks within distribution in regards to security of supplyalready today and will continue to be so in the future. Vattenfall is actively working to weather-proof assets to increase the resilience of our networks (see page 42).

Policies and Governance

The Swedish Distributions business is a regulated monopoly and supervised by the Swedish Energy Markets Inspectorate hence security of supply is regulated by law and not through internal policy. In essence, the purpose is to provide electricity distribution with a high reliability at a reasonable cost.

The regulation, which is set under democratic control, prescribes in a detailed manner the maximum outage duration for a customer and the maximum number of outages a customer can experience for the service to be considered good quality. The CEO of the Distributions business respective legal entity is responsible for compliance.

The exact scope of the regulation can be found on the Swedish Energy Markets Inspectorate's website.

Processes

Processes to remediate

Crisis organisation

Extreme weather events or natural disasters can cause outages for thousands of customers. For such occurences we have an established crisis organization with clearly defined roles, responsibilities and resources in order to minimize the power outages, provide transparent and clear communication to customers and ensure that we do not compromise on safety during the repair work.

Targets and Metrics

Vattenfall Distribution has a target to increase the electricity security of supply from the current 99.97% to 99.99 % by 2030. Our target of 99.99% security of supply entails that we halve our SAIDI (the number of minutes of outages per average customer) from approx. 150 minutes in 2020 to 75 minutes by 2030. In 2024 the outcome was 123 minutes. While there is no conclusive science to set the target, we do have a thorough process to set it. The target is decided in the management process, where we evaluate external trends, expectations of customers and stakeholders, and update the business units' scorecards and performance indicators on a rolling five-year period.

Security of supply or reliability can also be measured with SAIFI (average number of interruptions that a customer experience in a year). In 2024, the outcome of SAIFI was 1.9. See full definitions of SAIDI and SAIFI on page 131.

The Swedish Energy Markets Inspectorate annually requests the input data for SAIDI and SAIFI for all Swedish DSOs.

Actions

Investments in resilient infrastructure

Weather-related hazards such as storms and natural disasters can lead to damage to our electrical equipment and cause power outages for customer. Therefore a large focus is placed on building a physically resilient infrastructure. We have continuously worked with weather proofing the grid and the investments made in 2024 have been estimated to reduce SAIDI by 10–12 minutes, directly contributing Vattenfall's target and in line with Swedish regulation. Additional focus areas between 2023–2032 includes investments in protective relays and improved redundancy. The investments in relays is set to reduce SAIDI by 0.5 minutes in 2024.

Adapted way of working for live-line working

We also focus on changing our ways of working since one way to reduce SAIDI is to perform more maintenance while power lines are energised, also referred to as live-line working, in connection with announced maintenance and new builds. In 2024, we developed and established a plan with clearly defined activities that will create the conditions for us to increase the proportion of live-line working and thus reduce the number of customer interruption minutes in line with regulations and Vattenfall's target. The initiative is set to be finished in the beginning of 2025 and the activities will be implemented before the end of 2030.

Forsmark nuclear power plant

Non-material social disclosures: Diversity, equity and inclusion

Vattenfall believes that a diverse workforce accelerates our progress toward achieving our goal, fossil freedom. We are dedicated to fostering an inclusive culture where a breadth of perspectives and experiences drive innovation and growth. Diversity is embedded in our values and represented at the highest level of management, with four members out of nine being female, including our CEO. Our vision is to be recognised as one of the most inclusive workplaces in the energy industry, creating an environment where everyone can thrive and contribute to a more sustainable future.

Ambitions, targets and key metrics

Moving towards our goal of becoming one of the most diverse, equitable and inclusive workplaces in the energy industry, Vattenfall has received a Gold medal as part of UHLALA Group's Pride Index in 2024 in Germany. In the UK, we hold a Silver award by Investors in People. On a group level, Vattenfall was recognised as a European leader in the Financial Times-Statista Diversity Leaders ranking, making 4th place among 23 utility companies in Europe.

One of the ways we measure the progress of Diversity, Equity and Inclusion (DEI) is through demographic data collected in the recruitment process and through our annual My Opinion[1] employee engagement survey. Our demographic data allows us to track key metrics such as gender ratio, female representation in management, female manager hires, nationality, as well as age ranges.

To measure Vattenfall's DEI efforts, targeted questions in the My Opinion survey capture employees' views on managers' efforts in driving DEI initiatives, the DEI Index. Employee perceptions of inclusivity at Vattenfall have improved steadily over the years, indicating growing support for the company's commitment to Diversity, Equity and Inclusion.

Actions in 2024

Vattenfall's DEI positive action plan is comprised of work focused on the systemic embedding of DEI throughout the employee lifecycle – through our programmes, processes and policies. In 2024, we made significant progress, advancing our efforts by expanding programmes and broadening the reach of our training and mentorship initiatives.

Training and mentorship

The Inclusive Leadership Journey continued to expand in 2024, fostering DEI awareness and leadership accountability. The programme is comprised of two parts: 1) Conscious Inclusion Training and 2) Self-Discovery Workshop. The programme was rolled out to our top management group and highest management levels across Staff Functions and Business Areas, reinforcing our commitment to inclusive leadership and driving positive change across the organisation.

The Licence to Hire eLearning programme was rolled out to all hiring managers and recruiters, equipping them with the knowledge and tools to hire a greater breadth of diverse talent. The project was also recognised by the Gouden Reigers Awards and won the main prize under the category "Creative & Innovative" in 2024.

Vattenfall Xplore was launched on World Mental Health Day. Through this online platform, Vattenfall offers a comprehensive workshop series and content on different DEI-related topics throughout the year to raise awareness.

1. My Opinion is an anonymous, voluntary, annual employee survey (see page 29).

Vattenfall employees represent

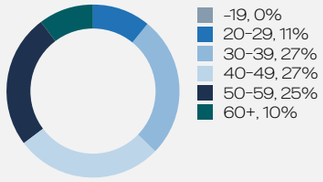
88

known nationalities

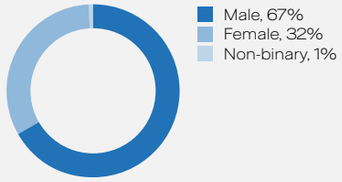
For more key metrics about our workforce, see page 109

Figure 15. DEI metrics

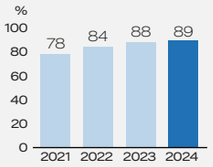
Age[2]



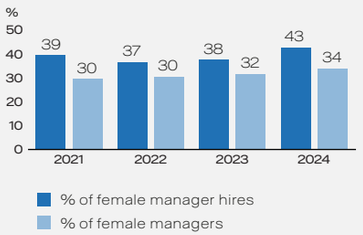
Gender all employees[2]



DEI index



Female managers and hires



2. Data reflects voluntary, anonymous, self-identification in the employee engagement survey.

Non-material social disclosures: Diversity, equity and inclusion, cont.

Social impact and employee engagement

Beyond Vattenfall's DEI positive action plan, a robust DEI-organisational roadmap and calendar ensures the recognition and participation of significant dates and events, including communication thereof. This generates visibility and awareness across the organisation and beyond. The roadmap covers all dimensions of diversity[1] through targeted activities and workshops, reinforcing social impact and deepened employee engagement.

Examples of initiatives include Vattenfall Women in Energy Week, which included several speakers, workshops and an external event; Pink Shirt Day, for which a campaign was organised to bring people together to stand up against harassment and discrimination throughout the organisation; World Autism Awareness Day, sharing how Vattenfall creates opportunities for neurodiverse talent; Vattenfall Diversity Month in May with events covering all dimensions of diversity; Vattenfall Pride Season, participating in parades across several markets, and also in Poland this year, driving LGBTQ+ inclusion; Vattenfall Ethnicity Days, celebrating and highlighting the added value of cultural diversity.

As part of our commitment to effectively communicate and bring awareness to DEI initiatives, Vattenfall Voices, a DEI employee advocacy programme, was launched in March 2024. This allows employees to play an active part bringing visibility and awareness to various topics and is a key channel for sharing our DEI efforts externally.

Vattenfall's local Diverse Energy Networks, with a combined membership of 2,442 employees, played an important role in facilitating DEI initiatives throughout all our markets. The Women in Energy initiative grew to over 2,000 LinkedIn members, further raising awareness and supporting women in the energy sector. By launching Vattenfall Language Cafés in various locations, employees were able to practise foreign language skills, creating better intercultural connection and inclusion.

DEI Maturity Level Tracking

In 2024, the DEI maturity levels of Vattenfall´s Business Areas (BA) were mapped to identify localised pressure points. This led to tailored DEI action plans and roadmaps for each area. While guided by global DEI principles, these plans are adapted to address specific market conditions and departmental priorities, ensuring a focused and effective approach to advancing DEI across the whole organisation.

Challenges and planned activities

Societal norms and cultural sensitivities still present a challenge when it comes to the collection of comprehensive demographic data of our employees. Widening the scope is not just essential for gaining deeper insights into employee experiences and needs; it is also the shifting legislative landscape increasing the pressure on companies to expand reporting and demonstrate commitment to DEI. Vattenfall remains focused on improving the data collection processes as well as on widening the data scope.

In addition, as a highly regulated industry, the energy sector faces challenges in advancing diversity due to a limited pipeline of diverse STEM talent. This requires targeted strategies to attract and retain a diverse workforce while maintaining regulatory compliance. Building on these challenges, Vattenfall is committed to several key initiatives in the coming year to strengthen our DEI efforts, including but not limited to:

- Invest in enhancing cultural competence around DEI dimensions, empowering employees and leaders to better engage with diverse perspectives and foster a more inclusive workplace
- Strengthen our anti-harassment policy and procedure, fostering an inclusive and safe work environment
- Broaden our partnerships with various DEI associations while deepening existing affiliations to access valuable insights and resources to accelerate progress towards our DEI objectives.

Governance

The DEI Director, alongside the DEI Country Leads, are responsible for the strategy and corresponding work. They report to the Chief DEI Officer, which is a two-year rotating role within the Executive Group Management.

Frameworks, partnerships & standards

- Global Diversity, Equity and Inclusion Benchmarks (GDEIB)
- Equal by 30
- European Diversity Charters
- Diversity Factory
- MittLiv
- Unicus
- UHLALA Group
- Kraftkvinnorna
- Niya
- Leqture
- RFSL
- Dare to Sing
- Workeer

Read more: https://group.vattenfall.com/who-we-are/diversity--inclusion

International Women's Day: Vattenfall's women make all the difference

The Vattenfall Women in Energy Week was about reinforcing our commitment to gender diversity and inclusion by providing a week-long programme of activities and lectures. With four out of nine Executive Group Management positions held by women, Vattenfall continues to advance female leadership. Female representation in leadership has steadily increased, reinforcing Vattenfall's dedication to creating a more inclusive workplace. As a signatory of the "Equal by 30" initiative, the company is working towards equal pay, leadership and opportunities for women by 2030.

1. The six Vattenfall DEI Dimensions are: Gender & Sexual Orientation, Ethnicity & Worldview, Socio-economic Background, Seen & Unseen Disabilities, Age & Generations and Family & Relationships.

Governance

Vattenfall believes a sound corporate culture is not only a matter of basic legal compliance; rather, observing a high standard is essential for conducting successful business. This is explained in our Code of Conduct: "Expectations on Vattenfall are high, and so they should be. Our operations are crucial to society, and all we do reflect on our owner the Swedish State. We also have ambitious goals and need the right partners to achieve them. This puts high demands on what we do and how we do it. Living our values and always acting with integrity make us trustworthy – and a trusted brand opens doors".

G1 Business conduct

Material IROs[1]	Type
Good Corporate Culture	Impact (+)
Poor Corporate Culture	Impact (–)
Corporate Culture in the supply chain	Impact (–)

1. For more information see page 86.

Impacts, risks and opportunities

Our corporate culture is a material topic as it is the essence of what defines us as a company and unites us towards a common goal. We believe our culture engages employees and leads to positive interactions with suppliers and communities. In addition, a negative culture could lead to higher risk of corruption, bribery, loss of transparency and lack of trust.

Other sub-topics within G1 are deemed non-material. When it comes to corruption and bribery this is mainly based on the adequacy of existing legislation and business practices within the geographies we operate. We have several efforts in place to ensure that relevant legislation and practices are adhered to, such as mandatory online and in-person trainings. The impact materiality of these measures is however considered limited in light of the low-risk environments that Vattenfall conducts business in.

Political engagement is likewise not a material topic for Vattenfall. Vattenfall is state owned, and has an arms-length relationship with the government. The company does not have any direct influence on government policy. One Director of the Board is employed by the government offices.

Further, Vattenfall does not contribute financially to political parties or individual politicians. Vattenfall does have lobbying activities related mainly to energy policy, but these are conducted primarily as one voice of many through industry associations and are typically long and slow-moving processes.

Animal welfare is not applicable as a topic, since our activities do not include domesticated animals. All Vattenfall's activities which have an effect on animals, are reported within E4 Biodiversity (pages 96–100).

IRO interaction with strategy and business model

Our corporate culture is one of the main drivers of our strategy and business model, while other Governance related topics have no significant impact. We are actively monitoring potential negative impacts but have a robust system for education, prevention, and information regarding integrity-related risks and work proactively with anti-corruption to uphold our zero-tolerance policy.

Regarding future adjustments, we observe potential changes in the area of corruption and bribery, with new risk areas due to digitalisation, and with the relationships with our suppliers with regards to scarcity of resources and the risk of increased scarcity of rare materials (see pages 101–103) meaning the importance could increase in the future.

Figure 16. Whistleblowing process at Vattenfall

Right to remain anonymous
Reports to the Whistleblowing function can be submitted anonymously. It is strictly prohibited for all employees and other Vattenfall representatives to attempt to identify an anonymous informant, or to engage in any sort of retaliation against the informant in a Whistleblowing matter.

G1 Business conduct, cont.

Policies and governance

The senior management responsibilities, policies and management systems that govern social topics (described on page 106) also apply to the topic of governance. Notably, the relevant policies for establishing and promoting corporate culture are continuously updated to mitigate risk and provide clear and up to date best practice. Corporate culture is evaluated in several different ways, further described below. The following policies govern Vattenfall's management of material impacts on corporate culture.

The Code of Conduct (CoC), with the CEO as the sender, outlines Vattenfall's work to establish, develop, promote and evaluate a positive corporate culture. It is the core of all work performed at Vattenfall and comprises what is expected from employees (including temporary staff) with regards to business integrity and corporate culture. In the Code of Conduct, reference is made to policies with more detailed information and instructions regarding, among other things, competition, anti-corruption, and conflicts of interest. Contractors and consultants are not covered by the CoC, but fall within the scope of the Code of Conduct for Suppliers and Partners (CoCfSP), described on page 112. The key principles of the CoC are Open, Active, Positive and Safety. How these goals are reached and what they mean in terms of expectations on employees in practice is further defined in internal instructions in the Vattenfall Management System. The CoC has been communicated throughout the Group and is available on the intranet in several language versions, in the countries where Vattenfall has business operations. Furthermore, information about the CoC is provided in connection with new hiring and training. The most senior function responsible for ensuring compliance with the CoC is the CEO and the Executive Group Management (EGM). The Integrity Organisation provides their expertise to management through, for example, trainings.

Vattenfall works to identify, report and investigate concerns of unlawful behaviour or behaviour failing to uphold the CoC. An Integrity Survey is conducted annually and followed by targeted individual interviews if needed. The yearly group wide My Opinion survey (page 29) and the, for managers, mandatory Integrity Survey are important tools to measure progress, identify risks and find areas of development and improvement. Employees are encouraged through training and by management to speak up about ways of improving the corporate culture as well as if they witness conduct adverse to the CoC. Employees (and external stakeholders) can also report suspected or observed breaches of the CoC, internal rules and the Code of Conduct for Suppliers and partners to the Whistleblowing function.

Vattenfall has implemented a whistleblowing system that complies with all relevant legislation. Reports can be done completely anonymously through an encrypted system, or directly to a national whistleblowing coordinator or Internal Audit. Incidents are investigated by an independent investigation function with employees from Legal, Internal Audit, Corporate Security & Resilience and People & Culture. The investigations teams work independently and have all means necessary to conduct investigations thoroughly, promptly and objectively. It is strictly prohibited for all Vattenfall employees and other representatives to attempt to determine the identity of a whistleblower. Similarly, Vattenfall prohibits all retaliation of any type against a whistleblower. The EU Whistleblowing Directive has been implemented in all countries in which Vattenfall operates and is applied in all Vattenfall markets. Vattenfall aims to interpret the directive generously and according to the strictest national implementation, in order to have a consistent approach throughout the group. At the operational level, we offer direct contact with project managers, stakeholder engagement managers or other staff, to raise concerns. Reported incidents are tracked and monitored and subject to lessons-learned processes to ensure continuous improvement within the company.

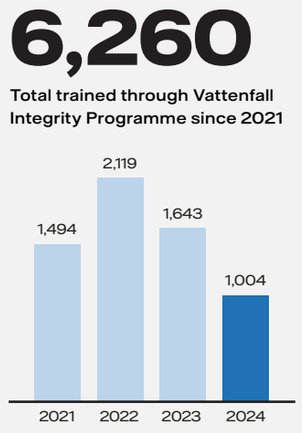
The Vattenfall Integrity Programme (VIP) mitigates integrity related risk by bringing repetitive knowledge and awareness regarding competition law, anti-corruption, conflict of interest, procurement and bribes to all managers on N to N-3 level, as well as employees who have regular outside contacts for example with suppliers, customers and trade associations. These trainings are essential to keep integrity related matters high on the agenda and continuously discussed by managers and employees in business units and teams within Vattenfall. The extended three hour in-person training is mandatory every three years for managers and employees with regular contacts with competitors and suppliers (e.g. procurement). The procurement organisation has been identified as most at risk in respect of corruption and bribery because of the regular supplier contacts and position to award contracts. In addition, all new employees undertake a mandatory e-learning on the content and principles of the Code of Conduct, and a "four eyes principle" is applied in all procurement acitivites.

To support our ability to meet the responsibility and commitment to act sustainably, Vattenfall's operations are based on our company philosophy and core values. Our responsibilities are valid not just within our own operations but extend to our supply chain as well. Vattenfall's approach is grounded in the CoCfSP. The purpose of this code is to safeguard that our suppliers and partners share the same values as Vattenfall, when it comes to positive corporate culture and sustainability. It defines our requirements and expectations when it comes to environment, social and human rights, and governance topics, and lists the minimum standards that suppliers and partners should apply to their own operations and supply chains. Our suppliers and partners should always strive to apply both international and industry best practice.

Targets and metrics

Corporate culture consists of many aspects but an ultimate result of a positive culture and buy-in to our core values is the engagement of employees. Vattenfall centrally has set a target on an Engagement Index that covers all active employees and aims to measure employee engagement defined as the degree of employees' connection to their organisation, demonstrated by committed efforts to achieve goals (being engaged). The index is based on an employee survey, My Opinion, where a number of relevant questions are weighted together. In 2024, the engagement index was 82% which is an increase by 2 percentage points compared to 2023. In the base year 2019 it was 69% and the target for 2025 is set to 75%.

Figure 17. Vattenfall Integrity Programme
Number of managers and other key personnel trained



Key Actions

VIP (Vattenfall Integrity Programme) trainings

During 2024, 1,004 employees completed the VIP. In addition, trainings were tailor-made and conducted with targeted stakeholders within Vattenfall.

The VIP is a group wide training programme primarily for managers down to three levels below the EGM, as well as for other employees with relevant external contacts on a regular basis (such as competitors, suppliers, business customers and public authorities) and employees who define specifications for procurement processes. These target groups have been identified based on their risk exposure.

The main purpose of the programme is to ensure that the participants understand the integrity standards Vattenfall expects of them and to ensure a common compliance culture throughout the group. The VIP is an important training programme to raise awareness within the integrity field among managers and other relevant target groups in Vattenfall, but also for the integrity team to get a better understanding of the actual and perceived integrity risks in the group.

Integrity survey

Vattenfall uses an annual Integrity and Competition Law Compliance Survey to monitor risks. The survey is completed by approximately 350 managers yearly. The purpose of the survey is to make a risk assessment of potential integrity related issues within Vattenfall and to raise awareness of the principles in the Code of Conduct and Integrity and other internal instructions. In 2024, the survey was circulated to 377 managers, 89% completed the survey.

Policy updates

During 2024, internal instructions and guidelines were updated to ensure a better internal understanding of Vattenfall's ethical standards and legal requirements, among these were, for example, instructions on whistleblowing and the guidelines for the Whistleblowing function.

Our future actions for 2025 will continue to focus on strengthening our corporate culture by raising awareness and monitoring risks.

There is no significant Capex or Opex for these actions beyond resources already included as an integrated part of the relevant units' budgets. These are not separately disclosed.

Non-material governance disclosures: Tax

Vattenfall regards taxes as an important component in our commitment to grow sustainably, responsibly, and in a socially inclusive way. Taxes are handled in a compliant and efficient way. We aim for increased tax transparency.

Ambitions, targets and key metrics

Vattenfall has submitted its country-by-country reporting for 2024 required by law in all of the countries where Vattenfall operates. In the tax area Vattenfall focuses on compliance and efficiency. All material business transaction shall proactively be reviewed from a tax perspective and roles and responsibilities are set up to handle this. Vattenfall will not have any business activities in countries listed as tax havens by EU or OECD and will not conduct any aggressive tax planning activities. Vattenfall aims for an open and transparent relationship with the tax authorities and to be transparent towards other external stakeholders. When possible, Vattenfall enters into country-specific tax-enhanced relationship systems, with the benefits conferred of having a direct contact in the local tax authority, higher tax certainty, and no tax audit risks or exposures. Vattenfall's business generates material tax revenue for the local authorities in the countries we work. In addition to corporate income tax and the specific so called Trade tax in Germany (a municipality tax), Vattenfall pays operational taxes on production, employment, and property. Total taxes reported in Vattenfall's income statement for 2024 amounted to SEK 7.8billion where of corporate income taxes SEK 3.6 billion. Vattenfall's effective tax rate in 2024 was 12.1 per cent, expressed as a percentage of consolidated profit before tax. This corresponds to SEK 4.6 billion.

A third item related to total tax contribution are so called collective tax which is the largest amount of tax payments. A collective tax is where we as a company collect tax revenues on behalf of the local tax authority. These taxes have no financial effects on Vattenfall but is regulated in specific regulations. The main collective taxes are value added tax, the employee tax on employment and energy tax on consumption.

Activities in 2024

Vattenfall has confirmed, and the Board of Directors have approved, the Tax Policy in December 2024. In this process we also have reviewed the adherence to the Tax policy in the year between the Board meetings. We have then concluded that we do not conduct any aggressive tax planning activities nor have any business activities in countries listed as tax havens. Vattenfall continues to support the trend towards more tax-transparency and thus participates in various relevant projects and networks, such as:

- Reaccreditation of The Fair Tax Mark, an independent verification that demonstrates our commitment to responsible tax conduct
- Process for implementation of the minimum taxation rules
- Specific arrangement regarding that the Tax system can be used as an enabler for the energy transition.

Governance

The Group and Country Tax functions ensure that the Group's business activities are conducted proactively and in accordance with laws and regulations, i.e. in a responsible manner. The Group Tax function reports to the Board of Directors and Audit Committee regarding tax policy matters and provides updates on tax regulations. The Audit Committee receives quarterly updates on the tax position of the Group. Vattenfall's tax policy is approved by the Board of Directors on a yearly basis.

Figure 18. Total taxes 2024 per tax type

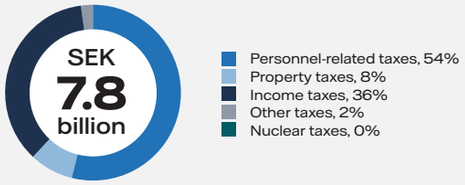


Table 25. Total taxes paid by country

Tax history, by country

SEK million	Sweden	Germany	Nether-lands	Other	Total
2024	5,346	1,365	-80	1,140	7,771
2023[1]	4,388	4,325	-145	912	9,480
2022[1]	2,155	1,290	2,069	3,294	8,808
2021[1]	6,002	2,511	1,221	748	10,482

1. The historical data has been adjusted to clarify actual taxes paid strictly in a given year compared to previously published.

Table 26. Total taxes paid, by type and country 2024

SEK million	Sweden	Germany	Nether-lands[3]	UK	Denmark	Finland	France	Norway	Poland	Total
Personnel-related taxes[1]	2,865	705	470	66	0	11	37	0	50	4,204
Property taxes	469	0	25	102	0	10	0	0	0	606
Income taxes[2]	1,899	658	-643	855	-30	10	22	0	6	2,777
Other taxes	113	2	68	1	0	0	0	0	0	184
Nuclear taxes	0	0	0	0	0	0	0	0	0	0
Total taxes paid	**5,346**	**1,365**	**-80**	**1,024**	**-30**	**31**	**59**	**0**	**56**	**7,771**

1. Including social security costs.
2. Does not include deferred taxes. The income taxes accrued in P/L amounts to SEK 3,562 million, see Note 12 to the consolidated accounts. The paid tax amounts are equal to the paid tax in the cash flow statement and consists mainly of preliminary tax payments but also refunds and additional tax payments for the previous years. The difference between income taxes according to P/L and paid tax according to cash flow statement of SEK 785 million are mainly due to lower preliminary tax payments during 2024 and tax refund in the Netherlands relating to previous years.
3. The amounts include a refund of corporate income tax for prior years.

Table 27. Other related information 2024

SEK million	Sweden	Germany	Nether-lands	UK	Denmark	Finland	France	Norway	Poland	Total
Employees, FTE	11,433	3,415	4,105	496	631	91	64	1	418	20,654
Tangible assets other than cash	170,291	25,512	57,712	16,706	28,606	1,195	2	-	21	300,045
Revenues from third party	61,389	114,325	55,696	348	6,133	2,413	4,381	718	-	245,403
Profit/loss before tax	37,903	20,715	4,033	7,729	4,827	-10	184	-	14	75,395

Frameworks, partnerships & standards

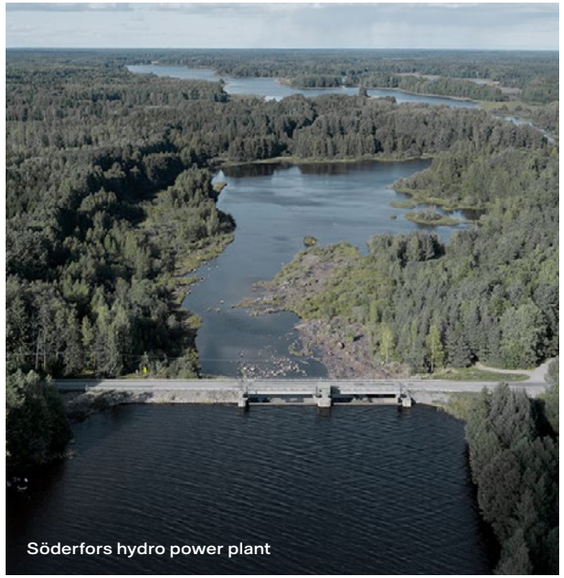
- GRI: 207 standard
- European Union's (EU) public Country-by-Country Reporting (CBCR) Directive
- The Fair Tax Mark accreditation
- Dutch Tax Covenant model and framework

Read more

- Tax policy vattenfall-tax-policy-2024.pdf
- See Note 12 to the consolidated accounts, Income taxes, for more financial tax related information.

Sustainability notes

The sustainability notes provide the deeper details of Vattenfall's sustainability disclosures. The sustainability notes constitute a continuation of the general information, Environmental, Social and Governance parts of the statement.



Söderfors hydro power plant

Accounting policies and notes

Note regarding E1 Climate change

Energy consumption

Energy consumption is disclosed on page 147. The same perimeter has been applied for energy and GHG Scopes 1 and 2 emissions. Energy-related information is a mix of primary fuel consumption that is used for production of heat and electricity and final energy consumption through purchased electricity, heat and steam. Energy consumption is not offset and energy that is sourced within own organisational boundary is not double counted. Underlying data includes assurance linked to national requirements linked to both EU ETS and Energy Audits under the EU EED.

Use of Internal carbon price

At present, Vattenfall has not implemented one official internal carbon pricing level across the group. Price scenarios for CO_2 are used for Scope 1 emissions as part of internal decision making. Trials using internal pricing addressing Scope 3 emissions have begun during 2024. Price scenarios are not disclosed externally at this point.

Activities in high climate impact sectors

The energy sector is classified as a high climate impact sector, hence all figures on energy consumption and energy intensity based on net revenue reported at page 144–146 are associated with activities in high climate impact sectors. The net revenue figure reported is in line with the accounting standards requirements applicable for the financial statements and equals to the value on turnover that is reported as a part of EU Taxonomy reporting, see page 136.

Greenhouse gas accounting methodology and actions

Vattenfall applies the principles, requirements and guidance provided by the GHG Protocol Corporate Standard (2004). The principles of consolidation for environmental data follow financial data. Consolidation includes subsidiaries in which Vattenfall AB owns shares corresponding to more than 50% of the voting rights or in some other way has control over. We consolidate 100% of the GHG emissions of all entities we operationally control. See Table 1 for emission scopes and calculation methodology, tools and emission factors.

Vattenfall measures the effectiveness of actions taken over time through tracking KPI's of GHG emissions in absolute and intensity terms. Installed capacity as well as the total amount and share of fossil free electricity generated also show an indirect progress of the management of Vattenfall's material IROs.

Uncertainties

Uncertainties are mainly linked to scope 3 emissions a where lack of data is covered by the use of emission factors. As far as possible emission factors from official sources in Vattenfalls markets are used. See Table 1 on details of used emission factors.

Table 1. Emission scopes, calculation methodologies, tools and emission factors

Emission scope	Description	Calculation methodology and tools used
S1	Direct emissions from own operations	Vast majority of scope 1 emissions are linked to fossil emission also covered by EU ETS and follows relevant national standards and requirements and incöudes both calculations based on fuel volumes and actual measurements depending on national requirements. Assurance is done as part of EU ETS revisions.
S2 market based	Indirect emissions from use of energy based on attributes	Calculated using the total purchased volume of heat and electricity for own use, calculated using contractual instruments such as guarantees of origin. For electricity consumption without specific contracted sources national residual mixes has been applied. Emission factor for residual mix from Association of Issuing Bodies
S2 location based	Indirect emissions from use of energy based production based emissions on country level	Calculated using the total purchased volume of heat and electricity for own use, calculated using production mix for each market. Emission factors for production mix from Association of Issuing Bodies
S3.1 Purchased goods and services	All procurement of goods and services excluding new asset construction	Spend analysis and supplier data via CDP supply chain program
S3.2 Capital goods	New asset construction (mainly offshore and onshore wind, and solar)	Spend analysis and supplier data via CDP supply chain program
S3.3 Fuel and energy-related activities	Upstream emissions of purchased fuels, Upstream emissions of purchased electricity	Volume of fuels multiplied with relevant emission factors. For fossil gas, Sphera statistics on natural gas mix in Europe 2020 are applied on all years. For historical coal, Vattenfall specific mix on country of origin 2017–2023. For Nuclear fuel. For Nuclear fuel, Vattenfall EPD is used. For third part integrated heat plants, direct data delivery is used.
S3.3d	Generation of purchased electricity that is sold to end users	Calculated using residual mix per country for all electricity sales to end consumers of the electricity sold not covered with Guarantees of Origin. Emission factor for residual mix from Association of Issuing Bodies

Accounting policies and notes, cont.

Table 1. Emissions scopes, calculation methodologies and emission factors, continued

Emission scope	Description	Calculation methodology and tools used
S3.3d (optional)	Fuel and energy related linked to electricity use as fuel for pumped storage plants	Vattenfall's pumped storage plants are an electricity trading activity that does not include sales to end consumers, therefore it is not part of our main inventory. Emissions from losses generated are calculated using a 15 minute location based approach.
S3.4 Upstream transportation and distribution	Emissions of transported fuels	Calculated by using the distance between country of origin and country of delivery, and a kg/km factor based on fuel volumes transported.
S3.5 Waste generated in operations	Emissions linked to management of Radioactive waste Hazardous and Non-hazardous waste from operations	Radioactive waste emission factors are based on Vattenfall Nuclear EPD. Waste from operations are based on waste volumes for recovery, recycling, incineration and landfill collected throughout the business, mainly from our condensing plants generating heat and electricity. Applied emission factors based on waste type.
S3.6 Business travel	Flights for business travel (also including other travel)	Data provided from travel agency based on traveling data and DEFRA emission factors. Emissions from car travel based on fuel volumes.
S3.7 Employee commuting	Cars and public transport, using averages for similar types of companies.	Average emissions for commuting per employee are multiplied by the number of employees at the end of the reporting year.
S3.8 Upstream leased assets	Vessel leases, Grid connector leases and Gas storage leases	For vessels: Actual fuel consumption by vessels multiplied by an emission factor For grid connector leases: Losses in the grid connectors multiplied by DE residual mix due to connected to DE grid. For gas storage leases: Electricity consumption in storages, combustions, leakage of methane as measured at the storage unit.
S3.9 Downstream transportation	Downstream transportation of products (heat pumps, chargers, boilers, etc.)	Fixed transportation distance and fuel use per shipment. Shipments increasing with growth in sales.
S3.10 Processing of sold goods	n/a	Vattenfall does not sell intermediate products.
S3.11 Use of sold products	Sold fossil gas Other sold products, mainly gas boilers	All fossil gas sold multiplied with emission factor. All fossil gas in the gas boilers is combusted with the same emission factor. Assumed Vattenfall sells 30% of lifetime gas to the boiler, reducing the reported emissions, to avoid double counting with gas sales.
S3.12 End-of-life treatment of sold products	End-of-life treatment of sold products	For heat pumps, assuming a full charge of refrigerant R744 is leaked during disposal and for EV charging points end of life emission factors are multiplied with sold units.
S3.13 Downstream leased assets	Downstream leased assets	Power facilities owned and operated on behalf of customers are included in Scope 1 and 2 reporting.
S3.14 Franchises	Franchises	Vattenfall does not have franchises.
S3.15 Investments	Investments	Scope 1 and 2 emissions of companies with a minority shareholding without operational control. Emissions based on the Vattenfalls ownership share
Biogenic emissions S1–S3	Use of biomass	S1: Fuel volumes multiplied with emission factors, S2 Biogenic share of location based, S3 estimated based on Vattenfall EPDs.
S1 Biogenic		Biogenic emissions are caluclated based on the carbon content in the different types of fuels used. The main biogenic fuels used by Vattenfall is forrestry residues and demolition wood, but there is also renewable waste and high grade wood fuels. These sources are renewable since the main country of origin for the fuels, Sweden, continues to have a substantial net uptake for the LULUCF sector according to 2024 data from Naturvårdsverket.

Accounting policies and notes, cont.

Processes to identify and assess climate-related impacts, risks and opportunities

The process for identifying IROs as part of the DMA-process have been based on Vattenfalls existing processes.
Climate risks are identified, assessed and managed both in direct operations and upstream and downstream value chain, based on climate scenario analysis. Identification and assessment of risks, including climate risks, are part of the Enterprise Risk Management process (see page 46) where regular updates of the risk situation are shared with the Executive Group Management (EGM) and the Board of Directors. In addition, there is an annual separate report on Environmental risks, including climate risks, presented to the EGM.

Climate risks are an important consideration when Vattenfall sets business objectives or decides on major investments, business development projects and mergers and acquisitions. For example, physical and transition risks that could hinder business objectives are identified and assessed through scenario analysis, typically considering the probability of risks and opportunities, as well as financial and non-financial consequences over time.

Transition risks and opportunities

To evaluate transition risks Vattenfall includes a comprehensive assessment of the development of GHG emissions across all emission scopes covering the full emissions inventory (see page 94). Emission projections are done for different development scenarios including changes in operations of existing assets and different investment options. The resulting emissions are assessed against a 1.5 degree emissions trajectory as derived from our science based targets (see page 94). In a wider perspective climate transition risks are assessed taking relevant climate related transition events into consideration. Transition events that may impact Vattenfall ranges from changing market conditions such as profitability in different CO_2-price scenarios but also different regulatory interventions or changing customer behaviour. Indirect transition risks exist linked to the speed of the transition where low electricity prices, complex permitting regimes or lack of political support might hamper the speed of the transition. Please see Vattenfall's transition plan on page 91 and 92 to understand how Vattenfall aims to decarbonize it's remaining fossil-based activties, mainly linked to fossil gas in district heating, emissions in supply chains and use of sold products.

Scenario analysis and time frames

As many of Vattenfall's decisions concern projects and assets with extensive lifetimes, long-term trends and uncertainties are important for our key business. For example, a hydropower dam has a lifetime of >150 years. To address this, Vattenfall uses a broad range of scenarios to identifying and assess climate change risk and opportunities (please see Table 2 for a brief summary). The guiding principle in selecting scenarios used to support our risk identification and assessment is to achieve the most scientifically supported and detailed view.

The energy transition scenarios used cover the time period from 2023–2060 with the aim to capture key uncertainties of the transition. It captures the latest global trends and key uncertainties in the development of the European power sector and explores different pathways towards a decarbonized Europe, this covers macro-economic trends, policy, market design as well as technological developments. Scenarios range from being aligned with a 1.5 degree pathway, one with a 2 degree pathway and one with an >2 degree pathway. The different scenarios reflect, for instance, varying degrees of governmental support for the energy transition, varying pace and extend of electrification, varying pace of phasing out fossil-fuels, varying build-out rates for renewables technologies, different types and varying volumes of flexibility and varying carbon and fuel prices. Scenarios is influenced by publicly available global climate and transition scenarios. Vattenfall conducts climate related scenario analysis on an annual basis, with the latest analysis completed in 2024.

Table 2. Scenario analysis

Scenario	Narrative – key forces and drivers	Coverage – key input and constraints	Time horizon	Source
RCP 4.5 (physical)	Intermediate physical climate scenario where emissions peak around 2040 and the global temperature stabilises at just below 2° C by 2100. Assumes moderate efforts to mitigate emissions through international policy measures, technological advancements, and changes in energy production and use.	The analysis covers Vattenfall's markets in Northern and Central Europe. It is based on geospatial coordinates specific to Vattenfall's locations for some assessments. Most assessments are based on regional data.	Now–2050 (or lifetime of asset where relevant)	Intergovernmental Panel on Climate Change (IPCC)
RCP 8.5 (physical)	High-end physical climate scenario where emissions continue to accelerate, and the temperature increase stabilises at just below 4°C by 2100. The scenario assumes no significant changes in policies to reduce emissions, and it is characterized by high population growth, high energy demand, and continued reliance on fossil fuels.	The analysis covers Vattenfall's markets in Northern and Central Europe. It is based on geospatial coordinates specific to Vattenfall's locations for some assessments. Most assessments are based on regional data.	Now–2050 (or lifetime of asset where relevant)	Intergovernmental Panel on Climate Change (IPCC)
Energy transition scenarios	Scenarios cover macro-economic trends, policy, market design as well as technological developments. Scenarios range from being aligned with a 1.5°C pathway, one with a 2°C pathway and one with an >2°C pathway.	The analysis covers the latest global trends and key uncertainties in the development of the European power sector and explores different pathways towards a decarbonized Europe.	Now–2060	Multiple sources

Accounting policies and notes, cont.

Note regarding E4 Biodiversity
Table 3 show the metrics Vattenfall use to evaluate performance and effectiveness, in relation to a biodiversity material impact, risk or opportunity. These metrics include descriptions, connections to material IROs, methodologies, significant assumptions, and uncertainties and limitations.

Corporate disclosures linked to biodiversity impacts and dependencies are a developing area where relevant metrics are still evolving. Data collection and impact monitoring often occur at local level as part of projects and activities but are typically not aggregated at the corporate level. To improve data disclosure in coming years, we will work further on identifying relevant metrics to disclose on group level. For group metrics no additional validation by external assurance providers have been conducted besides the revision of the annual report.

Policies and Governance
Desertification is not relevant for Vattenfall due to the geographical nature of the operations and impacts and therefore not included in policies.

Material sites
Table 4, lists material sites under Vattenfall's operational control. A material site has been defined as a site where compensatory measures have been needed to address residual impacts on the values of a nearby protected area as part of the permit. None of the sites has a shown material negative impact leading to deterioration of habitats or species for which the protected area has been designated.

Official documentation linked to each Biodiverse Sensitive Area (BSA) were reviewed to identify any references to impacts related to Vattenfall's activities. For Natura 2000 areas, information regarding threats, pressures, and activities was assessed to determine whether Vattenfall's operations might conflict with the area's conservation objectives. To report the ecological status, Natura 2000 ecological information linked to the defined conservation class was used, ranging from average to excellent. This information was not available for other types of biodiversity-sensitive areas. The overlap and area of influence on protected areas were primarily identified through the Integrated Biodiversity Assessment Tool (IBAT) assessment, which defines the influence area per operation type. For distribution, we conducted a GIS assessment to measure the overlap of distribution lines within the BSAs.

Processes to identify and assess biodiversity-related impacts, risks and opportunities
Actual and potential impacts
To generate a gross list of biodiversity-related potential impacts per business area and upstream and downstream in our value chain we used the Encore database (encorenature.org). For this, also TNFDs LEAP approach was partly used in guiding us to

Table 3. Performance and effectiveness metrics

Metric	Description	Connection to material IROs	Methodologies	Significant assumptions	Uncertainities and limitations
Operational sites located in or near biodiversity-sensitive areas	The number of operational sites that are situated within or in close proximity to areas identified as critical for biodiversity, such as protected areas, nature reserves, and key biodiversity areas.	Material risk of delays or stoppages in permitting and project realization, leading to increased costs and lost opportunities. Potential negative impact on customer trust. This metric helps identify sites that may face regulatory and operational challenges due to their location, impacting project timelines and costs.	GIS analysis is used to map and analyze the spatial relationships between operational sites and biodiversity-sensitive areas. This involves overlaying site locations with maps of protected areas, nature reserves, and key biodiversity areas to identify proximity and potential impacts and dependencies. Integrated Biodiversity Assessment Tool (IBAT): IBAT provides access to critical biodiversity data, including the IUCN Red List, World Database on Protected Areas, and Key Biodiversity Areas. It is used to assess biodiversity sensitive areas.	Assumes accurate and up-to-date mapping of biodiversity-sensitive areas in IBAT	Proximity to these areas does not necessarily relate to significant impact, as the actual effects depend on the specific activities and ecological interactions at each site. The metric lacks detailed information about the nature and extent of impacts, and it may not capture temporal variations or indirect effects such as pollution and habitat fragmentation. Additionally, this metric does not account for the effectiveness of regulatory measures, cumulative impacts of multiple sites, or the broader ecological context and interdependencies within ecosystems.
Redlisted species near operational sites	The number of species classified as threatened (e.g., critically endangered, endangered, or vulnerable) according to the IUCN Red List, within a specified distance from operational sites.	Material impact on threatened species (e.g., certain birds, bats, fish) due to operations, leading to disruptions in permitting, project cancellations, and changes in operating conditions. This metric highlights the potential ecological impact of operations on threatened species, which can affect regulatory compliance and operational continuity.	IBAT is used to identify and assess the presence of redlisted species near operational sites, using including the IUCN Red List-dataset. It provides comprehensive data on species' conservation status and distribution.	Assumes comprehensive and current data on species distribution.	The presence of redlisted species near operational sites does not necessarily indicate a direct impact, as the actual effects depend on specific site activities and ecological interactions. This metric therefore lacks detailed information about the nature and extent of impacts on individual species. Data quality is crucial, but accuracy can vary, and there may be inconsistencies in how such a large dataset is collected and reported.
Land and sea use change	The extent of land and sea area that has been altered or converted due to new projects or operational activities, providing an indication of the impact on natural habitats and ecosystems.	Material impact on terrestrial, aquatic, and marine ecosystems, contributing to global habitat and ecosystem changes. Risks linked to permitting delays and increased costs. This metric assesses the extent of habitat transformation, which is crucial for understanding the environmental footprint and associated regulatory risks.	GIS to obtain geographical data and to conduct area calculation. Data has been reported from the environmental responsibles at subsidiaries within Vattenfall group to our internal reporting system.	Assumes consistent and reliable data collection and reporting.	The metric lacks detailed information on the specific types of habitats affected and the quality of those habitats. The metric may not capture the full extent of indirect impacts such as habitat fragmentation and connectivity.

Accounting policies and notes, cont.

Table 4. Material sites

Site name	Type of operation	Activities negatively affecting, and negative effects	Whether activites leading to detoriation of habitats or species for which the protected area has been designated	Biodiversity sensitive area	Ecological status	Mitigation, or compensation measures implemented[2, 3]	Overlap, site to protected area (km²)
Tollare	Distribution	Tree felling, blasting, excavation in nature reserve	No	Tollare Nature Reserve	No info available	Planting new oaks to replace felled ones	0.002
Tuggen-Västmyrriset	Distribution	Tree felling, blasting, excavation in nature reserve	No	Bredselet Nature Reserve	No info available	Restoration of sand pine forest, clearing small spruce	0.06
Kolbotten-Bockholms-sundet	Distribution	Tree felling, blasting, excavation in nature reserve	No	Bornsjön Natura 2000	Good – Excellent	Creating faunal depots, bat boxes, planting oaks	0.3
Flemingsberg-Lissma-Ekudden	Distribution	Tree felling, blasting, excavation in nature reserve	No	Flemingsberg Nature Reserve	No info available	Fencing, creating bee beds, wetlands, bird boxes	0.3
Pamilo Hydro Power Plant	Hydro power plant	Water level changes affecting nesting, causing erosion	No[1]	Lammassaari-Ypylä Natura 2000	Good – Excellent	Water regulation requirements	0
Söderfors Power Station	Hydro power plant	Flow regulation affecting natural flooding	No[1]	Bredforsen Natura 2000	Good	Water regulation requirements	2.2
Stornorrfors	Hydro power plant	Partial migration barrier for fish	No[1]	Vindelälven -Laisälven Natura 2000	Average – Good	Fish migration solution implemented	0
Strömmens Power Station	Hydro power plant	Low minimum flow affecting small streams and floodplain	No[1]	Sju Strömmar Natura 2000	Good	Water regulation and periodic minimum flows	0.06
Idbäcksverket Nyköping	Thermal power plant	Water cooling causing temperature increase	No	Nyköpingsån	Moderate	Releasing fish annually, limiting operations during low flow	0

1. To re-assessed as part of permit reviews linked to the national implementatin of water framework directive
2. No compensatory measures as part of a formal NA2000 assessment has been required
3. Mitigation measures such as limiting emissions to air driven by thresholds set by Industrial Emissions Directive or other emission related requirements is not included

assess the materiality in both our own operations, upstream and downstream value chain. The most material impacts were identified through the scoring process in the DMA. Actual impacts on site level has been assessed using IBAT including site proximity to biodiversity sensitive areas as well as threatened species found within a range of our operation. To assess actual impacts in our upstream and downstream value chain, we utilized the Global Biodiversity Score (GBS) to conduct a Biodiversity Footprint Assessment. This assessment, carried out in 2021–2022, used Mean Species Abundance (MSA) criteria to evaluate our impact. However, we did not consider specific sites within the upstream and downstream value chain during this assessment.

Dependencies
Dependencies on biodiversity and ecosystems have been conducted based on activity type using Encore data. The assessment does not include ecosystem services that are disrupted or likely to be disrupted and no assessment of dependencies in upstream or downstream value chains have been conducted.

Transition, physical, systemic risks and opportunities
A gross list to identify transition and physical risks and opportunities have been generated using the Encore data. These have been assessed, based on impacts and dependencies, through the scoring process in the DMA. Assessment criteria can be found in previous section of this report, describing the DMA. Systemic risks were considered at an early stage of the DMA to develop a list of risks related to our impacts. However, none were identified as material in the assessment.

Consultation with affected communities
As part of the DMA process and process for resilience analysis no additional consultations with affected comunities have taken place linked to biodiversity and related disclosures. Consultations with affected communities are part of the permitting process for new projects or linked to significant changes to existing operations when communities are likely to be impacted. As part of this process, assessments on impacts on ecosystems and shared biological resources are indluded when relevant.

Biodiversity and ecosystem scenario analysis
Vattenfall has not utilized biodiversity and ecosystems scenario analysis to inform the identification and assessment of material risks and opportunities.

Resilience Analysis
The resilience analysis builds on Vattenfall's Biodiversity Footprint Assessment (BFA 2022) together with land use and emission projections for 2040. The assessment used the scopes framework and definitions adapted from the Greenhouse Gas (GHG) Protocol and The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) pressures.

The BFA assessment evaluated impacts in MSA/km2, which measures the fraction of biodiversity integrity lost on a given surface.

Scope
The BFA covered Vattenfall's direct operations in Vattefalls markets. The assessment also included supply chain impacts based on spend modeling. For Downstream impacts the impact of use of sold products where used to analys impacts.

Key assumptions and time horizon
Relevant pressures:
- Terrestrial biodiversity: Atmospheric nitrogen deposition, Climate change, Encroachment, Fragmentation (F), Land use, Ecotoxicity.
- Aquatic biodiversity: Freshwater eutrophication, Hydrological disturbance due to climate change, Hydrological disturbance due to direct water use, Land use in catchment of rivers, Land use in catchment of wetlands, Wetland conversion, Ecotoxicity.

Timelines for analysis ranges to 2040 for emissions and land use projections while the BFA was conducted using 2020 data.

Data sources
The following sources of data were used for the assessment:
- Operational data linked to emissions, water use, waste, fuel use, land use data,
- Life cycle performance of energy technologies from Environmental Product Declarations
- Spend analysis

Results
The overall results of the resilience analysis shows that the decarbonization of Vattenfall will be a key driver to reduce pressures on biodiversity. It also shows that there is a need to have a strong focus on limiting land use impacts as well as strengthening biodiversity values linked to both existing assets and development projects.

Accounting policies and notes, cont.

When it comes to our annual growing footprint (dynamic impacts), the BFA shows that almost 90% is connected to climate change impacts (BFA 2022).

Our operations impact both terrestrial, aquatic and marine ecosystems due to land and sea use, site constructions and hydrological disturbances. Looking at static impacts (historical transformations), around 30% is due to our own operations, mainly linked to land occupation needed for the distribution grids. Considering the investments needed in grids and fossil free generation for the energy transition, land use could increase significantly towards 2040 compared to the 2019 baseline.

The assessment also shows significant static land use footprint from fuel and non-fuel supply chains.

Aquatic static impacts are also relevant, mainly through hydrological disturbance linked to hydro power operations. However, data refinements are required e.g. since the hydropower module in Global Biodiversity Score tool was still experimental at the time of the assemssment. A weakness in the methodology was also that marine areas were not fully included at the time of the assessment. We are however aware of marine impacts at project level and we invest in R&D activities to further study how marine species and habitats are impacted by offshore wind developments.

Note regarding E5 Resource use and circular economy

The risk assessment on page 101 was evaluated based on the sub-risks and underlying data presented in Table 5.

One exception is concrete for which no data were available in the consulted source reports. Social and supply risks for concrete were assessed by internal experts.

It was assumed that Vattenfall's supply chain is comparable to the global supply chain for each specific material, except for aluminium, where European supply chain data was used because aluminium sourcing primarily occurs in Europe. Based on the risk assessment, the four materials with the highest risk were selected per risk indicator (supply, social, and climate). For these selected materials, individual thresholds for low, medium, and high risk have been defined based on the distribution of the risk scores for each risk indicator. The main assumption made is that Vattenfall's supply chain is similar to the global supply chain for each specific material, and that social risks at the country level can be applied to our material supplies from those respective countries. Communities in the supply chain have not been consulted directly. However, during 2024, Vattenfall took part in two multi-stakeholder initiatives, the German Energy Sector Dialogue and the International RBC Agreement for the Renewable Energy Sector, which increased our understanding of our supply chain and potentially affected communities (see Section S2 and S3).

Resource use is based on growth projects beeing the absolute majority of resource use. Non material resource flows are not included in the disclosure. The use of secondary, reused or recycled materials is not be dissagregated in 2024 and is expected to align with industry averages.

Note regarding S1 Own workforce

All Vattenfall workforce metrics are reported in FTEs, reflect year-end, and are not validated by an external body other than Vattenfall's auditor. Furthermore, as disclosed on page 108, we differentiate between the types of workers in our workforce which influence our metrics as we calculate and report them separately.

Vattenfall's strategic health and safety target is called Lost Time Injury Frequency (LTIF) which is expressed in terms of the number of lost time occupational injuries resulting in absences longer than one day, and accidents resulting in absences longer than one day, and accidents resulting in fatalities, per 1 million worked hours. It pertains only to Vattenfall's employees and is calculated by summing the number of Lost Time Injuries and fatalities over the year and multiplying it by 1,000,000 a normalisation factor then divided by the hours worked in a year. Furthermore, high consequence LTI considers work-related accidents that result in an injury from which the worker cannot recover (e.g., amputation of a limb), or is not expected to recover fully to pre-injury health status within 180 days or longer.

Similarly, the severity rate describes how severe the injuries sustained in a given year were per accident expressed in the number of lost days and calculated by taking the total number of days lost from LTIs and fatalities divided by the number of LTIs in a given year.

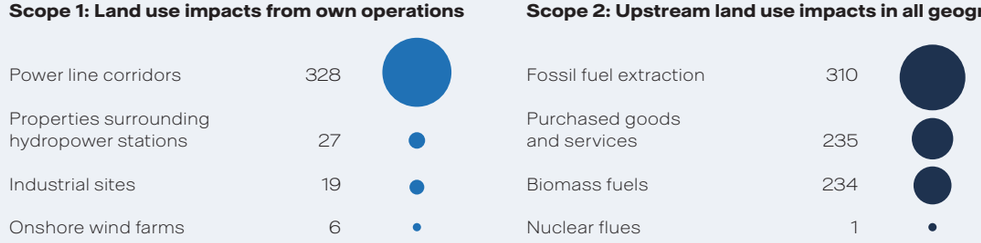
The total recordable incidents (TRI) consist of the number of fatalities, lost-time injuries, medical treatment cases, restricted work cases resulting from an injury, excluding first-aid cases in a given year. Consequently, TRIF is calculated by dividing TRI and the hours worked in a year.

The employee turnover rate expresses how many employees leave Vattenfall in a given year. This metric is calculated by dividing total FTEs leaving and the average total FTEs in a given year. This is not calculated separately and excludes non-employees.

Table 5. Resource use and circular economy risks

Risk	Assessed sub-risks	Data taken from below references
Supply risk	Supply risk	Study on the Critical Raw Materials for the EU 2023
	Economic importance	
	Import reliance	
Social risk	Working conditions	World Bank governance report
	Local communities	ILOSTAT
	Conflict areas	Heidelberg Institute for International Conflict Research (2018)
CO_2 emissions	CO_2 emissions	Emission intensity retrieved from Life Cycle Inventory databases like LCA for Experts

Figure 1. Vattenfall's terrestrial static biodiversity footprint, in MSA.km²



Note regarding Entity specific Security of supply

The two main metrics used in this disclosure are System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI). The following outages are included: announced and unannounced outages that occur on our distribution network and supplying distribution networks that are not owned by us. Interruptions from extraordinary events are included.

SAIDI measures the average outage time per customer and year. It is calculated as total outage time in hours multiplied by 60 min divided by total number of customers. Measuring unit is minutes. Furthermore, the SAIDI target is 99.99% which means system average interruption duration needs to be less than 75 minutes annually, assumming there are 525,600 minutes per year.

SAIFI measures the number of outages per customer and year. Number of outages divided by total number of customer. Measuring unit is interruptions per customer.

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EU Taxonomy notes and tables

This section together with the taxonomy information on page 88 and 134–145 in this report is Vattenfall's taxonomy reporting for 2024.

Eligible Activities
Vattenfall has identified the following main eligible activities in the Climate Delegated Acts and Complementary Delegated Act for nuclear and aas:

- 4.3 Electricity generation from wind power[1]
- 4.5 Electricity generation from hydro power[1]
- 4.9 Transmission and distribution of electricity[2]
- 4.10 Storage of electricity[1]
- 4.28 Electricity generation from nuclear energy in existing installations[1]
- 4.29 Electricity generation from fossil gaseous fuels[3]
- 4.30 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels[3]
- 4.31 Production of heat/cool from fossil fuels in an efficient district heating and cooling system[3]

All of Vattenfall's activities can be found in the taxonomy tables later in this section.

A screening for eligibility, has also been conducted against the Environmental Delegated Act (Commission Delegated Regulation (EU) 2023/24864). None of Vattenfall's economic activities are identified to be eligible under the Environmental Delegated Act. In 2024, Vattenfall report on one new activity, 7.1 Construction of new buildings.

All Vattenfall's operating segments are involved in identifying Vattenfall's eligible and aligned economic activities. The external reporting is based on reporting done at the lowest level for all reporting units in the Group and is an integrated part of our financial reporting system.

Alignment Assessment
For an economic activity to qualify as aligned under the EU taxonomy, it needs to substantially contribute to at least one of the environmental objectives as defined in the taxonomy, do no significant harm (DNSH) to the remaining objectives, and comply with minimum social safeguards.

Substantial contribution and DNSH have been assessed on an economic activity level, and the minimum social safeguards on Group level.

Substantial Contribution
All Vattenfall's eligible economic activities have been assessed against the substantial contribution criteria for climate change mitigation and climate change adaptation. Investments contributing to both climate change mitigation and climate change adaptation are not distinguishable as adaptation to material climate risks are an integral part of project specification and design. Therefore, all capex and opex are reported under climate change mitigation in order to avoid double counting. Vattenfall's aligned turnover only contributes to climate change mitigation.

Climate Change Mitigation
Aligned activities such as electricity generation from wind (4.3) and storage of electricity (4.10) (pumped hydro power storage) contribute to the climate mitigation objective by default. Other major activities such as electricity generation from hydro power (4.5) and electricity generation from nuclear energy in existing installations (4.28) are verified to be below the life cycle greenhouse gas (GHG) threshold of the EU taxonomy via Vattenfall's third-party verified life cycle assessments.

For the activity distribution and transmission of electricity (4.9), the majority of the activity has been assessed as aligned since Vattenfall's distribution networks are part of the interconnected European system, and the new generation connected to the grid complies with the climate requirements for new connections. A minor part of the activity has been reported as not aligned, due to lack of verifiable data.

Other economic activities' compliance is assessed at product or economic-activity level. Alignment is often fulfilled via compliance to EU and national legislation and is followed up annually through our certified Environmental Management Systems.

Climate Change Adaptation
The physical climate risks that are material to the activities have been assessed and adaptation solutions are continuously implemented to substantially reduce most important risks. Examples of climate adaptation solutions are presented in the climate change (E1) section, see page 89–95.

Do No Significant Harm Climate Change Adaptation
Climate Change Adaptation
The two IPCC climate scenarios RCP 4.5 and RCP 8.5 have been used to conduct the physical climate risk and vulnerability assessments for Vattenfall's operations. The scenarios used reflect the most detailed data available at the time of assessment, representing intermediate and high GHG concentration scenarios. In 2024, a study was commissioned to verify our existing risk inventory and strengthen Vattenfall's work on climate scenario analysis for our operations. For further details on physical climate risk management in Vattenfall, see section climate change (E1) on pages 89–95.

Sustainable use and protection of water and marine resources, and Protection and restoration of biodiversity and ecosystems
The DNSH criteria for water and biodiversity are linked to the requirements of EU legislation, which are implemented at a national law in the different markets where Vattenfall operates. Within current legal systems, compliance requirements are set on operators through permits and instructions as set out by the competent national authorities. Legal compliance is followed up through environmental permits as well as annual reviews of certified Environmental Management Systems.

More specifically, the DNSH criteria linked to sustainable use and protection of water and marine resources are linked to compliance with the Water Framework Directive (WFD), and a key focus of the criteria is the implementation of relevant mitigation measures. As part of the transposition of the WFD in the different markets, national competent authorities set the ecologically relevant environmental requirements on operators as part of permit conditions where applicable. As long as the procedures and requirements set out by competent authorities are followed and that permit requirements are not relying on derogations, Vattenfall considers the activity to be aligned. Relevant to note is that for Swedish hydropower there is an ongoing review of existing permits where further relevant measures will be identified as part of the overall process. Vattenfall's assessment here is that all Hydropower operations that are included in the planned review of existing permits are considered aligned as long as measures in existing permits have been implemented. As permits will be gradually updated with new identified relevant measures a continuous re-assessment of the alignment of hydro power will be conducted. If future relevant measures are determined on the basis of derogations an individual assessment will be conducted to assess alignment.

Transition to a Circular Economy
The DNSH criteria on circular economy require that activities demonstrate high durability and recyclability where the materials applied are eligible. Resource efficiency and circularity is a key focus area for Vattenfall, see pages 101–103 to read more. The requirement is fulfilled via contractual agreements with suppliers and contractors and via compliance to Vattenfall's overarching Environmental Management System, in which circularity and resource management are an explicit part.

Pollution Prevention and Control
Compliance is secured by adhering to existing EU and national legislation. Legal compliance is followed up through requirements from competent authorities and environmental reporting. Legal compliance is also followed up annually through our audits linked to certified Environmental Management Systems. When it comes to requirements that extend beyond existing legislation, e.g. requirements linked to use of mercury and substances on the EU candidate list, these are fulfilled via internal systems for substitution and chemicals management.

Minimum Safeguards
Vattenfall has a public Human Rights Policy describing our approach to respecting human rights. It includes commitments to follow UN Guiding Principles, OECD guidelines for Multinational Enterprises, ILO's eight fundamental conventions, and the principles of the UN Global Compact. In our Code of Conduct for Suppliers and Partners, we extend these human rights requirements to the value chain.

On a reoccurring basis, we do a gap analysis with an external organization to ensure that we live by these policies. The latest Human Rights Assessment was done in August 2021. Although

1. Taxonomy aligned
2. Partly taxonomy aligned
3. Not taxonomy aligned

EU Taxonomy notes and tables, cont.

we are already managing most issues identified, key areas for improvement from the analysis have been transformed into a Human rights action plan (published version and internal list for continuous follow-up). The plan is followed up on a regular basis. The process is valid throughout the whole organization. More details on our human rights work can be found on pages 106–107, and we also publish a separate Human Rights Progress Report.

In the event that there would be a breach, Vattenfall has a whistleblowing system that has been checked against the UNGP effectiveness criteria. Complaints through this channel or others do not automatically make us consider it as a breach of the minimum safeguards. It is not until after an analysis and a ruling showing noncompliance with one of the frameworks listed as minimum safeguards, that we consider the affected activities as not aligned.

Accounting policy

The KPIs have been defined in accordance with Annex I to the article 8 Delegated Act.

Basis for preparation of the EU Taxonomy reporting is the Vattenfall consolidated accounts prepared in accordance with IFRS, see note 3 to the Consolidated accounts. In addition, the Taxonomy reporting is based on Vattenfall's segment reporting as presented in note 6 to the Consolidated accounts, meaning that turnover KPI figures for the electricity producing activities are based on spot prices. Results from electricity production price hedges, which are done on group level, are not allocated by production type. Hence, results from electricity price hedges are recognized as a non-eligible activity.

Capex consists of additions to (i.e. investments in) property plant and equipment (reported in Vattenfall's balance sheet and in note 22), intangible assets (reported in Vattenfall's balance sheet and in note 23), and additions to right of use assets from leases whereby also business combinations are considered. The right of use assets, presented in note 33, are included in investments in property, plant, and equipment in note 22. Assets recognized in accordance with IFRIC 1 are reported as investments in property, plant, and equipment. The numerator of the KPI is the share of capex assessed to be aligned, reported under section A1 Environmentally sustainable activities.

Turnover in the taxonomy reporting is equivalent to the net sales in Vattenfall's income statement. The numerator of the KPI is the share of turnover assessed to be aligned, reported under section A1 Environmentally sustainable activities.

Opex consists of maintenance costs, research and development costs as well as expenses for short-term leases. Expenses covered by the opex definition in the taxonomy are reported as Other external expenses and Personnel expenses in Vattenfall's income statement. The numerator of the KPI is the share of opex assessed to be aligned, reported under section A1 Environmentally sustainable activities.

Capex and opex according to the taxonomy is divided into three different categories. Category (a) refers to capex and opex in already existing and aligned activities. Category (b) refers to required capex and opex to expand already aligned activities, expenses for new aligned activities as well as expenses necessary to transform a non-taxonomy-aligned activity into being taxonomy-aligned. Category (c) refers to capex and opex that in themselves reduce greenhouse gas emissions and/or become low carbon, provided the measures are implemented and put into operation within 18 months. Vattenfall has classified all aligned capex and opex under categories (a) and (b). At the end of 2024, a FAQ was published by the European Commission that further specifies how to recognise certain category (c) capex and opex related to so-called 'purchases of outputs' from suppliers that have activities within environmental objectives 3-6. Such purchases related to capex and opex, which are not currently attributable to the activities that Vattenfall conducts and already recognises as eligible, may be classified as eligible and compatible capex and opex per se. Vattenfall has not considered or made any assessment regarding the new FAQ, since the late publication did not enable application in this year's reporting. It is also still in draft form, and the final guidance may change.

Vattenfall's investment plans are presented on pages 24–25. Vattenfall has one new activitiy for the year 2024, activity 7.1 Construction of new buildings.

For assets held for sale (IFRS 5), capex is recognised in taxonomy reporting until the asset is classified as such. Thereafter, until divestment, the investments are expensed in the income statement and therefore not part of the capex taxonomy reporting. Turnover and opex are recognised in the taxonomy reporting until Vattenfall lose control.

According to the delegated act to article 8, non-financial undertakings that have issued environmental sustainable bonds or debt securities with the purpose of financing specific identified taxonomy-aligned activities must disclose adjusted capex and turnover related to the taxonomy-aligned capital expenditure and operating expenses financed by such bonds or debt securities. Vattenfall has not issued any bonds according to the EU Taxonomy Standard. In addition, as Vattenfall has not issued any debt securities for the financing of taxonomy-aligned activities, no alternative KPI adjustments are presented for capex or turnover.

In certain cases, allocation keys have been used based on production volumes or other relevant allocation factors. Vattenfall's internal reporting system is not always set up in such a way it supports the detailed requirements of the taxonomy regulation.

The taxonomy regulation does not include materiality. Though, Vattenfall has applied materiality for a few minor businesses with insignificant numbers where the work load for reporting in a taxonomy correct way could not be defended. These businesses are recognized as non-eligible activities.

All assessment and reporting are based on our current interpretation of the EU Taxonomy Regulation and its Delegated Act. Available guidance from the EU through FAQs and industry practices, that evolve over time, may affect the accounting policies, together with eligibility and alignment assessment.

EU Taxonomy

EU Taxonomy - Capex

	Code	Absolute capex MSEK	Proportion of capex %	Technical screening criteria: Substantial contribution: Climate change mitigation **CCM** Y; N; N/EL	Substantial contribution: Climate change adaptation **CCA** Y; N; N/EL	Substantial contribution: Water and marine resources **WTR** Y; N; N/EL	Substantial contribution: Pollution **PPC** Y; N; N/EL	Substantial contribution: Circular economy **CE** Y; N; N/EL	Substantial contribution: Biodiversity and eco-system **BIO** Y; N; N/EL	Do no significant harm (DNSH): Climate change mitigation **CCM** Y/N	Do no significant harm (DNSH): Climate change adaptation **CCA** Y/N	Do no significant harm (DNSH): Water and marine resources **WTR** Y/N	Do no significant harm (DNSH): Pollution **PPC** Y/N	Do no significant harm (DNSH): Circular economy **CE** Y/N	Do no significant harm (DNSH): Biodiversity and eco-system **BIO** Y/N	**Minimum safe guards** Y/N	**Taxonomy aligned (A1) or eligible (A2) proportion of capex 2023**	Category: *Enabling activity* E	Category: *Transitional activity* T
A. Taxonomy-eligible activities																			
A1. Environmentally sustainable activities (Taxonomy-aligned)																			
Electricity generation using solar photovoltaic technology	**CCM 4.1**, CCA 4.1	195	1%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
Electricity generation from wind power	**CCM 4.3,** CCA 4.3	9,008	31%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	54%		
Electricity generation from hydropower	**CCM 4.5**, CCA 4.5	1,168	4%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	3%		
Transmission and distribution of electricity	**CCM 4.9,** CCA 4.9	10,234	35%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	19%	E	
Storage of electricity	**CCM 4.10,** CCA 4.10	142	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
Storage of thermal energy	**CCM 4.11,** CCA 4.11	5	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
District heating/cooling distribution	**CCM 4.15**, CCA 4.15	1,183	4%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	5%		
Installation and operation of electric heat pumps	**CCM 4.16,** CCA 4.16	283	1%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
Cogeneration of heat/cool and power from bioenergy	**CCM 4.20,** CCA 4.20	7	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
Production of heat/cool from bioenergy	**CCM 4.24,** CCA 4.24	386	1%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1%		
Production of heat/cool using waste heat	**CCM 4.25,** CCA 4.25	57	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
Electricity generation from nuclear energy in existing installations	**CCM 4.28,** CCA 4.28	1,864	6%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	5%		T
Construction of new buildings	**CCM 7.1,** CCA 7.1	80	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
Installation, maintenance and repair of energy efficiency equipment	**CCM 7.3,** CCA 7.3	8	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	**CCM 7.4,** CCA 7.4	1,022	3%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	2%	E	
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	**CCM 7.5,** CCA 7.5	8	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
Installation, maintenance and repair of renewable energy technologies	**CCM 7.6,** CCA 7.6	6	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
Acquisition and ownership of buildings	**CCM 7.7,** CCA 7.7	566	2%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
A1. Capex - Taxonomy aligned activities		**26,222**	**88%**	**88%**	0%*												**89%**		
- Of which enabling		*11,425*	*38%*	*38%*	*0%**												*21%*	*E*	
- Of which transitional		*1,864*	*6%*	*6%*	*0%**												*5%*		*T*
A2. Taxonomy eligible, but not environmentally sustainable activities (not Taxonomy-aligned)				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture, installation, and servicing of high, medium and low voltage electrical equipment for electrical transmission and distribution that result in or enable a substantial contribution to climate change mitigation	**CCM 3.20,** CCA 3.20	87	0%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
Transmission and distribution of electricity	**CCM 4.9,** CCA 4.9	88	0%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
District heating/cooling distribution	**CCM 4.15**, CCA 4.15	351	1%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
Installation and operation of electric heat pumps	**CCM 4.16,** CCA 4.16	2	0%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
Electricity generation from fossil gaseous fuels	**CCM 4.29,** CCA 4.29	81	0%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	**CCM 4.30**, CCA 4.30	351	1%	EL	EL*	N/EL	N/EL	N/EL	N/EL								1%		
Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system	**CCM 4.31,** CCA 4.31	210	1%	EL	EL*	N/EL	N/EL	N/EL	N/EL								1%		
Installation, maintenance and repair of energy efficiency equipment	**CCM 7.3,** CCA 7.3	0	0%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	**CCM 7.4,** CCA 7.4	5	0%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
A2. Capex - Taxonomy not aligned activities		**1,175**	**3%**	**3%**	**0%***												**2%**		
TOTAL - Taxonomy-eligible activities (A1+A2)		**27,397**	**91%**	**91%**	**0%***												**91%**		
B. Taxonomy-non-eligible activities																			
Capex of taxonomy non-eligible activities		2,551	9%																
TOTAL (A+B)		**29,948**	**100%**																

Y = Yes (Taxonomy eligible and aligned activity with the relevant objective)
N = No (Taxonomy eligible, but not aligned activity with the relevant objective)
EL = Eligible (Taxonomy eligible activity for the relevant objective)
N/EL = Not eligible (Taxonomy non-eligible activity for the relevant environmental objective)

* Vattenfall comply with the technical screeing criteria (including DNSH) for both Climate Change Mitigation (CCM) and Climate Change adoption (CCA). However, Vattenfall doesn't have any CCA Capex that is distinguishable from CCM. Therefore the full amount is reported under CCM.

EU Taxonomy, cont.

EU Taxonomy - Capex, cont.

	Code	Absolute capex MSEK	Proportion of capex 2024 - of which: Intagible fixed asset MSEK	Tangible fixed asset MSEK	Right of use assets MSEK	Business combination MSEK	Proportion of capex 2023 - of which: Intagible fixed asset MSEK	Tangible fixed asset MSEK	Right of use assets MSEK	Business combination MSEK
A. Taxonomy-eligible activities										
A1. Environmentally sustainable activities (Taxonomy-aligned)										
Electricity generation using solar photovoltaic technology	**CCM 4.1**, CCA 4.1	195	0	22	173	0	0	32	0	0
Electricity generation from wind power	**CCM 4.3,** CCA 4.3	9,008	0	8,857	130	21	0	19,753	81	182
Electricity generation from hydropower	**CCM 4.5**, CCA 4.5	1,168	0	1,168	0	0	0	835	0	0
Transmission and distribution of electricity	**CCM 4.9,** CCA 4.9	10,234	127	10,001	106	0	158	6,669	178	0
Storage of electricity	**CCM 4.10,** CCA 4.10	142	0	140	2	0	0	108	3	18
Storage of thermal energy	**CCM 4.11,** CCA 4.11	5	0	5	0	0	0	62	0	0
District heating/cooling distribution	**CCM 4.15**, CCA 4.15	1,183	1	1,179	3	0	0	1,575	0	70
Installation and operation of electric heat pumps	**CCM 4.16,** CCA 4.16	283	1	258	0	24	1	57	20	76
Cogeneration of heat/cool and power from bioenergy	**CCM 4.20,** CCA 4.20	7	0	7	0	0	0	7	0	0
Production of heat/cool from bioenergy	**CCM 4.24,** CCA 4.24	386	0	386	0	0	0	222	0	16
Production of heat/cool using waste heat	**CCM 4.25,** CCA 4.25	57	0	57	0	0	0	0	0	0
Electricity generation from nuclear energy in existing installations	**CCM 4.28,** CCA 4.28	1,864	0	1,863	1	0	0	1,879	2	0
Construction of new buildings	**CCM 7.1,** CCA 7.1	80	0	80	0	0	0	0	0	0
Installation, maintenance and repair of energy efficiency equipment	**CCM 7.3,** CCA 7.3	8	0	3	5	0	1	1	1	0
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	**CCM 7.4,** CCA 7.4	1,022	264	669	89	0	193	469	6	0
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	**CCM 7.5,** CCA 7.5	8	0	3	5	0	1	2	2	0
Installation, maintenance and repair of renewable energy technologies	**CCM 7.6,** CCA 7.6	6	0	3	3	0	0	1	0	0
Acquisition and ownership of buildings	**CCM 7.7,** CCA 7.7	566	0	0	566	0	0	0	0	0
A1. Capex - Taxonomy aligned activities		**26,222**	**393**	**24,701**	**1,083**	**45**	**354**	**31,672**	**293**	**362**
A2. Taxonomy eligible, but not environmentally sustainable activities (not Taxonomy-aligned)										
Manufacture, installation, and servicing of high, medium and low voltage electrical equipment for electrical transmission and distribution that result in or enable a substantial contribution to climate change mitigation	**CCM 3.20,** CCA 3.20	87	4	33	50	0	9	26	19	0
Transmission and distribution of electricity	**CCM 4.9,** CCA 4.9	88	0	78	10	0	1	42	1	0
District heating/cooling distribution	**CCM 4.15**, CCA 4.15	351	0	349	2	0	0	49	0	0
Installation and operation of electric heat pumps	**CCM 4.16,** CCA 4.16	2	0	2	0	0	0	2	0	0
Electricity generation from fossil gaseous fuels	**CCM 4.29,** CCA 4.29	81	0	81	0	0	0	91	0	0
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	**CCM 4.30**, CCA 4.30	351	0	351	0	0	0	401	0	32
Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system	**CCM 4.31,** CCA 4.31	210	0	210	0	0	0	129	0	0
Installation, maintenance and repair of energy efficiency equipment	**CCM 7.3,** CCA 7.3	0	0	0	0	0	5	13	9	0
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	**CCM 7.4,** CCA 7.4	5	0	4	1	0	0	5	0	0
A2. Capex - Taxonomy not aligned activities		**1,175**	**4**	**1,108**	**63**	**0**	**15**	**758**	**29**	**32**
TOTAL - Taxonomy-eligible activities (A1+A2)		**27,397**	**397**	**25,809**	**1,146**	**45**	**369**	**32,430**	**322**	**394**
B. Taxonomy-non-eligible activities										
Capex of taxonomy non-eligible activities		2,551	1,236	1,064	251	0	924	1,930	308	207
TOTAL (A+B)		**29,948**	**1,633**	**26,873**	**1,397**	**45**	**1,293**	**34,360**	**630**	**601**

Capex KPI

88% (89) of Vattenfall's capex in 2024 was aligned (i.e., compliant with the taxonomy framework, section A1 in the table). 3% (2) of the capex relates to activities that were not aligned (section A2 in the table) and the remaining 9% (9) relates to capex in non-eligible activities, i.e. not covered by the taxonomy (section B in the table). Non-eligible activities according to the taxonomy regulation do not necessarily mean that they are not sustainable. It only indicates that the activity is not covered by, hence not assessed under the taxonomy framework.

All capex in Vattenfall has been assessed against the criteria for significant contribution to the climate change mitigation (CCM) and climate change adaptation (CCA). All capex contributes to both climate objectives, though can not be allocated to respective objective and are therefore only reported under climate change mitigation (CCM) due to the fact that significant climate risks are an integrated part of the project's design. No capex has been identified as applicable for assessment against the Environmental Delegated Act. 88% of Vattenfall's capex is aligned under both climate change mitigation (CCM) and adaptation (CCA).

Vattenfall's share of capex attributable to enabling activities amounts to 38% of total capex. Enabling activities are those activities that directly enable others to make a significant contribution to the climate-/environmental objectives. These are mainly related to the transmission and distribution of electricity (4.9).

The share of capex attributable to transitional activities amounts to 6% of total capex and consists entirely of the activity electricity generation from nuclear energy in existing installations (4.28). Transitional activities are those for which low-carbon alternatives are not yet available and that have greenhouse gas emission levels that correspond to the best performance in the sector or industry, which fulfil the two following conditions: (i) they should not hamper the development and deployment of low-carbon alternatives and (ii) they should not lead to a lock-in of carbon-intensive assets, considering the economic lifetime of those assets.

The majority of Vattenfall's taxonomy-aligned capex relates to electricity generation from wind power (activity 4.3), transmission and distribution of electricity (4.9), distribution of district heating/cooling (4.15) and electricity generation from nuclear energy in existing installations (4.28). Vattenfall's generation of heat and electricity from gas (4.29–31) represents the absolute majority of not aligned capex.

Compared to previous year, capex has decreased by SEK 7 billion. This is mainly attributable to the activity electricity generation from wind power (4.3), which decreased by SEK 11 billion and is due to the completion of some major wind power projects in 2023. In 2024, investments in the activity electricity transmission and distribution (4.9) increased by just over SEK 3 billion compared with 2023.

Vattenfall develops wind and solar power projects for divestment (develop to sell). The expenses related to these projects are recognised as inventory and are therefore not included in the taxonomy capex KPI.

Vattenfall's total capex amounts to SEK 29.948 million. The absolute majority consists, as in the previous year, of tangible fixed assets attributable to taxonomy aligned activities 4.3, 4.9, 4.15 and 4.28 and taxonomy not aligned activities 4.29–31.

	Proportion of Capex	
	Taxonomy aligned	**Taxonomy eligible**
CCM	88%	91%
CCA	88%	91%
WTR	N/EL	N/EL
PPC	N/EL	N/EL
CE	N/EL	N/EL
BIO	N/EL	N/EL

EU Taxonomy, cont.

EU Taxonomy - Turnover

	Code	Absolute turnover MSEK	Proportion of turnover %	Technical screening criteria: Substantial contribution: Climate change mitigation **CCM** Y; N; N/EL	Climate change adaptation **CCA** Y; N; N/EL	Water and marine resources **WTR** Y; N; N/EL	Pollution **PPC** Y; N; N/EL	Circular economy **CE** Y; N; N/EL	Biodiversity and eco-system **BIO** Y; N; N/EL	Do no significant harm (DNSH): Climate change mitigation **CCM** Y/N	Climate change adaptation **CCA** Y/N	Water and marine resources **WTR** Y/N	Pollution **PPC** Y/N	Circular economy **CE** Y/N	Biodiversity and eco-system **BIO** Y/N	Minimum safe guards Y/N	Taxonomy aligned (A1) or eligible (A2) proportion of turnover 2023	Category: *Enabling activity* E	Category: *Transitional activity* T
A. Taxonomy-eligible activities																			
A1. Environmentally sustainable activities (Taxonomy-aligned)																			
Electricity generation using solar photovoltaic technology	**CCM 4.1**	91	0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	0%		
Electricity generation from wind power	**CCM 4.3**	21,481	9%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	9%		
Electricity generation from hydropower	**CCM 4.5**	13,854	6%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	6%		
Transmission and distribution of electricity	**CCM 4.9**	13,837	6%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	5%	E	
Storage of electricity	**CCM 4.10**	5,953	2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	2%	E	
Storage of thermal energy	**CCM 4.11**	196	0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	0%	E	
District heating/cooling distribution	**CCM 4.15**	3,480	2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	2%		
Installation and operation of electric heat pumps	**CCM 4.16**	439	0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	0%		
Cogeneration of heat/cool and power from solar energy	**CCM 4.17**	3	0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	0%		
Cogeneration of heat/cool and power from bioenergy	**CCM 4.20**	114	0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	0%		
Production of heat/cool from bioenergy	**CCM 4.24**	1,834	1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	1%		
Electricity generation from nuclear energy in existing installations	**CCM 4.28**	15,121	6%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	6%		T
Installation, maintenance and repair of energy efficiency equipment	**CCM 7.3**	161	0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	0%	E	
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	**CCM 7.4**	231	0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	0%	E	
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	**CCM 7.5**	56	0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	0%	E	
Installation, maintenance and repair of renewable energy technologies	**CCM 7.6**	465	0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/A	Y	Y	Y	Y	Y	Y	0%	E	
A1. Turnover - Taxonomy aligned activities		**77,316**	**32%**	**32%**													**30%**		
- Of which enabling		*20,899*	*8%*	*8%*													*7%*	*E*	
- Of which transitional		*15,121*	*6%*	*6%*													*6%*		*T*
A2. Taxonomy eligible, but not environmentally sustainable activities (not Taxonomy-aligned)				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture, installation, and servicing of high, medium and low voltage electrical equipment for electrical transmission and distribution that result in or enable a substantial contribution to climate change mitigation	**CCM 3.20**	1,160	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0%		
Transmission and distribution of electricity	**CCM 4.9**	87	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0%		
District heating/cooling distribution	**CCM 4.15**	37	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0%		
Installation and operation of electric heat pumps	**CCM 4.16**	554	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0%		
Electricity generation from fossil gaseous fuels	**CCM 4.29**	3,515	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								2%		
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	**CCM 4.30**	11,157	5%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								7%		
Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system	**CCM 4.31**	948	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								1%		
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	**CCM 7.4**	5	0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0%		
A2. Turnover - Taxonomy not aligned activities		**17,463**	**7%**	**7%**													**10%**		
TOTAL - Taxonomy-eligible activities (A1+A2)		**94,779**	**39%**	**39%**													**40%**		
B. Taxonomy-non-eligible activities																			
Turnover of taxonomy non-eligible activities		150,791	61%																
TOTAL (A+B)		**245,570**	**100%**																

Y = Yes (Taxonomy eligible and aligned activity with the relevant objective)
N = No (Taxonomy eligible, but not aligned activity with the relevant objective)
EL = Eligible (Taxonomy eligible activity for the relevant objective)

N/EL = Not eligible (Taxonomy non-eligible activity for the relevant environmental objective)
N/A = Not applicable

EU Taxonomy, cont.

Turnover KPI

Out of Vattenfall's total turnover in 2024 of SEK 245.570 million, 39% (40) is eligible, of which 32% (30) is aligned (i.e., compliant with the taxonomy framework, section A1 in the table). 7% (10) of the turnover relates to activities not being aligned (section A2 in the table), and the remaining 61% (60) relates to turnover that is not eligible (section B in the table). The latter consists primarily of sales of electricity, gas and heat to customers that are not produced by Vattenfall, regardless of how they are produced.

Vattenfall's turnover has been assessed against the criteria for significant contribution to the climate change mitigation (CCM).

Vattenfall's share of turnover attributable to enabling activities amounts to 8% of total turnover, mainly related to the transmission and distribution of electricity (4.9) and storage of electricity (4.10). Turnover attributable to transitional activities amounts to 6% of total turnover and consists entirely of the activity electricity generation from nuclear energy in existing installations (4.28).

The majority of Vattenfall's taxonomy-aligned turnover relates to electricity generation from wind power (4.3), electricity generation from hydro power (4.5), transmission and distribution of electricity (4.9), storage of electricity (4.10) and electricity generation from nuclear energy in existing installations (4.28).

Vattenfall's generation of heat and electricity from gas (4.29–31) represents the absolute majority of not aligned turnover.

As stated in the accounting principles on page 135, taxonomy reporting is based on Vattenfall's segment reporting. In this reporting, sales are based on spot prices (market prices), while the result from hedging of electricity generation prices, which is done at Group level, is not allocated to the respective generation type. The result from hedging of electricity generation prices, which is recognised as turnover, is not eligible as it is not allocated to the different types of generation in the segment reporting (Note 6 to the consolidated accounts).

In 2024, market prices have decreased compared to 2023, which in the taxonomy reporting has contributed to significantly lower turnover for the electricity-generating activities and lower prices in our customer sales. At the same time, the result from hedges of the production has improved during 2024. This is the main reasons the turnover KPI is lower in 2024 compared with 2023.

Vattenfall Services perform construction activities on distribution and transmission grids to external customers and the turnover from these services have been allocated to the activity transmission and distribution of electricity (4.9).

Turnover from heat and electricity produced by coal represents less than 1% of Vattenfall's total turnover. This is recognised under non-eligible activities. Vattenfall's coal-fired cogeneration plants were included in the divestment of the heat business in Berlin in beginning of May 2024.

Note 7 to the consolidated accounts specifies Vattenfall's net sales. Net sales include revenues from the sale and distribution of electricity and heat, sales of gas, electricity trading, and other revenues such as service and consulting assignments as well as connection fees. However, the taxonomy is reported from a production perspective whereby Vattenfall takes into account group internal sales for the electricity generating units, which are allocated to electricity generating activities and at the same time reduce non-eligible sales revenue by a corresponding amount. This is not reflected in Note 7 to the consolidated accounts, where Vattenfall presents external sales from a sales perspective. A link between the table in Note 7 and the taxonomy's breakdown of sales by activity is therefore not possible.

	Proportion of Turnover	
	Taxonomy aligned	**Taxonomy eligible**
CCM	32%	39%
CCA	N/EL	N/EL
WTR	N/EL	N/EL
PPC	N/EL	N/EL
CE	N/EL	N/EL
BIO	N/EL	N/EL

EU Taxonomy, cont.

EU Taxonomy - Opex

				Technical screening criteria															
				Substantial contribution						Do no significant harm (DNSH)								Category	
	Code	Absolute capex MSEK	Proportion of capex %	Climate change mitigation **CCM** Y; N; N/EL	Climate change adaptation **CCA** Y; N; N/EL	Water and marine resources **WTR** Y; N; N/EL	Pollution **PPC** Y; N; N/EL	Circular economy **CE** Y; N; N/EL	Biodiversity and eco-system **BIO** Y; N; N/EL	Climate change mitigation **CCM** Y/N	Climate change adaptation **CCA** Y/N	Water and marine resources **WTR** Y/N	Pollution **PPC** Y/N	Circular economy **CE** Y/N	Biodiversity and eco-system **BIO** Y/N	**Minimum safe guards** Y/N	**Taxonomy aligned (A1) or eligible (A2) proportion of opex 2023**	*Enabling activity* E	*Transitional activity* T
A. Taxonomy-eligible activities																			
A1. Environmentally sustainable activities (Taxonomy-aligned)																			
Electricity generation using solar photovoltaic technology	**CCM 4.1,** CCA 4.1	1	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
Electricity generation from wind power	**CCM 4.3,** CCA 4.3	671	8%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	8%		
Electricity generation from hydropower	**CCM 4.5,** CCA 4.5	791	10%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	9%		
Transmission and distribution of electricity	**CCM 4.9,** CCA 4.9	2,165	26%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	24%	E	
Storage of electricity	**CCM 4.10,** CCA 4.10	174	2%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	2%	E	
District heating/cooling distribution	**CCM 4.15,** CCA 4.15	254	3%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	4%		
Installation and operation of electric heat pumps	**CCM 4.16,** CCA 4.16	5	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
Cogeneration of heat/cool and power from bioenergy	**CCM 4.20,** CCA 4.20	10	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
Production of heat/cool from bioenergy	**CCM 4.24,** CCA 4.24	234	3%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	3%		
Electricity generation from nuclear energy in existing installations	**CCM 4.28,** CCA 4.28	2,288	28%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	25%		T
Installation, maintenance and repair of energy efficiency equipment	**CCM 7.3,** CCA 7.3	5	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	**CCM 7.4,** CCA 7.4	6	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	**CCM 7.5,** CCA 7.5	2	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
Installation, maintenance and repair of renewable energy technologies	**CCM 7.6,** CCA 7.6	2	0%	Y	Y*	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
A1. Opex - Taxonomy aligned activities		**6,608**	**80%**	**80%**	**0%***												**75%**		
- Of which enabling		*2,354*	*28%*	*28%*	*0%**												*26%*	*E*	
- Of which transitional		*2,288*	*28%*	*28%*	*0%**												*25%*		*T*
A2. Taxonomy eligible, but not environmentally sustainable activities (not Taxonomy-aligned)				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Transmission and distribution of electricity	**CCM 4.9,** CCA 4.9	1	0%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
District heating/cooling distribution	**CCM 4.15,** CCA 4.15	40	0%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
Installation and operation of electric heat pumps	**CCM 4.16,** CCA 4.16	2	0%	EL	EL*	N/EL	N/EL	N/EL	N/EL								0%		
Electricity generation from fossil gaseous fuels	**CCM 4.29,** CCA 4.29	270	4%	EL	EL*	N/EL	N/EL	N/EL	N/EL								2%		
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	**CCM 4.30,** CCA 4.30	172	2%	EL	EL*	N/EL	N/EL	N/EL	N/EL								5%		
Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system	**CCM 4.31,** CCA 4.31	181	2%	EL	EL*	N/EL	N/EL	N/EL	N/EL								2%		
A2. Opex – Taxonomy not aligned activities		**666**	**8%**	**8%**	**0%***												**9%**		
TOTAL - Taxonomy-eligible activities (A1+A2)		**7,274**	**88%**	**88%**	**0%***												**84%**		
B. Taxonomy-non-eligible activities																			
Opex of taxonomy non-eligible activities		972	12%																
TOTAL (A+B)		**8,246**	**100%**																

Y = Yes (Taxonomy eligible and aligned activity with the relevant objective)
N = No (Taxonomy eligible, but not aligned activity with the relevant objective)
EL = Eligible (Taxonomy eligible activity for the relevant objective)
N/EL = Not eligible (Taxonomy non-eligible activity for the relevant environmental objective)

* Vattenfall comply with the technical screeing criteria (including DNSH) for both Climate Change Mitigation (CCM) and Climate Change adoptation (CCA). However, Vattenfall doesn't have any CCA opex that is distinguishable from CCM. Therefore the full amount is reported under CCM.

EU Taxonomy, cont.

EU Taxonomy - Opex, cont.

	Code	Absolute opex MSEK	Proportion of opex 2024 - of which			Proportion of opex 2023 - of which		
			Maintenance costs MSEK	Research & Development MSEK	Short term leases MSEK	Maintenance costs MSEK	Research & Development MSEK	Short term leases MSEK
A. Taxonomy-eligible activities								
A1. Environmentally sustainable activities (Taxonomy-aligned)								
Electricity generation using solar photovoltaic technology	**CCM 4.1,** CCA 4.1	1	0	0	1	1	0	0
Electricity generation from wind power	**CCM 4.3,** CCA 4.3	671	288	53	330	249	43	319
Electricity generation from hydropower	**CCM 4.5,** CCA 4.5	791	699	88	4	654	91	3
Transmission and distribution of electricity	**CCM 4.9,** CCA 4.9	2,165	2,056	77	32	1,846	63	14
Storage of electricity	**CCM 4.10,** CCA 4.10	174	139	33	2	114	34	1
District heating/cooling distribution	**CCM 4.15,** CCA 4.15	254	250	0	4	330	0	5
Installation and operation of electric heat pumps	**CCM 4.16,** CCA 4.16	5	0	0	5	0	0	2
Cogeneration of heat/cool and power from bioenergy	**CCM 4.20,** CCA 4.20	10	10	0	0	39	0	0
Production of heat/cool from bioenergy	**CCM 4.24,** CCA 4.24	234	214	19	1	231	18	1
Electricity generation from nuclear energy in existing installations	**CCM 4.28**, CCA 4.28	2,288	2,236	48	4	1,938	48	5
Installation, maintenance and repair of energy efficiency equipment	**CCM 7.3**, CCA 7.3	5	0	0	5	0	0	2
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	**CCM 7.4,** CCA 7.4	6	0	0	6	0	0	0
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	**CCM 7.5,** CCA 7.5	2	0	0	2	0	0	1
Installation, maintenance and repair of renewable energy technologies	**CCM 7.6,** CCA 7.6	2	0	0	2	0	0	0
A1. Opex - Taxonomy aligned activities		**6,608**	**5,892**	**318**	**398**	**5,402**	**297**	**353**
A2. Taxonomy eligible, but not environmentally sustainable activities (not Taxonomy-aligned)								
Transmission and distribution of electricity	**CCM 4.9,** CCA 4.9	1	1	0	0	1	0	0
District heating/cooling distribution	**CCM 4.15,** CCA 4.15	40	40	0	0	32	0	0
Installation and operation of electric heat pumps	**CCM 4.16,** CCA 4.16	2	2	0	0	1	0	0
Electricity generation from fossil gaseous fuels	**CCM 4.29**, CCA 4.29	270	270	0	0	171	0	0
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	**CCM 4.30,** CCA 4.30	172	169	0	3	374	0	0
Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system	**CCM 4.31,** CCA 4.31	181	178	0	3	163	0	2
A2. Opex - Taxonomy not aligned activities		**666**	**660**	**0**	**6**	**742**	**0**	**2**
TOTAL - Taxonomy-eligible activities (A1+A2)		**7,274**	**6,552**	**318**	**404**	**6,144**	**297**	**355**
B. Taxonomy-non-eligible activities								
Opex of taxonomy non-eligible activities		972	262	338	372	632	299	357
TOTAL (A+B)		**8,246**	**6,814**	**656**	**776**	**6,776**	**596**	**712**

Opex KPI

80% (75) of Vattenfall's opex in 2024 was aligned (i.e. compliant with the taxonomy framework, section A1 in the table). 8% (9) of the opex relates to activities that were not aligned (section A2 in the table) and the remaining 12% (16) relates to opex in not eligible.

All opex in Vattenfall has been assessed against the criteria for significant contribution to the climate change mitigation (CCM) and climate change adaptation (CCA). All opex contributes to both climate objectives, though can not be allocated to respective objective and are therefore only reported under climate change mitigation (CCM). 80% of Vattenfall's opex is aligned under both climate change mitigation (CCM) and adaptation (CCA).

Vattenfall's share of opex attributable to enabling activities amounts to 28% of total opex, mainly related to the transmission and distribution of electricity activity (4.9). Opex attributable to transitional activities amounts to 28% of total opex and consists entirely of the activity electricity generation from nuclear energy in existing installations (4.28).

The majority of Vattenfall's taxonomy-aligned opex relates to electricity generation from wind power (4.3), electricity generation from hydro power (4.5), transmission and distribution of electricity (4.9) and electricity generation from nuclear energy in existing installations (4.28). Vattenfall's generation of heat and electricity from gas (4.29–31) represents the absolute majority of not aligned opex.

Vattenfall's total opex amounted to SEK 8.246 million. The absolute majority, as in previous year, consists of maintenance costs. The distribution of opex is shown in the table.

	Proportion of Opex	
	Taxonomy aligned	Taxonomy eligible
CCM	80%	88%
CCA	80%	88%
WTR	N/EL	N/EL
CE	N/EL	N/EL
PPC	N/EL	N/EL
BIO	N/EL	N/EL

EU Taxonomy, cont.

Taxonomy tables for nuclear and gas

Template 1: Nuclear and fossil gas activities

Disclosures referred to in Article 8.6 and 8.7

	Nuclear energy related activities	Turnover Yes/No	Opex Yes/No	Capex Yes/No
1	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	No	No	No
2	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	No	No	No
3	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	Yes	Yes	Yes
	Fossil gas related activities			
4	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	Yes	Yes	Yes
5	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	Yes	Yes	Yes
6	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	Yes	Yes	Yes

EU Taxonomy, cont.

Taxonomy tables for nuclear and gas

Template 2 - Eligible activities that are aligned (denominator)

Disclosures referred to in Article 8.6 and 8.7

TURNOVER - Eligible activities that are aligned		Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change mitigation (CCA)	
Denominator		Amount	%	Amount	%	Amount	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	15,121	20%	15,121	20%	0	0%
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
7	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	62,195	80%	62,195	80%	0	0%
8	**Total applicable KPI**	**77,316**	**100%**	**77,316**	**100%**	**0**	**0%**

OPEX - Eligible activities that are aligned		Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change mitigation (CCA)	
Denominator		Amount	%	Amount	%	Amount	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	2,288	35%	2,288	35%	0[1]	0%[1]
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
7	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	4,320	65%	4,320	65%	0	0%
8	**Total applicable KPI**	**6,608**	**100%**	**6,608**	**100%**	**0**	**0%**

CAPEX - Eligible activities that are aligned		Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change mitigation (CCA)	
Denominator		Amount	%	Amount	%	Amount	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	1,864	7%	1,864	7%	0[1]	0%[1]
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
7	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	24,358	93%	24,358	93%	0	0%
8	**Total applicable KPI**	**26,222**	**100%**	**26,222**	**100%**	**0**	**0%**

1. Vattenfall comply with the technical screeing criteria (including DNSH) for both Climate Change Mitigation (CCM) and Climate Change adoption (CCA). However, Vattenfall doesn't have any CCA opex that is distinguishable from CCM. Therefore the full amount is reported under CCM.

EU Taxonomy, cont.

Taxonomy tables for nuclear and gas

Template 3 - Eligible activities that are aligned (numerator)

Disclosures referred to in Article 8.6 and 8.7

TURNOVER - Eligible activities that are aligned	Amount and proportion					
	CCM + CCA		Climate change mitigation (CCM)		Climate change mitigation (CCA)	
Numerator	Amount	%	Amount	%	Amount	%
1 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
2 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
3 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	15,121	20%	15,121	20%	0	0%
4 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
5 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
6 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
7 Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	62,195	80%	62,195	80%	0	0%
8 Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	**77,316**	**100%**	**77,316**	**100%**	**0**	**0%**

OPEX - Eligible activities that are aligned	Amount and proportion					
	CCM + CCA		Climate change mitigation (CCM)		Climate change mitigation (CCA)	
Numerator	Amount	%	Amount	%	Amount	%
1 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
2 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
3 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	2,288	35%	2,288	35%	0[1]	0%[1]
4 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
5 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
6 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
7 Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	4,320	65%	4,320	65%	0	0%
8 Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	**6,608**	**100%**	**6,608**	**100%**	**0**	**0%**

CAPEX - Eligible activities that are aligned	Amount and proportion					
	CCM + CCA		Climate change mitigation (CCM)		Climate change mitigation (CCA)	
Numerator	Amount	%	Amount	%	Amount	%
1 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
2 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
3 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	1,864	7%	1,864	7%	0[1]	0%[1]
4 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
5 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
6 Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	0	0%
7 Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	24,358	93%	24,358	93%	0	0%
8 Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI	**26,222**	**100%**	**26,222**	**100%**	**0**	**0%**

1. Vattenfall comply with the technical screeing criteria (including DNSH) for both Climate Change Mitigation (CCM) and Climate Change adoptation (CCA). However, Vattenfall doesn't have any CCA opex that is distinguishable from CCM. Therefore the full amount is reported under CCM.

EU Taxonomy, cont.

Taxonomy tables for nuclear and gas

Template 4 - Taxonomy eligible, but not taxonomy-aligned, economic activities

Disclosures referred to in Article 8.6 and 8.7

TURNOVER - Taxonomy-eligible but not taxonomy-aligned economic activities		Amount and proportion					
		(CCM + CCA)		Climate change mitigation (CCM)		Climate change mitigation (CCA)	
		Amount	%	Amount	%	Amount	%
1	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
3	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
4	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	3,515	20%	3,515	20%	0	0%
5	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	11,157	64%	11,157	64%	0	0%
6	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	948	5%	948	5%	0	0%
7	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	1,843	11%	1,843	11%	0	0%
8	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	**17,463**	**100%**	**17,463**	**100%**	**0**	**0%**

OPEX - Taxonomy-eligible but not taxonomy-aligned economic activities		Amount and proportion					
		(CCM + CCA)		Climate change mitigation (CCM)		Climate change mitigation (CCA)	
		Amount	%	Amount	%	Amount	%
1	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
3	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
4	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	270	41%	270	41%	0[1]	0%[1]
5	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	172	26%	172	26%	0[1]	0%[1]
6	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	181	27%	181	27%	0[1]	0%[1]
7	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	43	6%	43	6%	0	0%
8	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	**666**	**100%**	**666**	**100%**	**0**	**0%**

CAPEX - Taxonomy-eligible but not taxonomy-aligned economic activities		Amount and proportion					
		(CCM + CCA)		Climate change mitigation (CCM)		Climate change mitigation (CCA)	
		Amount	%	Amount	%	Amount	%
1	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
2	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
3	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	0	0%
4	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	81	7%	81	7%	0[1]	0%[1]
5	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	351	30%	351	30%	0[1]	0%[1]
6	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	210	18%	210	18%	0[1]	0%[1]
7	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	533	45%	533	45%	0	0%
8	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	**1,175**	**100%**	**1,175**	**100%**	**0**	**0%**

Template 5: Taxonomy non-eligible economic activities

Disclosures referred to in Article 8.6 and 8.7

Under the taxonomy, information should be disclosed for non-eligible economic activities, indicating the amount and share of nuclear and fossil gas-related activities (4.26 to 4.31).

Nuclear energy related activities (4.26–4.28) and fossil gas related activities (4.29–4.31) are covered by the taxonomy, hence taxonomy eligible. Template 5 is therefore not applicable.

1. Vattenfall comply with the technical screeing criteria (including DNSH) for both Climate Change Mitigation (CCM) and Climate Change adoption (CCA). However, Vattenfall doesn't have any CCA opex that is distinguishable from CCM. Therefore the full amount is reported under CCM.

E1 Climate Change: Emissions and targets overview

E1-6 Gross Scopes 1.2.3 and Total GHG emissions according to GHG Protocol[1]	Retrospective				Milestones and target years		
	2017	2023	2024	2023–2024 (%)	2030	2040	Annual % target/ Base year[2]
Emission reduction targets approved by SBTi[3]							
Scope 1 and 2 (market-based) intensity, gCO_2e/kWh	110.4	33.5	33.7	0.6%	25.4	9.1	5.9%
Scope 1 and Scope 3 Sold electricity intensity, gCO_2e/kWh	199.1	88.7	66.6	-24.9%	43.7	9.1	6.0%
Scope 3 – Use of sold products for sold fossil fuels, $MtCO_2e$	15.1	8.9	10.2	14.0%	6.9	1.5	4.2%
Rest of Scope 3, $MtCO_2e$	6.1	4.1	4.2	0.8%		0.6	
Total energy production according to GHG Protocol	114.7	96.2	97.9				
Scope 1 GHG emissions							
Gross Scope 1 GHG emissions, $MtCO_2e$[4, 11]	12.6	3.2	3.3	2.2%	3.3	1.2	5.7%
Percentage of Scope 1 GHG emissions from regulated emission trading schemes, %	99.8	99.7	99.8	0.0%			
Scope 2 GHG emissions, $MtCO_2e$							
Gross location-based Scope 2 GHG emissions[11]	0.04	0.03	0.03	4.1%			
Gross market-based Scope 2 GHG emissions[6, 11]	0.04	0.03	0.03	10.3%			
Scope 3 GHG emissions, $MtCO_2e$[7]							
Total Gross indirect (Scope 3) GHG emissions	40.3	22.7	21.3	-5,9%			
Category 1 – Purchased goods and services	0.5	0.5	0.3	-46.8%			
Category 2 – Capital goods	0.4	0.8	0.8	10.9%			
Category 3 – Fuel and energy-related activities (not included in S1 and S2)	23.3	11.8	9.5	-19.6%			
– of which emissions of upstream fuels	4.3	2.2	2.6	13.7%			
– of which emissions of sold electricity[4]	19.1	9.6	6.9	-27.5%	5.3	1	5.6%
Category 11 – Use of sold products	15.8	9.4	10.6	13.0%			
– of which sold fossil fuels	15.1	9.0	10.2	13.9%	6.9	1.5	4.2%
– of which sold products	0.6	0.4	0.4	-7.0%			
Minor scope 3 categories[8]	0.3	0.2	0.1	-39.9%			

E1-6 Gross Scopes 1.2.3 and Total GHG emissions according to GHG Protocol[1]	Retrospective				Milestones and target years		
	2017	2023	2024	2023–2024 (%)	2030	2040	Annual % target/ Base year[2]
Total GHG emissions							
Total GHG emissions (location-based) (tCO_2eq)	52.9	25.9	24.6	-5%			
Total GHG emissions (location-based) (tCO_2eq) Total GHG emissions (market-based) (tCO_2eq)	52.9	25.9	24.6	-5%			
Biogenic emissions, MtCO2 (biogenic)[9]							
Biogenic Scope 1	1.1	1.3	1.3				
Biogenic Scope 2 (location-based)	0.1	0.1	0.1				
Biogenic Scope 3	0.3	0.1	0.1				
E1-7 GHG mitigation projects financed through carbon credits[10]							
Carbon credits cancelled in the reporting year, $MtCO_2e$	n/a	0.3	0.5				
Share from reduction projects, %	n/a	100	100				
Recognised quality standard – Gold Standard, %	n/a	100	100				
Share from projects within the EU, %	n/a	0	0				
Share of carbon credits that qualify as corresponding adjustments,%	n/a	0	0				
Carbon credits planned to be cancelled in the future – Amount until 2028	n/a	n/a	0.1				

1. All Scope 1, 2 and 3 emission figures reported in this table do not include any removals, or any purchased, sold or transferred carbon credits or GHG allowances.
2. Average annual decrease between 2017–2030. SBTi target methodology means Vattenfall's average annual decrease changes over time.
3. Targets adjusted after divestment of Heat Berlin and general data quality updates. Updated targets approved by SBTi.
4. Intensity target converted to resulting absolute emissions.
5. The joint-ventures which are controlled or operated by Vattenfall are included under our science-based targets.
6. Contractual instruments used for the purchases of electricity includes the share of Guarantees of origin in total electricity purchases. In 2024, this value was 87% out of which 0% was unbundled.
7. 92% of the emissions come from primary data – These are mainly emissions from use of sold goods, emissions from Scope 3.3d electricity sales and part of the supply chain emissions.
8. Emissions from remaining Scope 3 categories, Category 4–8 and 12,13 and 15.
9. Biogenic emissions from Vattenfall's own assets, electricity consumption, electricity sales and other Scope 3 categories such as construction related emissions. Emissions included in climate targets as relevant by each scope and category.
10. Vattenfall does not have any GHG removals or storage between 2017 and 2024. Carbon compensation is used to voluntary offset emissions linked to products and services, main methodologies used are ACM0001 and ACM0002.
11. No emissions from investees not included in financial consolidation

Ten-year overview of sustainability data

Financial consolidation of sustainability data. For emissions data comparable with climate targets see page 146.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
E1-5, Electricity generation[1], TWh	**170.2**	**157.5**	**124.6**	**126.8**	**126.0**	**109.1**	**108.1**	**105.7**	**97.7**	**95.7**
Renewable sources	**43.4**	**39.0**	**40.7**	**40.2**	**42.4**	**47.0**	**49.1**	**49.8**	**46.9**	**48.4**
– of which hydro power	36.6	32.3	32.8	32.1	32.6	35.9	37.6	37.3	32.9	31.1
– of which wind power	5.8	5.8	7.6	7.8	9.5	10.8	11.2	12.1	13.7	17.1
– of which solar power	–	–	–	–	–	–	0.1	0.1	0.1	0.0
– of which biomass and waste (biogenic)	0.9	0.9	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2
Nuclear	**42.2**	**46.9**	**51.9**	**55.0**	**53.4**	**39.3**	**40.4**	**39.6**	**37.4**	**37.9**
Fossil sources (incl. non-biogenic waste)	**84.1**	**71.6**	**32.0**	**31.6**	**30.3**	**22.8**	**18.6**	**16.3**	**13.3**	**9.4**
Electricity delivered from storage, TWh	2.9	2.5	2.8	3.5	3.2	3.8	3.3	3.2	3.2	3.5
Heat production, TWh	–	–	19.7	18.9	15.5	14.2	16.1	14.6	14.5	9.2
Renewable sources	–	–	3.0	3.0	3.2	2.7	3.3	3.2	3.2	2.9
Fossil sources (incl. non-biogenic waste)	–	–	16.7	15.9	12.3	11.5	12.8	11.4	11.3	6.2
E1-5, Energy consumption (excl. from hydro, wind & solar production), TWh	**367**	**344**	**247**	**256**	**241**	**180**	**176**	**168**	**155**	**144**
Renewable sources	**6.5**	**6.6**	**4.8**	**5.1**	**5.2**	**4.6**	**5.2**	**5.0**	**4.9**	**4.3**
– of which biomass, waste (biogenic)	5.6	5.7	3.7	3.9	4.1	3.5	4.0	3.8	3.7	3.4
– of which electricity, heat and steam (renewable)	0.8	0.9	0.9	1.0	0.9	1.0	1.0	1.0	0.9	0.8
– of which self-generated, non-fuel renewable energy	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Share of renewable sources in total consumption	1.8%	1.9%	2.0%	2.0%	2.1%	2.5%	3.0%	3.0%	3.1%	3.0%
Energy from uranium[2], TWh	**129**	**143**	**158**	**168**	**163**	**120**	**123**	**121**	**114**	**116**
Share of nuclear sources in total consumption, %	35%	42%	64%	65%	67%	67%	70%	72%	74%	80%
Fossil sources	**232**	**195**	**83.7**	**83.3**	**73.2**	**54.9**	**47.2**	**42.4**	**35.9**	**24.0**
– of which gas	27.7	32.5	36.8	38.6	44.3	41.8	38.7	34.7	28.4	20.3
– of which hard coal	46.1	43.9	42.1	41.1	25.6	10.7	5.9	5.8	5.3	2.3
– of which lignite	153	113	1.5	–	–	–	–	–	–	
– of which peat	0.5	0.5	0.4	0.6	0.2	–	–	–	–	–

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
– of which waste (non-biogenic)	2.6	2.6	1.2	1.2	1.2	0.7	0.8	0.7	0.8	0.9
– of which other fuels, including oil	1.8	1.7	1.5	1.7	1.6	0.3	0.4	0.3	0.3	0.1
– of which electricity, heat and steam (non-renewable)	0.2	0.3	0.2	0.2	0.3	1.4	1.4	0.9	1.3	0.4
Share of fossil sources in total consumption, %	63%	57%	34%	33%	30%	31%	27%	25%	23%	17%
Total energy consumption per net revenue, MWh/SEK	–	–	6.6	6.1	5.2	4.1	3.5	2.5	1.9	2.1
Nuclear, Uranium (tonnes)	143.0	119.6	105.9	118.0	136.4	98.6	119.2	83.2	128.5	65.9
Emissions to air (Scope 1)[8]										
Carbon dioxide equivalents (CO_2e)[3], Mtonnes	84.3	68,4	23.2	22.6	18.4	12.2	10.3	9.5	7,9	5.2[4]
Biogenic CO_2[5], Mtonnes	1.9	1,2	1.3	1.3	1.4	1.2	1.4	1.3	1,3	1.3
Nitrogen oxides (NOx), ktonnes	52.2	10,2	9.8	9.9	7.4	5.5	5	4.6	4,3	3.0
Sulphur dioxide (SO_2), ktonnes	50.1	4,2	4.1	4.2	2.3	1.5	1.3	1.2	1,1	1.0
Particulate matter (PM), ktonnes	1.5	0,3	0.3	0.2	0.1	0.1	0.1	0.1	0,1	0.0
Carbon dioxide equivalents (CO_2e)[3], Mtonnes (Scope 2)[6]										
Market based	–	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.04
Location based	–	–	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.03
CO_2e intensity, g/kWh (Scope 1 + scope 2 market based)[1]	**434**	**381**	**161**	**156**	**131**	**100**	**83.5**	**79.9**	**71.3**	**49.9**
CO_2e intensity, g/SEK (Scope 1 + scope 2 market based)	**–**	**–**	**172**	**149**	**111**	**77.7**	**57.6**	**40.1**	**27.6**	**21.3**
Carbon dioxide equivalents (CO_2e), Mtonnes (Scope 3)	**–**	**–**	**39.4**	**40.9**	**34.7**	**28.5**	**29.9**	**23.3**	**23.2**	21.5
Capital Goods	–	–	0.4	0.2	0.5	0.8	0.9	1.1	0.8	0.8
Purchased goods and services	–	–	–	–	–	–	–	–	0.5	0.3
Fuel and energy related[6]	–	–	23.5	24.0	19.6	14.6	15.1	11.9	12.4	9.8
Upstream transport and distribution	–	–	0.2	0.3	0.2	0.1	0.1	–	0.1	0.0
Waste related	–	–	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.0
Business travel	–	0.030	0.030	0.025	0.017	0.008	0.002	0.008	0.011	0.013
Use of sold products[7]	–	–	15.0	16.2	14.2	12.9	13.6	10.1	9.4	10.6

1. Electricity generation parameters have been adjusted to report electricity delivered from storage, primarily from pumped storage plants, separately. This update also impacts CO_2e intensity, g/kWh.
2. Nuclear energy added to energy consumption as energy from uranium.
3. Before 2017 only CO_2. From 2017 including CH_4, N2O and SF_6.
4. Of the total greenhouse emissions 0.1 Mtonnes CO_2e consist of SF6, CH_4 and N_2O emissions. Characterisation factors are obtained from the IPCC Sixth Assessment report.
5. CO_2 emissions from combustion of biomass.
6. Emissions from fuel and energy relating to electricity purchased for sale to end customers, methodology updated to align with contracts with end customers.
7. Use of sold products updated to include sold gas boilers.
8. Either calculated or measured directly in different countries. Emission factors applied depend on the technology and local methodologies.

Ten-year overview of sustainability data, cont.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Optional disclosure[1]										
Emissions related to losses in pumped storage, tCO_2e	–	–	–	–	–	0.2	0.2	0.2	0.2	0.2
Greenhouse gas emissions Scope 1, 2 and 3, CO_2e, market based[2,3], Mtonnes	**–**	**–**	**62.7**	**63.6**	**53.2**	**40.9**	**40.2**	**32.9**	**31.2**	**26.7**
Greenhouse gas emissions Scope 1, 2 and 3, CO_2e, location based[2,3], Mtonnes	**–**	**–**	**62.7**	**63.6**	**53.3**	**40.9**	**40.2**	**32.9**	**31.2**	**26.7**
Greenhouse gas emission per net revenue, market based, tCO_2eq/SEK	**–**	**–**	**0.46**	**0.41**	**0.31**	**0.26**	**0.22**	**0.14**	**0.11**	**0.11**
Greenhouse gas emission per net revenue, location based, tCO_2eq/SEK	**–**	**–**	**0.46**	**0.41**	**0.31**	**0.26**	**0.22**	**0.14**	**0.11**	**0.11**
Waste and by-products, ktonnes										
Hazardous waste	96	130	61	59	72	37	50	49	37	42
Non-hazardous waste	338	198	147	98	75	39	40	37	28	21
Ash from coal and lignite	6,219	4,692	671	579	423	160	110	106	104	43
Ash from biomass	38	41.3	37.4	38.4	32.9	21.6	20.8	25.4	17.5	12.2
Slag from waste incineration	229	237	168	170	173	100	105	99	76	97
Gypsum	3,048	2,341	169	185	128	45	26	22	26	12
Radioactive waste										
Low and medium radioactive operational waste, m^3	3,353	1,013	912	829	411	628	434	408	214	606
Core components, tonnes	7	17	15	31	13	58	84	1	21	1
Spent nuclear fuel, tonnes	197	124	175	137	260	274	136	157	171	188
SAIDI (minutes/customer)										
Sweden	212	150	125	187	439	148	112	157	132	123
SAIFI (number/customer)										
Sweden	2.2	2.1	1.8	2.9	2.4	2.0	1.8	2.1	1.9	1.9

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Our people										
Number employees, FTE,	**28,567**	**19,935**	**20, 041**	**19,910**	**19,814**	**19,859**	**18,835**	**19,638**	**20,994**	**20,655**
- of which females	6,399	4,773	4,827	4,840	5,000	5,083	4,985	5,439	6,017	6,288
- of which temporary employed (not permanent contract)	761	550	609	618	664	723	686	830	902	897
Employee turnover, %	–	–	–	–	–	7.5%	8.0%	10.2%	9.0%	9.4%
Sick leave										
- men %	4.1%	3.5%	3.6%	3.5%	3.2%	3.1%	3.0%	2.7%	3.0%	2.6%
- females %	5.8%	5.4%	5.7%	5.4%	5.1%	4.6%	4.2%	3.6%	4.0%	3.5%
Working related accidents										
Internal LTIF (employees)	2.6	2.0	1.5	1.9	2.1	1.8	1.7	1.1	1.5	1.4
External LTI (contractors)[4]	133	101	80	71	88	78	86	62	73	67
Gender diversity										
Female managers %	19%	22%	23%	24%	26%	27%	30%	30%	31%	34%
Share of managers per age category total										
-29	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
30-49	52%	56%	58%	56%	56%	57%	57%	56%	60%	61%
50-	46%	43%	40%	43%	43%	42%	42%	43%	39%	38%

1. Optional Information in GHG Protocol in addition to Scope 1, 2 and 3.
2. Emissions from fuel and energy relating to electricity purchased for sale to end customers, methodology updated to align with contracts with end customers.
3. Use of sold products updated to include sold gas boilers.
4. As the calculation of LTIF for subcontractors is not reliable, only LTI is reported.

Ratings

Sustainability and Environment, Social, Governance (ESG) ratings are important for customers, investors and stakeholders in general to gain an understanding of a company's performance. Vattenfall believes in the benefits of transparency and participates in numerous surveys and ratings, both voluntarily and at the request of customers.

Learn more
For the latest ESG ratings assessment information please visit this page.
Read more about the respective ratings see links below:

- **CDP**
- **Ecovadis**
- **Institutional Shareholder Services, ISS**
- **MSCI**
- **Sustainalytics**
- **World Benchmarking Alliance**

Rating firm	Focus	Score	Latest assessment
CDP	The leading system globally for disclosing environmental data for investors, companies, cities, states and regions.	CDP Climate Score: A / A. CDP Water Score: B / A Climate A Water B	2024, January Assessment frequency: yearly
ecovadis	An online platform that enables companies to monitor the performance of their supply chains by providing supplier sustainability ratings.	Score: 85 / 100. "Platinum rating" 85	2024, April Assessment frequency: yearly
ISS	ESG rating mainly for the investment community. The assessment spans over a range of ESG issues that are analysed on the basis of up to to 100 rating critera, most of them sector specific.	Score: B / A+ B	2022, December Assessment frequency: 3 years
MSCI	ESG rating mainly for the investment community. Uses methododology to identify industry leaders and laggards. Ranks companies according to their ESG risk exposure and how well they manage those risks relative to peers.	Score: AAA / AAA AAA	2024, December Assessment frequency: yearly
SUSTAINALYTICS	ESG rating mainly for the investment community. Uses methododology to identify industry leaders and laggards. Ranks companies according to their ESG risk exposure and how well they manage those risks relative to peers.	Score: Medium Risk / Negligible Risk Medium Risk	2023, December Assessment frequency: yearly
World Benchmarking Alliance	The Electric Utilities Benchmark 2023 presents a ranking of 68 keystone electric utilities companies based on an Assessing low-Carbon Transition (ACT) assessment and a social assessment comprising Core Social and Just Transition Indicators. The overall score measures the company on their alignment with the low-carbon transition as well as their social equity in the process.	Score: 51.6 / 100, #7 out of 68 companies ranked 51.6	2023, December Assessment frequency: yearly

GRI index

This material references the following GRI standards.

GRI Standard	Disclosure number	Disclosure title	Page and/or Note number(s)	Omissions
GRI 207: Tax 2019				
	207-1	Approach to tax	125	
	207-2	Tax governance, control, and risk management	125	
	207-3	Stakeholder engagement and management of concerns related to tax	125	
	207-4	Country-by-country reporting	125, Note 1, Note 6, Note 11	207-4-b-v Not applicable: Vattenfall accounting policies eliminate Intra-Group transactions
GRI 303: Water and Effluents 2018				
	303-1	Interactions with water as a share resource	105	
	303-2	Management of water discharge-related impacts	105	
	303-3	Water withdrawl	105	
	303-4	Water discharge	105	303-4b to d: information incomplete: total water discharges per total dissolved solids and priority substances of concern for which discharges are treated since these are not assessed to be significant for Vattenfall's plants
	303-5	Water consumption	105	
GRI 305: Emissions 2016				
	305-7	Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions	147	305-7-aiii/aiv/av Information incomplete: emissions of POPs, VOC and HAP are not reported because they are not measured regularly since they are not significant for Vattenfall plants
GRI 306: Waste 2020				
	306-1	Waste generation and significant waste-related impacts	104, 148	
	306-2	Management of significant waste related-impacts	104	
	306-3	waste generated	104, 148	
GRI 405: Diversity and Equal Opportunities 2016				
	405-1	Diversity of governance bodies and employees	109, 121	

Auditor's Limited Assurance Report on Vattenfall AB's Green Bond Investor report

To the annual general meeting of Vattenfall AB, corporate identity number 556036-2138

Introduction

We have been engaged by the Board of directors and President and CEO of Vattenfall AB ("Vattenfall") to undertake a limited assurance of Vattenfall AB's Investor report Green Bonds for the year 2024 ("Investor report"). The Investor report is defined on page 26 in Vattenfall's Annual and Sustainability report 2024.

Responsibilities of the Board and President and CEO

The Board of Directors and President and CEO are responsible for evaluating and selecting eligible assets, for the use and management of bond proceeds, and for preparing an Investor Report in accordance with applicable criteria. The criteria are defined on page 26 in the Annual and Sustainability Report 2024 and consist of relevant parts of Vattenfall's Green Financing Framework dated May 2022, available on Vattenfall's website, as well as the accounting and calculation principles that the Company has developed. This responsibility includes the internal control relevant to the preparation of an Investor Report that is free from material misstatements, whether due to fraud or error.

Responsibilities of the auditor

Our responsibility is to express a limited assurance conclusion on the Investor Report based on the procedures we have performed and the evidence we have obtained. Our assignment is limited to the historical information that is presented and thus does not include future-oriented information.

We conducted our limited assurance engagement in accordance with ISAE 3000 (revised) *Assurance Engagements Other than Audits or Reviews of Historical Financial Information.* A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the selected information in the Investor Report and applying analytical and other limited assurance procedures. A limited assurance engagement has a different focus and a considerably smaller scope compared to the focus and scope of an audit in accordance with International Standards on Auditing and generally accepted auditing standards.

The audit firm applies ISQM 1 (International Standard on Quality Management) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent in relation to Vattenfall AB according to generally accepted auditing standards in Sweden and have fulfilled our professional ethics responsibility according to these requirements.

The procedures performed in a limited assurance engagement do not allow us to obtain such assurance that we become aware of all significant matters that could have been identified if an audit was performed. The conclusion based on a limited assurance engagement, therefore, does not provide the same level of assurance as a conclusion based on an audit has.

Our procedures are based on the criteria defined by the Board of Directors and President and CEO as described above. We consider these criteria as suitable for the preparation of the Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

Conclusion

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Investor Report is not prepared, in all material respects, in accordance with the criteria defined by the Board of Directors and Executive Management.

Stockholm, 24 march 2025
PricewaterhouseCoopers AB

Eva Carlsvi
Authorized Public Accountant
Auditor in Charge

Aleksander Lyckow
Authorized Public Accountant

This is a translation of the Swedish language original. In the event of any differences between this translation and the Swedish language original, the latter shall prevail.

Auditor's limited assurance report of Vattenfall AB's voluntary sustainability statement

To the general meeting of the shareholders of Vattenfall AB, corporate identity number 556036-213

Conclusion
We have been appointed by the Board of Directors to conduct a limited assurance engagement of the sustainability statement for Vattenfall AB for the financial year 2024. The sustainability statement is included on pages 74–148 and 150 in this document.

Based on our limited assurance engagement as described in the section Auditor's responsibility, nothing has come to our attention that causes us to believe that the sustainability statement does not, in all material respects, meet the requirements of the Swedish Annual Accounts Act which includes,

- whether the sustainability statement meets the requirements of ESRS,
- whether the process the company has carried out to identify reported sustainability information has been conducted as described in IRO-1 of the sustainability statement,
- compliance with the reporting requirements of the EU's Green Taxonomy Regulation Article 8.

Basis for conclusion
We have conducted the limited assurance engagement in accordance with FAR's recommendation RevR 19 *Revisorns översiktliga granskning av den lagstadgade hållbarhetsrapporten*. Our responsibility according to this recommendation is further described in the section Auditor's responsibility.

We believe that the evidence we have obtained are sufficient and appropriate to provide a basis for our conclusion.

Other matter
The sustainability statement for the previous financial year has not been subject to a limited assurance, in accordance with RevR 19 and no review of the comparative figures in the sustainability statement for the year 2024 (the financial year) has therefore been performed.

Other information than the sustainability statement
This document also contains other information than the sustainability statement and is found on pages 1–73, 104–105, 121–122, 125, 149 and 153-221. The Board of Directors and the Managing Director are responsible for this other information.

Our conclusion on the sustainability statement does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our limited assurance engagement on the sustainability statement, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the sustainability statement. In this procedure we also take into account our knowledge otherwise obtained in the limited assurance engagement and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors and the Managing Director
The Board of Directors, and the Managing Director, are responsible for the preparation of sustainability statement in accordance with Chapter 6, Sections 12–12f of the Swedish Annual Accounts Act, and for such internal control as they determine is necessary to enable the preparation of the sustainability statement that is free from material misstatements, whether due to fraud or error.

Auditor's responsibility
Our responsibility is to express a conclusion on whether the sustainability report has been prepared in accordance with Chapter 6, Sections 12–12f of the Swedish Annual Accounts Act based on our review. Our responsibility is obtaining limited assurance whether the sustainability statement is free from material misstatement based on our review. The limited assurance engagement has been conducted in accordance with FAR's recommendation RevR 19 *Revisorns översiktliga granskning av den lagstadgade hållbarhetsrapporten*. This recommendation requires that we plan and perform our procedures to obtain limited assurance that the sustainability statement is prepared in accordance with these requirements.

The procedures in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. This means that it is not possible for us to obtain such assurance that we become aware of all significant matters that could have been identified if a reasonable assurance engagement had been performed.

Our firm applies ISQM 1 (International Standard on Quality Management), which requires the firm to design, implement and operate a system of quality management, including policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

We are independent of Vattenfall AB in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

A limited assurance engagement involves performing procedures to obtain evidence to support the sustainability information. The auditor selects the procedures to be performed, including assessing the risks of material misstatements in the sustainability statement, whether due to fraud or error. In this risk assessment, the auditor considers the parts of the internal control that are relevant to how the Board of Directors and the Managing Director prepares the sustainability statement, in order to design procedures that are appropriate under the circumstances, but not for the purpose of providing a conclusion on the effectiveness of the company's internal control. The review consists of making inquiries, primarily of persons responsible for the preparation of the sustainability statement, performing analytical review, and conducting other limited review procedures.

Summary of the work performed
Our procedures regarding the process that the company has implemented to identify sustainability information to report included, but were not limited to, the following:

Obtaining an understanding of the process by:

- Making inquiries to understand the sources of information used by management (e.g., stakeholder dialogues, business plans, and strategy documents); and
- Reviewing the company's internal documentation of its process; and
- Evaluating whether the information obtained from our actions regarding the process implemented by the company is consistent with the description of the process in IRO-1 of the sustainability report.

Our audit procedures regarding the sustainability report included, but were not limited to, the following:

- Through inquiries, obtained a general understanding of the internal control environment, reporting processes, and information systems relevant to the preparation of the information in the sustainability report.
- Evaluated whether the information identified by the process is included in the sustainability statement.
- Evaluated whether the structure and the presentation of the sustainability statement is in accordance with the ESRS.
- Performed inquiries of relevant personnel and analytical procedures on selected information in the sustainability statement.
- Performed substantive assurance procedures on selected information in the sustainability statement.
- Through inquiries and analytical procedures, evaluate supporting evidence to the methods, assumptions and data for developing significant estimates and forward-looking information.
- Obtained an understanding of the process to identify taxonomy-eligible and taxonomy-aligned economic activities and the corresponding disclosures in the sustainability statement.
- Performed substantive assurance procedures on selected disclosures in the sustainability statement on the EU green taxonomy.

Inherent limitations in the preparation of the sustainability statement
In reporting forward-looking information in accordance with ESRS, the board of directors and the managing director of Vattenfall AB are required to prepare the forward-looking information on the basis of disclosed assumptions about events that may occur in the future and possible future actions by Vattenfall AB. Actual outcomes are likely to be different since anticipated events frequently do not occur as expected.

Stockholm, 24 March 2025
PricewaterhouseCoopers AB

Eva Carlsvi
Authorized Public Accountant
Auditor in Charge

Aleksander Lyckow
Authorized Public Accountant

Auditor's assurance report on Vattenfall AB's supplementary sustainability information

To the annual general meeting of Vattenfall AB, corporate identity number 556036-2138

Introduction
We have been engaged by the Board of directors and the President and CEO of Vattenfall AB to perform assurance procedures over Vattenfall AB's supplementary sustainability information. The company's supplementary sustainability information consists of non-material information that is provided as a supplement to the Sustainability statement included on pages 74–148 and 150. The supplementary information is based on the Global Reporting Initiative's (GRI) standards and is included on pages 104–105, 121–122, 125 and 150 in the sustainability statement. The supplementary sustainability information also includes four strategic key performance indicators which are included on page 12 in the annual and sustainability report.

Responsibilities of the Board and President and CEO
The Board of Directors and the President and CEO are responsible for the preparation of the supplementary sustainability information. The criteria are described on page 150 of the Sustainability statement, and consists of the parts of the sustainability reporting framework issued by the GRI (Global Reporting Initiative) Sustainability Reporting Standards which are applicable to the Sustainability Report, as well as the accounting and calculation principles that Vattenfall AB has developed. This responsibility also includes the internal control which is deemed necessary to establish supplementary sustainability information that does not contain material misstatement, whether due to fraud or error.

Responsibilities of the auditor
Our responsibility is to express a conclusion on the supplementary sustainability information based on the assurance procedures we have performed. Our assignment is limited to the historical information that is presented and thus does not include future-oriented information.

We conducted our assurance engagement in accordance with ISAE 3000 (revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information. The engagement is a limited assurance engagement over the supplementary sustainability information included on pages 104–105, 121–122, 125 and 150 in the sustainability statement, and a reasonable assurance (audit) engagement over the four strategic key performance indicators further detailed below and included on page 12 in the annual and sustainability report.

The objective of an audit is to obtain reasonable assurance that the information is free of material misstatements. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the supplementary sustainability information and applying analytical and other limited assurance procedures. A limited assurance engagement have a different focus and a considerably smaller scope compared to the focus and scope of an audit in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden.

The audit firm applies ISQM 1 (International Standard on Quality Management) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent in relation to Vattenfall AB according to generally accepted auditing standards in Sweden and have fulfilled our professional ethics responsibility according to these requirements.

The procedures performed in a limited assurance engagement do not allow us to obtain such assurance that we become aware of all significant matters that could have been identified if an audit was performed. The conclusion based on a limited assurance engagement, therefore, does not provide the same level of assurance as a conclusion based on an audit has. As this is a combined engagement we provide our conclusions regarding the limited assurance and reasonable assurance procedures in separate sections.

Our reasonable assurance engagement includes Vattenfall's four strategic following key performance indicators on page 12 relating to:
- Customer engagement - Net Promoter Score (NPS)
- Carbon dioxide emissions intensity
- Lost Time Injury Frequency (LTIF)
- Employee Engagement Index

as well as a limited assurance of:
- GRI 207: Tax 2019
- GRI 305: Emissions 2016
- GRI 303: Water and Effluents 2018
- GRI 405: Diversity and Equal Opportunities 2016
- GRI 306: Waste 2020

Our procedures are based on the criteria defined by the Board of Directors and the President and CEO as described above. We consider these criteria as suitable for the preparation of the supplementary sustainability information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

Conclusion
Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the supplementary sustainability information on pages on pages 104–105, 121–122, 125 and 150 is not, in all material respects, prepared in accordance with the criteria defined by the Board of Directors and the President and CEO.

In our opinion the information in the supplementary sustainability information on page 12, which has been subject to our reasonable assurance procedures has, in all material respects, been prepared in accordance with the criteria defined by the Board of Directors and the President and CEO.

Stockholm, 24 March 2025
PricewaterhouseCoopers AB

Eva Carlsvi
Authorized Public Accountant
Auditor in Charge

Aleksander Lyckow
Authorized Public Accountant

This is a translation of the Swedish language original. In the event of any differences between this translation and the Swedish language original, the latter shall prevail.

Financial information

Contents

Amounts in SEK million unless indicated otherwise.

Vattenfall's financial performance

Underlying operating profit was relatively unchanged and amounted to SEK 19.8 billion in 2024, a decrease of SEK 0.2 billion compared to 2023. Lower contributions from operating segments Wind and Customer & Solutions was partially offset by higher contribution from Distribution, Power Generation and Other.

Amounts in SEK million	2024	2023
Net sales	245,570	290,168
Operating profit before depreciation, amortisation and impairment losses (EBITDA)[1]	60,779	39,685
Underlying operating profit before depreciation, amortisation and impairment losses[1]	40,436	40,340
Operating profit (EBIT)[1]	38,851	16,991
Underlying operating profit[1]	19,828	20,005
Profit for the year	33,380	10,395
Funds from operations (FFO)[1]	35,469	30,058
Net debt[1]	-2,767	68,424
Adjusted net debt[1]	72,118	139,518
Electricity generation, TWh	99.6	100.9
– of which, hydro power	34.7	36.1
– of which, nuclear power	37.9	37.4
– of which, fossil-based power	9.3	13.3
– of which, wind power	17.4	13.8
– of which, biomass, waste	0.3	0.3
Sales of electricity, TWh[2]	160.2	168.0
Sales of heat, TWh	9.1	13.5
Sales of gas, TWh	50.9	44.5
CO_2 equivalents, Mtonnes[3]	0.0	7.9
Work-related accidents, number (LTIF)[4]	1.4	1.5
Number of employees, full-time equivalents	20,655	20,995
Key ratios		
Return on capital employed, %[5]	12.4	5.3
Net debt/equity, %	-1.4	49.1
FFO/adjusted net debt, %	49.2	21.5
Adjusted net debt/EBITDA, times	1.2	3.5

1. See Definitions and calculations of key ratios for definitions of Alternative Performance Measures.
2. Sales of electricity also include bilateral trading on the Nordic electricity exchange.
3. Scope 1.
4. Lost time Injury Frequency (LTIF) is expressed in terms of the number of lost time work injuries (per 1 million hours worked), i.e., work-related accidents resulting in absence longer than one day, and accidents resulting in fatality. The measure pertains only to Vattenfall empolyees.
5. The key ratio is based on average capital employed.

Sustainability reporting
In addition to reporting on financial performance, Vattenfall Is subject to statutory sustainability reporting in accordance with the Swedish Annual Accounts Act. The Sustainability Report was delivered to the auditor at the same time as the Annual Report. The Sustainability Report, which can be found on pages 74–148 with exception for page 149 of this printed document, pertains to Vattenfall and its subsidiaries.

Wholesale price trend

Average Nordic electricity spot prices were 36% lower in 2024 than in 2023. A stronger hydrological balance, increased wind power production and lower electricity prices on the continent reduced the prices in the Nordics. Lower gas prices as well as increased generation from wind and solar power contributed to lower prices on the continent, which also affected the electricity price in southern Sweden, as these are closely interlinked. The lower average electricity prices had a negative effect on Vattenfall's profits. However, price hedges increased Vattenfall's achieved price in the Nordics.

Electricity generation

Total electricity generation in 2024 was 99.6 TWh (100.9).

Hydro power generation amounted to 34.7 TWh (36.1). Nordic reservoir levels were at 82% (56%) of capacity at year-end, which is 25 percentage points above the normal level.

Nuclear power generation was relatively unchanged and amounted to 37.9 TWh (37.4). Combined availability for Vattenfall's nuclear power plants for 2024 was 80.4% (80.5%). Forsmark had a decrease in availability to 78.0% (87.3%) mainly due to a prolonged standstill of Forsmark 3. The total generation from Forsmark also decreased to 21.8 TWh (24.3). Ringhals increased its availability to 84.3% (70.0) primarily due to higher availability of Ringhals 4 and had an increased generation to 16.1 TWh (13.1).

Electricity generation from wind power amounted to 17.4 TWh (13.8) in 2024, corresponding to an increase of around 26% mainly owing to Hollandse Kust Zuid in the Netherlands and Vesterhav Offshore wind farms in Denmark.

Fossil-based power generation decreased with 4 TWh and totalled to 9.3 TWh, following the divestment of the heat operations in Berlin and the gas-fired condensing plant Magnum in the Netherlands.

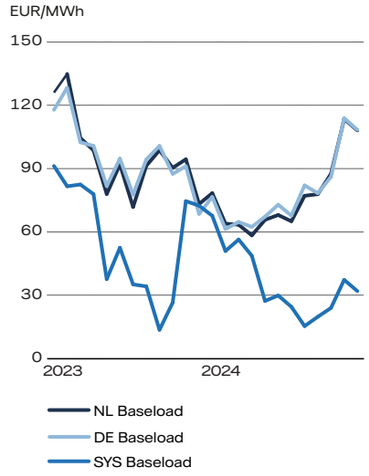
Sales of electricity, heat and gas

Sales of electricity, excluding sales to Nord Pool Spot and deliveries to minority shareholders, decreased by 10 TWh to 115.9 TWh (125.9). Sales of gas increased by 6.4 TWh to 50.9 TWh (44.5) due to growth of the customer base in Germany and increased sales to business customers in the Netherlands. Sales of heat decreased by 4.4 TWh to 9.1 TWh (13.5) as a result of the divestment of the heat business in Berlin.

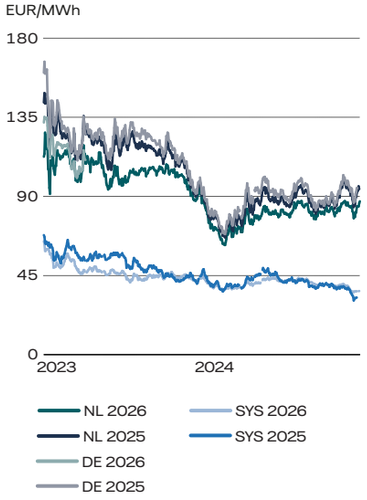
Vattenfall's price hedging

Vattenfall continuously hedges its future electricity generation through sales in the forward and futures markets. Spot prices therefore have only a limited impact on Vattenfall's earnings in the near term. With the current portfolio structure, the dominant market risk exposure is coupled to Nordic nuclear and hydro power generation. We generate a substantial share of regulated revenue from electricity distribution, and heat as well as (partially) subsidised wind power, which diversifies the risk exposure in our portfolio. However, Vattenfall has price exposure between electricity and used fuel/emissions allowances on the continent. This has a lower risk profile than the outright power exposure in the Nordic countries. Price risk for uranium is limited, as uranium accounts for a relatively small share of the total cost of nuclear power generation.

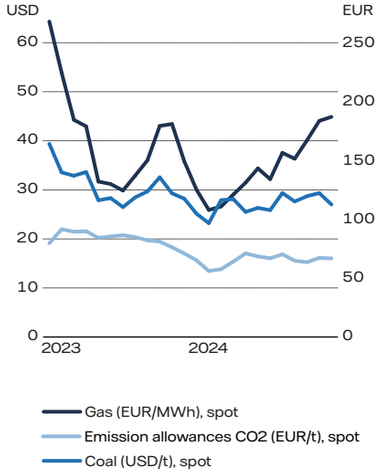
Electricity spot prices in the Nordic countries, Germany and the Netherlands, monthly averages



Electricity futures prices in the Nordic countries, Germany and the Netherlands



Price trend for coal, gas and CO_2 emission allowances



Comments on the consolidated income statement

Sales

	External net sales		Internal net sales		Total net sales	
	2024	2023	2024	2023	2024	2023
Customers & Solutions	175,530	215,626	13,462	19,575	188,992	235,201
Power Generation[1]	44,906	37,760	124,981	169,750	169,887	207,510
Wind	4,174	8,537	17,411	16,836	21,585	25,373
Distribution	13,229	10,445	622	694	13,851	11,139
Other[2]	7,731	17,800	13,705	16,208	21,436	34,008
Eliminations	–	–	-170,181	-223,063	-170,181	-223,063
Total	**245,570**	**290,168**	**–**	**–**	**245,570**	**290,168**

1. Pertains mainly to Tradings' sales of electricity, fuel and CO_2 emission allowances to other segments within Vattenfall.
2. "Other" pertains mainly to all staff functions including treasury activities and Shared Service Centres.

Consolidated net sales decreased by 44.6 SEK billion compared with 2023. The decrease is mainly explained by negative price effects in customer sales of electricity and gas, and by the divestment of the heat operations in Berlin. This was partially offset by higher gas sales to customers.

Underlying operating profit

Amounts in SEK million	2024	2023
Operating profit (EBIT)	38,851	16,991
Depreciation, amortisation and impairment losses	21,928	22,694
Operating profit before depreciation, amortisation and impairment losses (EBITDA)	**60,779**	**39,685**
Items affecting comparability excl. impairment losses and reversed impairment losses	-20,343	655
Underlying operating profit before depreciation, amortisation and impairment losses[1]	**40,436**	**40,340**
Operating profit (EBIT)	38,851	16,991
Items affecting comparability	-19,023	3,014
Underlying operating profit[1]	**19,828**	**20,005**

1. See Definitions and calculations of key ratios for definition of this Alternative Performance Measure.

The underlying operating profit decreased by SEK 0.2 billion, which is explained by:

- Higher earnings contribution from the Distribution operating segment (SEK +1.1 billion), mainly due to higher revenues. The comparison is to a great extent affected by the temporary reduction of the electricity grid tariff during the second half of 2023
- Higher earnings contribution from the Power Generation operating segment (SEK +1.0 billion) mainly due to a positive effect from price hedging in the Nordics which offset the lower electricity prices and together with lower price area differences contributed to a higher achieved price in the Nordics
- Higher earnings contribution from the Other[1] operating segment (SEK +0.9 billion), mainly as a result of higher earnings from the heat operations in Berlin, which were consolidated until 2 May 2024
- Lower earnings contribution from the Wind operating segment (SEK -0.7 billion) as a result of lower electricity prices, higher costs and higher depreciation mainly due to new assets
- Lower earnings contribution from the Customers & Solutions operating segment (SEK -2.6 billion) partly driven by increased regulatory costs in the German customer business, and partly by lower gas prices impacting the heat business
- Other items, net (SEK +0.2 billion)

Operating segments

	Operating profit (EBIT)		Underlying operating profit	
	2024	2023	2024	2023
Customers & Solutions	6,751	7,273	6,581	9,203
Power Generation	16,129	2,790	4,035	3,075
Wind	5,536	6,646	5,884	6,544
Distribution	2,580	1,530	2,599	1,526
Other	7,686	-1,239	560	-334
Eliminations	169	-9	169	-9
Total	**38,851**	**16,991**	**19,828**	**20,005**

	2024	2023
Underlying operating profit	19,828	20,005
Items affecting comparability[1]	19,023	-3,014
Financial net	-892	-769
Profit before income taxes	**37,959**	**16,222**

1. "Other" pertains mainly to all staff functions including treasury activities, Shared Service Centres and material capital gains and -losses.

The underlying operating profit for the Customer & Solutions operating segment decreased by SEK 2.6 billion compared to 2023. The decrease is partly driven by increased regulatory costs in the German customer business, and partly by lower gas prices impacting the heat business. The underlying operating profit for the Power Generation operating segment increased by 1.0 billion, mainly as a result of a positive effects from price hedging in the Nordic region. This was partly offset by an increase in nuclear provisions, as well as by lower generated volumes from hydro power. The underlying operating profit for the Wind operating segment decreased by SEK 0.7 billion driven by lower electricity prices, higher costs and higher depreciation, mainly due to new assets. This was partially offset by higher volumes, higher subsidies for German offshore wind farms and some availability warranty payments. The underlying operating profit for the Distribution operating segment increased by SEK 1.1 billion, which is mainly explained by higher revenues. The comparison is to a great extent affected by the temporary reduction of the electricity grid tariff during the second half of 2023. The higher revenues were partly offset by higher costs for the transmission grid as well as higher operating expenses and depreciation, primarily as a result of growth. Read more about the Group's operating segments in Note 6 to the consolidated accounts, Segment reporting.

Items affecting comparability that affected operating profit

Amounts in SEK million	2024	2023
Capital gains	9,852	240
Capital losses	-1,765	-184
Impairment losses	-1,335	-6,520
Reversed impairment losses	15	4,161
Provisions	643	1,243
Unrealised changes in the fair value of energy derivatives	9,899	-1,594
Unrealised changes in the fair value of inventories	1,528	-662
Other infrequent items affecting comparability	186	302
Total	**19,023**	**-3,014**

Items affecting comparability amounted to SEK 19.0 billion in 2024, most of which relates to capital gains from the sale of 49% of the Nordlicht I & II offshore wind projects (SEK 5.1 billion) and the sale of Norfolk Offshore Wind Zone (SEK 4.6 billion), as well as changes in the market value of energy derivatives (SEK 9.9 billion).

Items affecting comparability during 2023 amounted to SEK -3.0 billion. Impairments and reversed impairments amounted to SEK -2.4 billion net, mainly related to assets in offshore wind and in Business Area Heat. Changes in fair value of energy derivatives and inventories as well as changes in provisions amounted to SEK -1.0 billion in total.

Costs for CO_2 emission allowances

Costs for CO_2 emission allowances for own use amounted to SEK 1.3 billion in 2024, compared with SEK 6.2 billion in 2023. The decrease is mainly attributable to the divestment of the heat operations in Berlin and to lower average prices for CO_2 emission allowances.

Research and development

Vattenfall conducts research and development (R&D) to contribute to and support the execution of its strategy in both the short and long term. In 2024 Vattenfall invested SEK 492 million (464) in R&D. For further information on Vattenfall's R&D activities, see page 27.

Financial items

Financial items amounted to SEK -0.9 billion in 2024, compared to SEK -0.8 billion in 2023. The decrease is driven by the lower return from the Nuclear Waste Fund.

Taxes

For 2024, the Group reports a tax expense of SEK 4,6 billion calculated on a reported profit before tax of SEK 38.0 billion. The effective tax rate amounts to 12.1%. The low effective tax rate is mainly due to the recognition of deferred tax assets relating to the German operations, the tax-exempt capital gain of the Norfolk divestment and divestment of 49% of the shares in Nordlicht 1 and 2. For 2023, the group reported a tax expense of SEK 5.8 billion and an effective tax rate of 35.9%. For further information, see Note 12 to the consolidated accounts, Income taxes.

Comments on the consolidated balance sheet

Capital employed

Amounts in SEK million	31 December 2024	31 December 2023
Intangible assets: current and non-current	21,774	24,583
Property, plant and equipment	273,707	263,031
Participations in associated companies and joint arrangements	5,037	4,140
Deferred and current tax assets	8,887	14,523
Non-current noninterest-bearing receivables	723	639
Contract assets	260	119
Inventories	25,074	18,602
Trade receivables and other receivables	45,047	44,884
Prepaid expenses and accrued income	16,593	17,284
Unavailable liquidity	3,810	5,446
Other	989	1,183
Total assets excl. financial assets	**401,901**	**394,434**
Deferred and current tax liabilities	-14,952	-15,151
Other noninterest-bearing liabilities	-1,838	-1,824
Contract liabilities	-13,460	-10,651
Trade payables and other liabilities	-35,571	-39,041
Accrued expenses and deferred income	-24,790	-22,855
Other	-1,234	-1,297
Total noninterest-bearing liabilities	**-91,845**	**-90,819**
Other interest-bearing provisions not related to adjusted net debt[1]	-6,004	-6,852
Adjustment related to asset/liabilities held for sale	–	25,278
Capital employed[2]	**304,052**	**322,041**
Capital employed, average	**313,047**	**320,041**

1. Includes personnel-related provisions for non-pension purposes, provisions for tax and legal disputes and certain other provisions.
2. See Definitions and calculations of key ratios for definitions of this Alternative Performance Measure.

Available liquid assets

Amounts in SEK million	2024	2023
Cash and cash equivalents, and short-term investments	87,121	52,270
Committed credit facilities (unutilised)	22,918	33,288

Cash and cash equivalents, and short-term investments increased by SEK 34.9 billion compared with the level at 31 December 2023.

Committed credit facilities consist of a EUR 2.0 billion Revolving Credit Facility that expires in October 2027.

As per 31 December 2024, available liquid assets and/or committed credit facilities amounted to 43.3% of net sales. Vattenfall's target is to maintain a level of no less than 10% of the Group's net sales, but at least the equivalent of the next 90 days' maturities.

Interest-bearing liabilities and net debt as per 31 December

Amounts in SEK million	2024	2023
Hybrid Capital[1]	-21,880	-20,987
Bond issues and liabilities to credit institutions	-43,013	-61,956
Short-term debt, commercial papers and repo	-3,929	-20,071
Liabilities to associated companies	-388	-718
Liabilities to owners of non-controlling interests	-6,834	-10,065
Other liabilities	-8,555	-7,312
Total interest-bearing liabilities[1]	**-84,598**	**-121,109**
Cash and cash equivalents	35,117	27,682
Short-term investments	52,004	24,588
Loans to owners of non-controlling interests in foreign Group companies	244	415
Net debt[1]	**2,767**	**-68,424**

1. See Definitions and calculations of key ratios for definitions of Alternative Performance Measures.

Net debt decreased by SEK 71.2 billion to net cash of SEK 2.8 billion and adjusted net debt decreased by SEK 67.4 billion to SEK 72.1 billion compared to 31 December 2023. This is mainly attributable to positive cash flow from operating activities (SEK 61.9 billion) and from investing activities excluding changes in short-term investments (SEK 10.5 billion), which was mainly affected by the sale of the heat operations in Berlin, the sale of the Norfolk Offshore Wind Zone in the UK and the sale of 49% of the Nordlicht I & II offshore wind projects in Germany.

Adjusted gross and net debt as per 31 December

Amounts in SEK million	2024	2023
Total interest-bearing liabilities	-84,598	-121,109
50% of Hybrid Capital[1]	10,940	10,494
Present value of pension obligations	-27,890	-28,092
Provisions for gas and wind operations and other environment related provisions	-16,526	-15,404
Provisions for nuclear power (net)[2]	-44,811	-46,011
Margin calls received	623	287
Liabilities to owners of non-controlling interests due to consortium agreements	6,833	10,065
Adjustment related to assets/liabilities held for sale	–	3,429
Adjusted gross debt	**-155,429**	**-186,342**
Reported cash and cash equivalents and short-term investments	87,121	52,270
Unavailable liquidity	-3,810	-5,446
Adjusted cash and cash equivalents and short-term investments	**83,311**	**46,824**
Adjusted net debt[3]	**-72,118**	**-139,518**

1. 50% of Hybrid Capital is treated as equity by the rating agencies, which thereby reduces adjusted net debt.
2. The calculation is based on Vattenfall's share of ownership in the respective nuclear power plants, less Vattenfall's share in the Swedish Nuclear Waste Fund and liabilities to associated companies. Vattenfall has the following ownership interests in the respective plants: Forsmark 66%, Ringhals 70.4%, Brokdorf 20%, Brunsbüttel 66.7%, Krümmel 50% and Stade 33.3%. (According to a special agreement, Vattenfall is responsible for 100% of the provisions for Ringhals.)
3. See Definitions and calculations of key ratios for definitions of Alternative Performance Measures.

In their assessments of a company's credit strength, the rating agencies and analysts regularly make a number of adjustments of various items on the balance sheet in order to arrive at a figure for adjusted gross and net debt. Vattenfall's calculations of its adjusted gross and net debt are shown in the table above.

Adjusted net debt decreased by SEK 67.4 billion. The decrease is mainly attributable to positive cash flow from operating activities (SEK 61.9 billion) and from investing activities excluding changes in short-term investments (SEK 10.5 billion), which was mainly affected by the sale of the heat operations in Berlin, the sale of the Norfolk Offshore Wind Zone in the UK and the sale of 49% of the Nordlicht I & II offshore wind projects in Germany.

Equity

The Group's equity increased by SEK 62.5 billion. The increase is mainly attributable to the profit for the period and to the other comprehensive income.

Comments on the consolidated statement of cash flows

Cash flow from operating activities

Amounts in SEK million	2024	2023
Funds from operations (FFO)	35,469	30,058
Cash flow from changes in operating assets and operating liabilities (working capital)	26,400	-54,682
Cash flow from operating activities	61,869	-24,624

Funds from operations (FFO) increased by SEK 5.4 billion in 2024 to SEK 35.5 billion (30.1), mainly as a result of higher underlying operating profit before depreciation and amortisation (EBITDA) adjusted for non-cash items and lower tax paid.

The cash flow from changes in working capital amounted to SEK 26.4 billion (-54.7) for 2024. The main contributors were the net received and paid margin calls (SEK +31.2 billion) and a decrease in working capital in the Customers & Solutions segment (SEK +6.9 billion). This was offset by increased working capital in the Berlin heat operations prior to the divestment (SEK -10.8 billion) and in the Power Generation segment (SEK -3.6 billion).

Cash flow from investing activities

Amounts in SEK million	2024	2023
Replacement investments	17,800	18 498
Growth investments	12,668	23 842
Total investments	**30,468**	**42,340**
Total divestments	**41,000**	**3,060**
- of which, shares	42,157	1,746

Investments are specified in the to the right.

Specification of investments

Amounts in SEK million	2024	2023
Hydro power	1,263	883
Nuclear power	1,643	1,747
Gas	19	144
Wind power	8,852	19,782
Biomass, waste	14	25
Total electricity generation	**11,791**	**22,581**
Fossil-based power	447	1,104
Heat networks	1,846	1,688
Other	706	693
Total CHP/heat	**2,999**	**3,485**
Electricity networks	10,114	6,861
Total electricity networks	**10,114**	**6,861**
Purchases of shares, shareholder contributions	598	1,438
Other	3,602	2,728
Total investments	**29,104**	**37,093**
Changes in accrued, non-paid liabilities	1,372	5,328
Cash and cash equivalents in acquired companies	-8	-81
Total investments with cash flow effect	**30,468**	**42,340**

Cash flow from financing activities

Cash flow from financing activities amounted to SEK -44,1 billion (-56.6) in 2024.

Consolidated income statement

Amounts in SEK million	Note	2024	2023
Net sales	6, 7	245,570	290,168
Cost of purchases	8	-144,977	-207,113
Other external expenses	9	-25,403	-21,675
Personnel expenses	11	-23,767	-22,899
Other operating income and expenses, net	10	9,261	1,215
Share of profit from associated companies and joint ventures	25	95	-11
Operating profit before depreciation, amortisation and impairment losses (EBITDA)	6	**60,779**	**39,685**
Depreciation, amortisation and impairments	22, 23, 27	-21,928	-22,694
Operating profit (EBIT)[1]	6	**38,851**	**16,991**
Financial income	37	3,665	3,589
Financial expenses[2]	37	-7,343	-8,746
Return from the Swedish Nuclear Waste Fund	31	2,786	4,388
Profit before income taxes		**37,959**	**16,222**
Income taxes	12	-4,579	-5,827
Profit for the year		**33,380**	**10,395**
- Whereof attributable to owner of the Parent Company		31,793	8,646
- Whereof attributable to non-controlling interests		1,587	1,749
Supplementary information			
Underlying operating profit before depreciation, amortisation and impairment losses[3]	6	40,436	40,340
Underlying operating profit[3]	6	19,828	20,005
Financial items, net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund		-2,049	-3,024
1. Including items affecting comparability[3]		19,023	-3,014
2. Including interest components related to pension costs.		-954	-1,096
3. See Definitions and calculations of key ratios for the definitions of the Alternative Performance Measures.			

Consolidated statement of comprehensive income

Amounts in SEK million	Note	2024	2023
Profit for the year		**33,380**	**10,395**
Other comprehensive income			
Items that may be reclassified to the income statement			
Cash flow hedges			
- Changes in fair value		11,978	-10,776
- Transferred to the income statement		19,397	14,218
- Transferred to the balance sheet		29	-24
Hedging of net investments in foreign operations		-1,618	115
Exchange rate differences, divested companies		-318	-114
Exchange rate differences		5,438	-59
Income taxes related to items that may be reclassified		-4,551	-2,596
Total items that may be reclassified to the income statement		**30,355**	**764**
Items that will not be reclassified to the income statement			
Remeasurement pertaining to defined benefit obligations		143	-3,591
Income taxes related to items that will not be reclassified		169	732
Total Items that will not be reclassified to the income statement		**312**	**-2,859**
Total other comprehensive income, net after income taxes		**30,667**	**-2,095**
Total comprehensive income for the year		**64,047**	**8,300**
- Whereof attributable to owner of the Parent Company		61,741	6,898
- Whereof attributable to non-controlling interests		2,306	1,402

Consolidated balance sheet

Amounts in SEK million	Note	31 December 2024	31 December 2023
Assets			
Non-current assets			
Intangible assets: non-current	23	19,262	18,378
Property, plant and equipment	22	273,707	263,031
Participations in associated companies and joint ventures	25	5,037	4,140
Other shares and participations		225	330
Share in the Swedish Nuclear Waste Fund	31	55,650	52,175
Derivative assets	36	4,711	7,774
Deferred tax assets	12	7,318	12,242
Contract assets	7	21	13
Other non-current receivables		2,818	4,600
Total non-current assets		**368,749**	**362,683**
Current assets			
Inventories	15	25,074	18,602
Intangible assets: current	24	2,512	6,205
Trade receivables and other receivables	13	45,047	44,884
Contract assets	7	239	106
Advance payments paid	16	4,338	18,836
Derivative assets	36	7,255	24,177
Prepaid expenses and accrued income	14	16,593	17,284
Current tax assets	12	1,569	2,281
Short-term investments	28	52,004	24,588
Cash and cash equivalents	29	35,117	27,682
Assets held for sale	17	–	41,263
Total current assets		**189,748**	**225,908**
Total assets	**6**	**558,497**	**588,591**

Amounts in SEK million	Note	31 December 2024	31 December 2023
Equity and liabilities			
Equity attributable to owners of the parent company			
Share capital		6,585	6,585
Hedge reserve		-2,668	-29,188
Translation reserve		18,974	15,860
Retained earnings incl. profit for the year		148,305	120,209
Total equity attributable to owners of the parent company	38	**171,196**	**113,466**
Equity attributable to non-controlling interests		**30,725**	**25,963**
Total equity		**201,921**	**139,429**
Non-current liabilities			
Hybrid Capital	30	21,880	20,987
Other interest-bearing liabilities	30	46,021	57,746
Pension provisions	34	27,890	28,092
Interest-bearing provisions	32	127,370	125,023
Derivative liabilities	36	6,469	14,906
Deferred tax liabilities	12	14,105	13,353
Contract liabilities	7	11,886	9,924
Other non interest-bearing liabilities	35	1,838	1,824
Total non-current liabilities		**257,459**	**271,855**
Current liabilities			
Trade payables and other liabilities	18	35,571	39,041
Contract liabilities	7	1,574	727
Advance payments received	19	1,243	2,449
Derivative liabilities	36	15,479	49,017
Accrued expenses and deferred income	20	24,790	22,855
Current tax liabilities	12	847	1,798
Other interest-bearing liabilities	30	16,697	42,376
Interest-bearing provisions	32	2,916	3,059
Liabilities associated with assets held for sale	17	–	15,985
Total current liabilities		**99,117**	**177,307**
Total equity and liabilities		**558,497**	**588,591**

Consolidated statement of cash flows

Amounts in SEK million	Note	2024	2023
Operating activities			
Operating profit before depreciation, amortisation and impairment losses (EBITDA)		60,779	39,685
Tax paid		-2,777	-4,696
Capital gains/losses, net		-8,086	-56
Interest received		2,791	3,517
Interest paid		-4,218	-4,768
Other, incl. non-cash items	39	-13,020	-3,624
Funds from operations (FFO)[1]		**35,469**	**30,058**
Changes in inventories		-4,752	2,065
Changes in operating receivables		-4,945	2,755
Changes in operating liabilities		2,019	12,559
Margin calls related to commodity derivatives		31,240	-74,127
Other changes		2,838	2,066
Cash flow from changes in operating assets and operating liabilities		**26,400**	**-54,682**
Cash flow from operating activities		**61,869**	**-24,624**
Investing activities			
Acquisitions in Group companies	21	-112	-1,206
Investments in associated companies and other shares and participations		-478	-151
Other investments in non-current assets	39	-29,878	-40,983
Total investments		**-30,468**	**-42,340**
Divestments	39	41,000	3,060
Changes in short-term investments		-28,128	43,430
Cash flow from investing activities		**-17,596**	**4,150**
Cash flow before financing activities		**44,273**	**-20,474**

Amounts in SEK million	Note	2024	2023
Financing activities			
Changes in loans to owners of non-controlling interests in foreign Group companies		184	107
Loans raised[2]		7,570	12,654
Repayment of debt pertaining to acquisitions of Group companies		-35	–
Repayment of other debt[2]		-49,770	-70,413
Divestment of shares in Group companies to owners of non-controlling interests		–	698
Redemption of Hybrid Capital		–	-4,331
Issue of Hybrid Capital		–	3,215
Dividends paid to owners		-5,391	-4,428
Contribution to non-controlling interest		-1,259	-84
Contribution from non-controlling interest		4,638	5,951
Cash flow from financing activities		**-44,063**	**-56,631**
Cash flow for the year		**210**	**-77,105**
Cash and cash equivalents			
Cash and cash equivalents at start of year		27,682	106,540
Cash and cash equivalents included in assets held for sale		6,921	-2,614
Cash flow for the year		210	-77,105
Translation differences		304	861
Cash and cash equivalents at end of year		**35,117**	**27,682**

Supplementary information

Amounts in SEK million	Note	2024	2023
Cash flow after dividend			
Cash flow before financing activities		44,273	-20,474
Change in margin calls from Treasury operations		-1,672	2,444
Changes in short-term investments		28,128	-43,430
Divestment of shares in Group companies to owners of non-controlling interests		–	698
Dividends paid to owners		-5,391	-4,428
Contribution from owners of non-controlling interests		3,379	5,867
Cash flow after dividend end of year		**68,717**	**-59,323**
Cash flow from operating activities		61,869	-24,624
Maintenance investments		-17,800	-18,498
Free cash flow[1]		**44,069**	**-43,122**
Analysis of change in net debt			
Net debt at start of year		-68,424	-3,858
Cash flow after dividends		68,717	-59,323
Changes as a result of valuation at fair value		456	-16
Change in liabilities for leasing		-1,803	-1,254
Interest-bearing liabilities/short-term investments acquired/divested		-1	–
Changes in liabilities pertaining to acquisitions of Group companies, discounting effects		-28	-344
Cash and cash equivalents included in assets held for sale		6,921	-2,614
Interest-bearing liabilities associated with assets held for sale		–	45
Translation differences on net debt		-3,071	-1,060
Net debt at end of year[1]		**2,767**	**-68,424**

Supplementary information, cont

Amounts in SEK million	Cash and cash equivalents	Short-term investments and inter-est-bering receivables	Leasing liabilities	Current interest-bearing liabilities	Non-current interest-bearing liabilities	Total
Net debt as at 1 January 2023	**106,540**	**66,367**	**-6,729**	**-79,241**	**-90,795**	**-3,858**
Cashflow	-77,105	-41,093	1,697	40,574	16,604	**-59,323**
Change in leasing liabilities	–	–	-1,254	–	–	**-1,254**
Translation differences on net debt	861	-270	-57	-2,846	1,252	**-1,060**
Assets held for sale	-2,614	–	–	–	–	**-2,614**
Other non-cash items	–	–	45	–	-360	**-315**
Net debt as at 31 December 2023	**27,682**	**25,004**	**-6,298**	**-41,513**	**-73,299**	**-68,424**
Cashflow	209	26,272	1,212	27,601	13,423	**68,717**
Change in leasing liabilities	–	–	-1,803	–	–	**-1,803**
Translation differences on net debt	305	972	-292	-1,908	-2,148	**-3,071**
Acquired/divested interest-bearing liabilities/ short-term investments	–	–	–	–	-1	**-1**
Assets held for sale	6,921	–	–	–	–	**6,921**
Other non-cash items	–	–	–	2	426	**428**
Net debt as at 31 December 2024	**35,117**	**52,248**	**-7,181**	**-15,818**	**-61,599**	**2,767**

1. See Definitions and calculations of key ratios for the definition of the Alternative Performance Measure.
2. Short-term borrowings in which the duration is three months or shorter are reported net.

Consolidated statement of changes in equity

Amounts in SEK million	Attributable to owner of the parent company					Attributable to non-controlling interests	Total equity
	Share capital	Reserve for hedges	Translation reserve	Retained earnings	Total		
Balance brought forward 2024	**6,585**	**-29,188**	**15,860**	**120,209**	**113,466**	**25,963**	**139,429**
Profit for the year	**–**	**–**	**–**	**31,793**	**31,793**	**1,587**	**33,380**
Cash flow hedges							
- Changes in fair value	–	11,978	–	–	**11,978**	–	**11,978**
- Transferred to the income statement	–	19,397	–	–	**19,397**	–	**19,397**
- Transferred to the balance sheet	–	29	–	–	**29**	–	**29**
Hedging of net investments in foreign operations	–	–	-1,618	–	**-1,618**	–	**-1,618**
Exchange rate differences, divested companies	–	–	-318	–	**-318**	–	**-318**
Exchange rate differences	–	–	4,717	–	**4,717**	721	**5,438**
Remeasurement of defined benefit obligations	–	–	–	145	**145**	-2	**143**
Income taxes related to other comprehensive income	–	-4,884	333	169	**-4,382**	–	**-4,382**
Total other comprehensive income for the year	**–**	**26,520**	**3,114**	**314**	**29,948**	**719**	**30,667**
Total comprehensive income for the year	**–**	**26,520**	**3,114**	**32,107**	**61,741**	**2,306**	**64,047**
Dividends paid to owners	–	–	–	-4,000	**-4,000**	-1,391	**-5,391**
Group contributions from (+)/to (-) owners of non-controlling interests	–	–	–	–	**–**	-21	**-21**
Changes in ownership in Group companies on divestments of shares to owners of non-controlling interests	–	–	–	–	**–**	611	**611**
Contribution to/from non-controlling interest	–	–	–	–	**–**	3,379	**3,379**
Changes as a result of changed ownership	–	–	–	–	**–**	-134	**-134**
Other changes	–	–	–	-11	**-11**	12	**1**
Total transactions with equity holders	**–**	**–**	**–**	**-4,011**	**-4,011**	**2,456**	**-1,555**
Balance carried forward 2024	**6,585**	**-2,668**	**18,974**	**148,305**	**171,196**	**30,725**	**201,921**

Amounts in SEK million	Attributable to owner of the parent company					Attributable to non-controlling interests	Total equity
	Share capital	Reserve for hedges	Translation reserve	Retained earnings	Total		
Balance brought forward 2023	**6,585**	**-30,034**	**15,699**	**118,223**	**110,473**	**18,464**	**128,937**
Profit for the year	**–**	**–**	**–**	**8,646**	**8,646**	**1,749**	**10,395**
Cash flow hedges							
- Changes in fair value	–	-10,776	–	–	**-10,776**	–	**-10,776**
- Transferred to the income statement	–	14,218	–	–	**14,218**	–	**14,218**
- Transferred to the balance sheet	–	-24	–	–	**-24**	–	**-24**
Hedging of net investments in foreign operations	–	–	115	–	**115**	–	**115**
Exchange rate differences, divested companies	–	–	-114	–	**-114**	–	**-114**
Exchange rate differences	–	–	184	–	**184**	-243	**-59**
Remeasurement of defined benefit obligations	–	–	–	-3,460	**-3,460**	-131	**-3,591**
Income taxes related to other comprehensive income	–	-2,572	-24	705	**-1,891**	27	**-1,864**
Total other comprehensive income for the year	**–**	**846**	**161**	**-2,755**	**-1,748**	**-347**	**-2,095**
Total comprehensive income for the year	**–**	**846**	**161**	**5,891**	**6,898**	**1,402**	**8,300**
Dividends paid to owners	–	–	–	-4,000	**-4,000**	-428	**-4,428**
Group contributions from(+)/to(-) owners of non-controlling interests	–	–	–	–	**–**	1	**1**
Changes in ownership in Group companies on divestments of shares to owners of non-controlling interests	–	–	–	33	**33**	658	**691**
Contribution to/from non-controlling interest	–	–	–	–	**–**	5,867	**5,867**
Other changes	–	–	–	62	**62**	-1	**61**
Total transactions with equity holders	**–**	**–**	**–**	**-3,905**	**-3,905**	**6,097**	**2,192**
Balance carried forward 2023	**6,585**	**-29,188**	**15,860**	**120,209**	**113,466**	**25,963**	**139,429**

See also Note 38 to the consolidated accounts, Specifications of equity.

Note 1 Company information

The consolidated accounts include the parent company Vattenfall AB and all subsidiaries. The Annual and sustainability report for the financial year ending 31 December 2024 was approved for issue in accordance with the decision of the board and the CEO on 20 March 2025.

The parent company Vattenfall AB (publ) with registration number 556036-2138, is a limited company with registered office in Solna, Sweden. The head office is located at Evenemangsgatan 13 in Solna. Vattenfall AB is 100% owned by the Swedish state. Vattenfall AB has listed bonds issued on Nasdaq Stockholm and the London Stock Exchange. The Group mainly produces, distributes and sells electricity and heat. The business is primarily conducted in Sweden, Germany, the Netherlands, Denmark and the UK.

Note 2 Important changes in the financial statements compared with the preceding year

Recalculation of operating segments

Vattenfall has changed the reporting of its operating segments during the first quarter of 2024 due to the divestment of Heat Berlin on 2 May 2024. The heat business in Berlin was previously included in segment Heat but is included in segment Other as of 1 January 2024. The remaining operations in Heat are included in the operating segment Customers & Solutions as of 1 January 2024. The new segment reporting reflects the updated organization and decision making over the relevant business activities. The comparative figures for 2023 have been adjusted accordingly in the segment reporting. No other changes have been made to the operating segments.

Note 3 Accounting policies

Basis of preparation

The consolidated financial statements include Vattenfall AB and its subsidiaries. The consolidated accounts have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) as endorsed by the EU, as well as the interpretations issued by the IFRS Interpretations Committee. In addition, recommendation RFR 1 "Supplementary Accounting Policies for Groups", issued by the Swedish Sustainability and Financial Reporting Board, has been applied. RFR 1 specifies the additions to the IFRS disclosure requirements that are required by the Swedish Annual Accounts Act.

Assets and liabilities are reported at cost or amortised cost, with the exception of certain financial assets and liabilities and inventories held for trading, which are measured at fair value.

The accounting policies of the Group described below and in each respective note to the consolidated accounts have been applied consistently for all periods presented in the consolidated financial statements.

Unless otherwise stated, amounts are in million Swedish kronor (SEK million). Rounding differences may occur.

New accounting principles effective from 2024

Supplier finance arrangements: As of 1 January 2024, IAS 7 and IFRS 7 are amended by adding disclosure requirements, both qualitative and quantitative regarding supplier finance arrangements. Refer to Note 18, Trade payables and other liabilities for disclosures on supplier finance arrangements.

No other new or amended accounting standards or interpretations effective from 2024 have had a material impact on the Vattenfall Group's financial statements.

New accounting principles effective from 2025 and later

IFRS 18, Presentation and Disclosure in Financial Statements is a new standard that is applicable from 1 January 2027 (early adoption is permitted). The new standard replaces IAS 1, Presentation of Financial Statements, with focus on updates to the structure of the income statement with defined subtotals and required disclosures regarding management-defined performance measures. Vattenfall is currently assessing the impact on its financial statements.

No other new or amended accounting standards or interpretations that have been published and are effective as of 2025 and later are assessed to have a material impact on Vattenfall Group's financial statements.

Principles of consolidation

The consolidated financial statements cover the parent company, subsidiaries, associated companies, joint ventures and joint arrangements that are reported as a joint operation according to IFRS 11. For accounting principles on associated companies and joint ventures refer to Note 25, Participations in associated companies and joint ventures. For accounting principles on subsidiaries and joint operation refer to Note 26, Shares and participations in subsidiaries and joint operation.

Transactions that are eliminated upon consolidation

Intra-group receivables and liabilities, income and expenses, as well as gains or losses arising from intra-group transactions between group companies, are eliminated when preparing the consolidated accounts. Gains and losses arising from transactions with associated companies and joint ventures are eliminated to an extent that corresponds to the Group's participation in the company.

Foreign currency translation

The functional currency of each group entity is determined based on the primary economic environment in which each entity operates. The parent company's functional currency is Swedish kronor (SEK), which is also the presentation currency of both the parent company and the Group.

Assets and liabilities of foreign activities, including goodwill and other consolidated surplus and deficit values, are translated to SEK at the exchange rate on the balance sheet date. Income and expenses of foreign activities are translated to SEK using an average exchange rate. Translation differences arising from foreign currency translation of foreign activities are reported in Other comprehensive income.

Transactions in foreign currencies are translated to the functional currency at the exchange rate on the day of the transaction. On the balance sheet date, monetary assets and liabilities in foreign currencies are translated to the functional currency at the exchange rate applicable on that day. Operationally derived exchange gains and losses are reported under Other operating income and expenses. Financially derived exchange gains and losses are reported as Financial income and Financial expenses, respectively.

For the Vattenfall Group, key exchange rates applied in the accounts are disclosed in Note 5, Exchange rates.

Key accounting estimates and judgements

Preparation of the financial statements in accordance with IFRS requires the company's executive management and Board of directors to make estimations and assessments as well as assumptions that affect application of the accounting policies and the reported amounts of assets, liabilities, income and expenses. These estimations and assessments are based on historic experience and other factors that seem reasonable under current conditions. The results of these estimations and assessments are then used to establish the reported values of assets and liabilities that are not otherwise clearly documented from other sources. The final outcome may deviate from the results of these estimations and assessments. The estimations and assessments are revised on a regular basis.

Important estimates and judgements are described further in the following notes to the consolidated accounts:

Key accounting estimates and judgements	Note
Assumptions used for the recognition and measurement of deferred tax	12, Income taxes
Supplier finance arrangements	18, Trade payables and other liabilities
Assumptions related to impairment testing	22, Property, plant and equipment 23, Intangible assets 25, Participations in associated companies and joint ventures 26, Shares and participations in subsidiaries and joint operation 27, Impairment losses and reversed impairment losses
Estimates of useful life	22, Property, plant and equipment
Consolidation method for partnerships	25, Participations in associated companies and joint ventures 26, Shares and participations in subsidiaries and joint operation
Assumptions used to estimate cost for future commitments for nuclear power operations	32, Interest-bearing provisions
Measurement of lease liabilities and right-of-use assets	33, Leasing
Assumptions used to calulate future pension obligations	34, Pension provisions

Note 4 Climate related disclosures

Vattenfall is committed to working towards net zero emissions in 2040 meaning at least a 90% reduction, compared to baseline 2017, in absolute emissions across all emission scopes with intermediate targets for 2030. On top of this Vattenfall has set a strategic target on absolute emissions for 2030. See pages 91–93 and page 146 for details.

The climate related targets cover all of Vattenfall's value chain and geographies. The targets are central to adhering to our environmental policy which states our commitment to align our business with the Paris Agreement.

The actions Vattenfall need to take to reach the targets on emissions have been considered in the annual impairment test, see Note 27, Impairment losses and reversed impairment losses for more information.

Vattenfall has issued Green Bonds for financing certain investments in the Group, see page 26 for more information.

Climate related uncertainties in Vattenfall's financial statements.

Climate related uncertainties in Vattenfall's financial statements

Vattenfall is committed to align our business with the Paris Agreement and Vattenfall is transforming its business towards that. Risks in the transformation is further described in the Risk Management section pages 45–57.

Vattenfall's assets and liabilities at year end 2024 are prepared based on existing accounting rules (IFRS), existing legislation and considering Vattenfall's transformation plan. Changes in any of these going forward could have an effect on Vattenfall's financial statements.

Note 5 Exchange rates

Key exchange rates applied in the accounts of the Vattenfall Group:

	Average rate		Balance sheet data rate	
Currency	2024	2023	31 Dec 2024	31 Dec 2023
EUR	11.4226	11.4563	11.4590	11.0960
DKK	1.5317	1.5377	1.5365	1.4888
GBP	13.4917	13.1692	13.8197	12.7680
USD	10.5558	10.5945	11.0299	10.0416

Note 6 Segment reporting

Accounting policy

An operating segment is a component of the Group that engages in business activities from which it may earn revenue and incur expenses and for which discrete financial information is available. An operating segment's result is reviewed regularly by "the chief operating decision maker", who in Vattenfall is the Chief Executive Officer, to assess its performance and to make decisions about resources to be allocated to the operating segment.

Segment information

Vattenfall is organised in five Business Areas: Customers & Solutions, Generation, Markets, Wind and Distribution. The aim with the organisational structure is to increase the Group's business and performance focus, and to capitalise on cross-border synergies. The segment reporting corresponds with Vattenfall's organisational structure with the addition that the operating segment Generation consist of the Business Areas Generation and Markets.

The Customers & Solutions operating segment is responsible for sales of electricity, gas and energy services in all of Vattenfall's markets as well as Vattenfall's heat business (district heating and decentralised solutions) and gas-fired condensing plants.

The Power Generation operating segment comprises the Business Areas Generation and Markets. The segment includes Vattenfall's hydro and nuclear power operations, maintenance services business, optimisation, and physical and financial trading within Markets trading operations. Markets also includes certain large business customers.

The Wind operating segment is responsible for development, construction and operation of Vattenfall's wind farms as well as large-scale and decentralised solar power and batteries.

The Distribution operating segment comprises Vattenfall's electricity distribution operations in Sweden and the UK.

Other consist of Group-wide Staff Functions who direct, administrate and support the business activities and Shared Service Centres that focus on transaction-related processes and are an integral part of Vattenfall's business activities. Other also includes the heat operations in Berlin, which have been divested, for more information refer to Note 2, Important changes in the financial statements compared with the preceding year.

Net sales

	External net sales		Internal net sales		Total net sales	
	2024	2023	2024	2023	2024	2023
Customers & Solutions	175,530	215,626	13,462	19,575	**188,992**	**235,201**
Power Generation	44,906	37,760	124,981	169,750	**169,887**	**207,510**
Wind	4,174	8,537	17,411	16,836	**21,585**	**25,373**
Distribution	13,229	10,445	622	694	**13,851**	**11,139**
Other	7,731	17,800	13,705	16,208	**21,436**	**34,008**
Eliminations	–	–	-170,181	-223,063	**-170,181**	**-223,063**
Total	**245,570**	**290,168**	**–**	**–**	**245,570**	**290,168**

Internal net sales in Power Generation pertains mainly to Markets' sales of electricity, fuel and CO_2 emission allowances to other segments within Vattenfall.

Expenses

In segment Customers & Solutions cost of purchases is the main cost driver, SEK 164,657 million (209,675) with other external expenses also being material, SEK 9,363 million (8,785). The main cost drivers in Power Generation are cost of purchases SEK 135,854 million (180,573) and other external expenses SEK 16,397 million (11,329). In Wind, the main cost drivers are depreciation and amortisation, SEK 8,686 million (7,058) and other external expenses, SEK 3,672 million (3,326). In Distribution, the main cost drivers are cost of purchases, SEK 3,709 million (2,775) and depreciation and amortisation, SEK 3,011 million (2,764). Other include heat operatoins in Berlin during 2023 and the first four months 2024. Due to heat operations in Berlin, the main cost drivers in Other are cost of purchases, SEK 7,308 million (16,806) and other external expenses, SEK 6,866 million (8,433).

Operating profit

	Operating profit before depreciation, amortisation and impairment losses (EBITDA)		Underlying operating profit before depreciation, amortisation and impairment losses	
	2024	2023	2024	2023
Customers & Solutions	9,620	11,871	9,450	12,055
Power Generation	21,240	8,048	9,161	8,331
Wind	14,563	13,321	14,570	13,602
Distribution	5,614	4,294	5,610	4,290
Other	9,573	2,160	1,476	2,071
Eliminations	169	-9	169	-9
Total	**60,779**	**39,685**	**40,436**	**40,340**

Note 6 Segment reporting, cont.

Operating profit

	Operating profit (EBIT)		Underlying operating profit	
	2024	2023	2024	2023
Customers & Solutions	6,751	7,273	6,581	9,203
Power Generation	16,129	2,790	4,035	3,075
Wind	5,536	6,646	5,884	6,544
Distribution	2,580	1,530	2,599	1,526
Other	7,686	-1,239	560	-334
Eliminations	169	-9	169	-9
Total	**38,851**	**16,991**	**19,828**	**20,005**

	2024	2023
Underlying operating profit	19,828	20,005
Items affecting comparability[1]	19,023	-3,014
Financial net	-892	-769
Profit before income taxes	**37,959**	**16,222**

1. For a specification see Comments on the consolidated income statement.

Investments and assets

	Investments		Assets	
	2024	2023	2024	2023
Customers & Solutions	4,336	3,870	150,532	229,991
Power Generation	3,382	3,034	396,952	529,000
Wind	10,686	26,026	129,529	132,144
Distribution	10,245	7,000	70,369	61,123
Other	7,203	3,632	333,190	423,978
Eliminations	-5,384	-1,222	-522,075	-787,645
Total	**30,468**	**42,340**	**558,497**	**588,591**

Eliminations of assets pertains mainly to Markets' liquid assets and financial receivables from other operating segments.

Information about geographical areas

	External net sales		Internal net sales		Total net sales	
	2024	2023	2024	2023	2024	2023
Sweden	61,389	55,842	5,707	5,651	**67,096**	**61,493**
Germany	114,492	132,150	111,074	214,673	**225,566**	**346,823**
Netherlands	55,696	85,037	69,919	144,331	**125,615**	**229,368**
Denmark	6,133	6,603	1,295	948	**7,428**	**7,551**
UK	348	4,495	7,217	7,962	**7,565**	**12,457**
Other countries	7,512	6,041	1,315	4,521	**8,827**	**10,562**
Eliminations	–	–	-196,527	-378,086	**-196,527**	**-378,086**
Total	**245,570**	**290,168**	**–**	**–**	**245,570**	**290,168**

Information about geographical areas, cont.

	Operating profit (EBIT)		Underlying operating profit		Intangible assets: non-current, property, plant and equipment and investment property	
	2024	2023	2024	2023	2024	2023
Sweden	15,957	19,080	15,410	14,530	157,648	150,287
Germany	13,857	-1,697	2,460	4,949	20,181	19,024
Netherlands	505	-5,061	-1,809	-4,402	67,871	65,309
Denmark	622	1,105	629	995	28,386	28,016
UK	7,646	3,230	2,874	3,599	17,079	17,215
Other countries	164	334	164	332	1,804	1,558
Eliminations	100	–	100	2	–	–
Total	**38,851**	**16,991**	**19,828**	**20,005**	**292,969**	**281,409**

Note 7 Net sales

Accounting policy

Net sales include revenue from production, sales and distribution of electricity and heat, sales of gas, energy trading and other revenues such as service and consulting assignments and connection fees. Revenue from customers is recognised when the performance obligation is satisfied.

Vattenfall offers customers discounts and bonuses on sales of electricity, gas and heat. Various types of discounts and bonuses are offered from country to country. Vattenfall recognises discounts and bonuses when the performance obligation to the customer is satisfied, which in general is when the electricity, gas or heat has been delivered to the customer.

Various sales channels are used to sell Vattenfall's products, which gives rise to different types of costs associated with sales activities. Costs to obtain a contract related to revenues from contracts with customers are shown in Note 23, Intangible assets: non-current to the consolidated accounts. The amortisation schedule depends on the contract duration.

Distribution and sales of electricity, heat and gas are recognised as revenue at the time of delivery, excluding value-added tax and excise taxes. Depending on the system for metering of consumption, Vattenfall invoices either based on expected consumption, with a reconciliation when the readout takes place, or in arrears based on actual consumption.

Vattenfall has entered into long-term power purchase agreements which are supplied to the customers through physical delivery of electricity. The performance obligation is fulfilled over time and the income is reported within sales from electricity at delivery. These agreements do not contain derivatives nor are they to be treated as lease agreements.

Vattenfall's electricity transactions between Nordic electricity generation and sales activities in the Nordic countries are transactions vis-à-vis the Nordic electricity exchange. The purchases that the sales activities make from the Nordic electricity exchange are, at the Group level, offset against sales of generation to the Nordic electricity exchange.

Develop to sell projects

Vattenfall constructs Wind and Solar projects for the purpose of selling them. The assets under construction are accounted for as inventory and the sales proceeds are recognized as revenue in accordance with IFRS 15. Depending on the contract details, revenue is being recognized as the performance obligation is satisfied at a point in time or over time.

Note 7 Net sales, cont.

Net sales

	2024	2023
Production and sales of electricity	165,444	185,683
Sales of gas	37,910	51,679
Production, distribution and sales of heat and steam	12,652	22,920
Distribution of electricity	14,019	11,566
Sale of service and consulting services	6,482	5,266
Revenue from Develop to sell projects	5	4,630
Total revenues from contracts with customers	**236,512**	**281,744**
Other revenues	9,058	8,424
Total net sales	**245,570**	**290,168**

Contract assets and contract liabilities

Contract assets mainly consist of bonus payments made to a customer for entering into a new contract or prolonging an existing contract. These are amortised over the minimum contractual period, normally within 3 years. Contract liabilities mainly consist of connection fees paid by customers to connect to a network. These are released over the expected life of the underlying network asset, normally within 30–35 years, and recognised as revenue. Contract liabilities also include various types of bonuses that customers earn during the year and are credited the following year.

Contract balances

	2024	2023
Contract assets	**260**	**119**
– of which amortization of contract assets as cost during the year	106	175
Contract liabilities	**13,460**	**10,651**
– of which release of contract liabilities as revenue during the year	727	873

Note 8 Cost of purchases

	2024	2023
Electricity commodities	72,843	91,268[1]
Electricity grid cost	27,232	22,139
Emission allowances	1,271	6,245
Gas purchases	42,214	66,419
Nuclear fuel purchases	1,577	1,473
Other fuel purchases (coal, oil and biofuel)	1,736	3,711
Unrealized fair value changes of derivatives accounted for at fair value	-9,899	1,594
Other	8,003	14,264[1]
Total	**144,977**	**207,113**

1. The value has been adjusted compared with information previously published in Vattenfall's financial reports.

Note 9 Other external expenses

	2024	2023
Purchased services	7,396	7,836
IT expenses	2,754	2,673
Consulting expenses	4,386	4,875
Non-capitalised lease expenses	776	712
Marketing and selling expenses	1,974	1,871
Expenses related to provisions	4,788	1,250
Other	3,329	2,458
Total	**25,403**	**21,675**

Note 10 Other operating income and expenses

Other operating income during 2024 mainly consist of capital gains from divestments, refer to Note 21, Acquired and divested operations for further information.

Other operating expenses during 2024 mainly consist of capital loss from divestment of operation, refer to Note 21, Acquired and divested operations for further information.

Realised and unrealised exchange rate differences deriving from operational activities are also reported as other operating income and expenses.

In 2023, other operating income and expenses mainly related to realised and unrealised exchange rate differences deriving from operational activities.

	2024	2023
Other operating income	11,571	3,757
Other operating expenses	-2,310	-2,542
Total	**9,261**	**1,215**

Note 11 Number of employees and personnel costs

Number of employees at 31 December, full-time equivalents

	2024			2023		
	Men	Women	Total	Men	Women	Total
Sweden	7,881	3,552	**11,433**	7,374	3,135	**10,509**
Denmark	453	178	**631**	462	164	**626**
Germany	2,367	1,048	**3,415**	3,646	1,330	**4,976**
Netherlands	2,972	1,133	**4,105**	2,842	1,067	**3,909**
UK	331	165	**496**	325	141	**466**
Other countries	363	212	**575**	323	186	**509**
Total	**14,367**	**6,288**	**20,655**	**14,972**	**6,023**	**20,995**

Average number of employees during the year, full-time equivalents

	2024			2023		
	Men	Women	Total	Men	Women	Total
Sweden	7,731	3,427	**11,158**	7,242	3,016	**10,258**
Denmark	457	173	**630**	442	156	**598**
Germany	2,674	1,110	**3,784**	3,502	1,273	**4,775**
Netherlands	2,931	1,108	**4,039**	2,802	1,036	**3,838**
UK	334	158	**492**	316	135	**451**
Other countries	353	206	**559**	308	180	**488**
Total	**14,480**	**6,182**	**20,662**	**14,612**	**5,796**	**20,408**

Personnel costs

	2024	2023
Salaries and other remuneration	17,492	16,842
Social security costs[1]	6,275	6,057
Total	**23,767**	**22,899**

1. Pension costs are specified in Note 34 to the consolidated accounts, Pension provisions.

SEK	2024	2023
Average annual salary per full time equivalent[2]	832,549	799,559
Annual salary, the company's highest paid full time employee	18,466,000	17,455,000
Renumeration ratio	**22.2**	**21.8**

2. Salary and bonus (excluding pension contributions and other benefits)

Note 11 Number of employees and personnel costs, cont.

Remuneration to board members of the Vattenfall Group

Amounts in SEK thousands	2024	2023
Board of Directors		
Mats Granryd, Chairman of the Board	993	946
Ann Carlsson, board member (until April 29th, 2024)	160	474
Håkan Erixon, board member (until April 29th, 2024)	167	497
Fredrik Rystedt, board member	545	524
Ingemar Engkvist, board member (since April 26th, 2023)	463	284
Per Lindberg, board member (since April 26th, 2023)	516	341
Carola Puusteli, board member (since April 26th, 2023)	486	315
Pär Ekeroth, board member (employed by the Government Offices)	–	–
Christian Levin, board member (since April 29th, 2024)	292	–
Nina Linander, board member (since April 29th, 2024)	352	–
Former Board Members		
Viktoria Bergman, board member (until April 26th, 2023)	–	150
Tomas Kåberger, board member (until April 26th, 2023)	–	162
Total, Board of Directors	**3,974**	**3,693**

Remuneration to senior executives of the Vattenfall Group

	2024				2023			
Amounts in SEK thousands	Base salary	Other benefits	Pension costs	Severance costs	Base salary	Other benefits	Pension costs	Severance costs
Executive Group Management								
Anna Borg, President and CEO	18,466	107	5,447	–	17,455	107	5,188	–
Kerstin Ahlfont, Sr. Vice President, Chief Financial Officer	7,638	135	2,247	–	7,325	133	2,159	–
Christian Barthélémy, Sr. Vice President, Head of Staff Function People & Culture (until Oct 9th, 2024)	5,309	56	1,041	10,981[1]	6,667	73	1,314	–
Helene Biström, Sr. Vice President, Head of Business Area Wind	6,484	106	1,908	–	6,168	390	1,834	–
Anne Gynnerstedt, Sr. Vice President, General Counsel and Secretary to the Board of Directors and responsible for Corporate Security & Resilience (until Aug 31st, 2024)	4,519	47	835	–	5,677	80	1,604	–
Jonas Bengtsson, Sr. Vice President, General Counsel and Secretary to the Board of Directors and responsible for Corporate Security & Resilience (since Sept 1st, 2024)	1,928	8	563	–	–	–	–	–
Martijn Hagens, Sr. Vice President, Head of Business Area Markets	11,994	151	1,718	–	11,197	913[2]	1,602	–
Åsa Jamal, Sr. Vice President, Head of Communications and Acting Head of Staff Function People & Culture (from Oct 10th, 2024)	5,077	114	1,516	–	4,663	100	1,388	–
Andreas Regnell, Sr. Vice President, Head of Staff Function Strategic Development	5,934	103	1,746	–	5,702	96	1,678	–
Alexander van Ofwegen, Sr. Vice President, Head of Business Area Customers & Solutions	6,511	163	785	–	–	–	–	–
Torbjörn Wahlborg, Sr. Vice President, Head of Business Area Generation (until Oct 31st, 2024)	7,058	96	2,077	–	8,069	97	2,396	–
Johan Dasht, Sr. Vice President, Head of Business Area Generation (from Nov 1st, 2024)	1,017	31	306	–	–	–	–	–
Other senior executives								
Björn Linde, Vice President, Head of Business Unit Nuclear Generation	4,669	111	1,336	–	4,395	113	1,271	–
Annika Viklund, Sr. Vice President, Head of Business Area Distribution	6,275	93	1,849	–	6,012	88	1,777	–
Former senior executives								
Anna-Karin Stenberg, Sr. Vice President, Head of Business Area Markets	–	–	–	–	6,120	23	1,768	–
Total Executive Group Management and senior executives	**92,879**	**1,321**	**23,374**	**10,981**	**89,450**	**2,213**	**23,979**	**–**

1. The amount reflects payments during the notice period of 6 months, as well as a 12-month severance payment. Any income earned from employment outside of Vattenfall within the notice and severance periods, will be offset against payments from Vattenfall.
2. In 2023, Martijn Hagens received a jubilee payment, equivalent to one month's salary, for 20 years of service within the company (in accordance with the Dutch CLA agreement).

Note 11 Number of employees and personnel costs, cont.

Board of Directors
The Annual General Meeting on 29 April 2024 resolved in favor of increased fees with 6,2% and 4,3% respectively, entailing that the directors' fees for the period until the end of the next Annual General Meeting shall amount to SEK 965 thousand for the Chairman of the Board, and SEK 435 thousand for each of the other directors elected at the Annual General Meeting. In addition, it was resolved in favor of increased fees with 5,8% respectively 4,1% for the service on the Audit Committee, entailing a fee of SEK 118 thousand for the committee chair and SEK 88 thousand for the other committee members. For service on the Remuneration Committee, it was resolved in favor of no increased fees, entailing a fee of SEK 61,8 thousand to the committee chair and SEK 46,3 thousand to the other committee members. No directors' fees are paid to board members who are employed by the Swedish Government Offices or to employee representatives. The fees paid to each individual board member are shown in the table above. The board members' respective committee assignments are described in the Corporate Governance section.

President and Chief Executive Officer
Anna Borg, President and CEO, received a salary of SEK 18,466 thousand in 2024. The value of other benefits in 2024 amounted to SEK 107 thousand pertaining to a car benefit and health insurance. Anna Borg's pension is a defined contribution solution. Premiums paid in 2024 totaled SEK 5,447 thousand for the full year.

The President and CEO of Vattenfall AB does not receive any variable salary component.

The retirement age for Vattenfall's CEO is 65 years. The CEO's term of employment is until further notice, with a mutual notice period of six months. In the event Vattenfall serves notice, the CEO is entitled to a maximum of 12 months' severance pay after the notice period, but not longer than until the date of retirement. The amount of the severance pay shall be based on the fixed salary that applied at the time the notice was served. In the event that the CEO accepts a new employment or earns income from other business activities, the severance pay shall be reduced by an amount corresponding to the new income or other benefit received during the period in question. Severance pay is paid out monthly. The CEO's terms of employment are in agreement with the Swedish government's guidelines.

Executive Group Management and other senior executives
Salaries and other remuneration
For other members of the Executive Group Management, a total of eleven individuals (11), the sum of salaries and other remuneration for 2024, including the value of company cars and other benefits, was SEK 64,475 thousand. For other persons defined as senior executives by Vattenfall, who are not members of the Executive Group Management – a total of 2 individuals (2) – the sum of salaries and other remuneration for 2024, including the value of company cars and other benefits, was SEK 11,149 thousand.

Retirement benefits
Kerstin Ahlfont, Christian Barthélémy, Helene Biström, Anne Gynnerstedt, Jonas Bengtsson, Åsa Jamal, Andreas Regnell, Torbjörn Wahlborg, Johan Dasht, Annika Viklund and Björn Linde all have defined contribution pension solutions. Martijn Hagens and Alexander van Ofwegen have a pension solution under collective agreements in the Netherlands. All pensions for these executives are in compliance with the Swedish government's guidelines.

Terms of notice on the part of the company
According to Vattenfalls' guidelines, which are based on the government's guidelines, the notice period for a senior executive in the event that the company serves notice shall not exceed six months. In addition, severance pay equivalent to a maximum of 12 months' salary[1] is payable thereafter. In the event that the individual in question accepts new employment or receives income from other business activities, the severance pay shall be reduced by an amount corresponding to the new income or benefit received during the time in question. The severance pay is paid out monthly. All senior executives have severance terms that are in compliance with the government's guidelines.

Incentive programmes
The members of the Executive Group Management and other senior executives do not receive any variable salary component.

Payment from variable remuneration programmes
Vattenfall offers variable performance-based remuneration programmes to certain categories of employees in order to attract, retain and motivate.

Amounts in SEK thousands	Payment 2024	Payment 2023
Type of programme:		
Profit-sharing	105,740	281,570
Short-term incentive programmes	262,248	375,454
Long-term incentive programmes	134,909	162,539

Gender distribution among senior executives

	Women %		Men %	
	2024	2023	2024	2023
Board members	21	21	79	79
Other senior executives	44	50	56	50

1. Contracts entered into before the Annual General Meeting on 27 April 2017 include severance payment corresponding to a maximum of 18 months.

Note 12 Income taxes

■ **Accounting policy**
Income taxes comprise of current tax and deferred tax. Income tax is reported in the income statement except when the underlying transaction is reported in Other comprehensive income or in Equity, whereby also the associated tax effect is reported in Other comprehensive income and Equity, respectively.

Current tax is tax to be paid or received for the current year, with the application of the tax rates that are established or, established in practice as of the balance sheet date. Adjustments of tax paid attributable to previous periods are also included.

Deferred tax is calculated in accordance with the balance sheet method on the basis of temporary differences between the reported and taxable values of assets and liabilities. The valuation of deferred tax is based on how the reported value of assets or liabilities is expected to be realised or settled. Deferred tax is calculated in accordance with the tax rates and tax rules that have been established or have been established in practice by the balance sheet date.

Deferred tax assets concerning non-deductible temporary differences and tax-loss carry forwards are only reported to the extent that it is probable that they will be used. The value of deferred tax assets is reduced when it is no longer considered probable that they can be used.

OECDs model rules on Global Minimun Tax (Pillar II)
The Group has applied the temporary exception issued by the IASB in May 2023 from the accounting requirements for deferred taxes in IAS 12. Accordingly, the Group neither recognizes nor discloses information about deferred tax assets and liabilities related to Minimum Taxation rules (Pillar II).

Vattenfall is subject to the OECD's model rules on Global Minimum Tax (Pillar II), effective from 1 January 2024. Under the legislation, the parent company in Sweden will be required to pay top-up tax on profits of its subsidiaries that are taxed at an effective tax rate of less than 15%. The Pillar II rules have not resulted in any additional tax for Vattenfall in 2024.

■ **Key accounting estimates and judgements**
Assumptions used for the recognition and measurement of deferred tax
Vattenfall reports deferred tax assets and liabilities that are expected to be realised in future periods. In calculating these deferred taxes, certain assumptions and estimations must be made, mainly regarding future taxable earnings.

Breakdown of income tax

	2024	2023
Current tax expense (–)/ tax income (+)		
Current tax for the period:		
Sweden	–1,472	–1,292
Germany	–1,085	–939
Netherlands	–2	–18
Other countries	–944	–1,126
Adjustments for current tax of prior periods:		
Sweden	–40	–56
Germany	52	118
Netherlands	–17	70
Other countries	–54	128
Total current tax	**–3,562**	**–3,115**
Deferred tax expense (–)/ tax income (+)		
Sweden	–1,481	–1,802
Germany	106	–2,191
Netherlands	117	1,403
Other countries	241	–122
Total deferred tax	**–1,017**	**–2,712**
Total income tax	**–4,579**	**–5,827**

Note 12 Income taxes, cont.

The difference between the nominal Swedish tax rate and the effective tax rate

	2024		2023	
	%	MSEK	%	MSEK
Profit before tax		37,959		16,222
Swedish income tax rate at 31 December	20.6	-7,820	20.6	-3,342
Difference in tax rate in foreign operations	5.0	-1,881	0.1	-14
Tax adjustments for previous periods	0.1	-29	-1.8	289
Utlization of previously not recognized losses	0.0	2	-0.2	30
Revaluation of previously non-valued losses and other temporary differences	-7.3	2,759	16.6	-2,687
Tax-loss carryforwards from current year that are not valued	0.0	-5	1.6	-265
Capital gains	-6.0	2,271	0.6	-104
Participations in the results of associated companies	-0.1	63	-0.5	76
Non-deductible impairment losses	0.1	-52	3.5	-572
Changed tax rates	0.0	–	0.0	-7
Non-deductible interest	0.1	-29	0.4	-57
Other non-deductible expenses	0.5	-199	0.7	-114
Other non-taxable income	-0.9	341	-5.7	940
Effective tax rate	**12.1**	**-4,579**	**35.9**	**-5,827**

The effective tax rate is 12.1 %, the difference between the Swedish income tax rate of 20.6% corresponds to SEK 3,2 billion. The difference mainly relates to SEK -1.9 billion regarding difference in tax rate in foreign operations, recognised deferred tax assets relating to the German operations (SEK 2.6 billion) and tax exempt capital gain of the Norfolk divestment (tax effect SEK 1.2 billion) and divestment of 49% of the shares in Nordlicht 1 and 2 (tax effect SEK 1.5 billion).

The difference between the Swedish income tax rate and the effective tax rate 2023 was mainly due to the write-down of the deferred tax assets in Germany.

Balance sheet reconciliation of current tax

	2024	2023
Balance brought forward net asset (+)/ net liability (-)	483	-1,041
Translation differences, acquisitions, disposals and assets held for sale	645	-40
Change through the income statement	-3,562	-3,115
Tax effect through equity	379	-17
Taxes paid, net	2,777	4,696
Balance carried forward net asset (+)/ net liability (-)	**722**	**483**

The decrease in taxes paid compared to 2023 is mainly explained by lower preliminary tax payments during 2024 and by tax refund in the Netherlands relating to previous years.

Breakdown of the deferred tax

	2024	2023
Non-current assets	-31,421	-34,095
Current assets	-6,603	-10,250
Provisions	21,666	21,026
Other non-current liabilities	2,233	2,269
Current liabilities	6,084	14,523
Cash flow hedges	-531	4,251
Tax loss carryforward	1,785	1,165
Total	**-6,787**	**-1,111**

The net deferred tax position changed with SEK -5,676 million during 2024, mainly caused by the change in cash flow hedges and other derivatives.

Accumulated tax loss carryforward

	2024	2023
Sweden	146	56
Germany	8,538	7,861
Netherlands	8,868	6,679
Other countries	632	2,098
Total	**18,184**	**16,694**

The tax loss carryforward fall due as follows:

	2024
2025	–
2026-2029	301
2030 and beyond	8,513
No time limit	9,370
Total	**18,184**

The tax loss carryforwards correspond to a potential deferred tax asset of SEK 3,752 million, of which SEK 1,785 million is recorded on the balance sheet as of 31 December 2024. Tax loss carryforward not included in the computation of deferred tax represent a tax value of SEK 1,967 million and mainly relate to tax loss carryforward in German operations. These have not been assigned any value as it is currently uncertain whether it will be possible to use them.

Note 13 Trade receivables and other receivables

■ **Accounting policy**

Refer to Note 36, Financial instruments for trade receivables accounting policy.

Credit risk

From its sales to customers, Vattenfall is exposed to credit risk in outstanding trade receivables. This risk is relatively low as companies in the Group have trade receivables distributed among a large number of customers with a short expected maturity. Trade receivables are measured, without discounting, at the amounts initially invoiced less allowances for expected losses. Historically, overall customer losses have been low throughout the Group. A collective method is used where the receivables are grouped together based on e.g. the number of days past due. A credit loss percentage is calculated for the respective intervals based on experience from historic loss levels for similar receivables while taking into account forward-looking macroeconomic conditions that may affect expected cash flows. For individual, significant receivables, an individual assessment is made. Impairment and loss allowance of accounts receivable is reported within Cost of purchases. Standard payment terms are 14–30 days in the group.

Trade receivables and other receivables

	2024	2023
Accounts receivable - trade	33,059	34,095
Receivables from associated companies	3,661	740
Other receivables	8,327	10,049
Total	**45,047**	**44,884**

Note 13 Trade receivables and other receivables, cont

Age analysis accounts receivable - trade

	2024			2023		
	Accounts receivable, gross	Loss allowance	Accounts receivable, net	Accounts receivable, gross	Loss allowance	Accounts receivable, net
Current	29,862	-342	**29,520**	31,700	-496	**31,204**
Past due 1–30 days	1,805	-14	**1,791**	1,415	-21	**1,394**
Past due 31–90 days	1,079	-260	**819**	795	-307	**488**
Past due >90 days	2,188	-1,259	**929**	2,254	-1,245	**1,009**
Total	**34,934**	**-1,875**	**33,059**	**36,164**	**-2,069**	**34,095**

Loss allowance accounts receivable - trade

	2024	2023
Balance brought forward	2,069	1,745
Provision for loss allowance	822	807
Receivables written off	-594	-361
Unused amounts reversed	-472	-122
Other	50	–
Balance carried forward	**1,875**	**2,069**

Note 14 Prepaid expenses and accrued income

	2024	2023
Accrued income, energy	8,238	10,259
Prepaid expenses, other	5,460	5,081
Accrued income, other	2,895	1,944
Total	**16,593**	**17,284**

Note 15 Inventories

Accounting policy

Inventories held for own use are valued at the lower of their cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. The consumption of nuclear fuel is calculated as a depletion of the energy content of the fuel rods, and is based on the cost of each batch of fuel loaded into the core. The cost of inventories is calculated, depending on the type of inventory, either through application of the first-in, first-out (FIFO) method or through the application of a method based on average prices. Both methods include costs that arose on acquisition of the inventory assets.

Inventories held for trading are valued at fair value less costs to sell. For CO_2 emission allowances/certificates that are held for trading, fair value is based on quoted prices (Level 1), for other commodities the fair value measurement is derived from an observable market price (Level 2) of the fair value hierarchy.

Inventories related to develop to sell projects pertains to operations within Business Area Wind where Vattenfall constructs and builds wind- and solar parks with the purpose of selling the fully operational parks to external parties. These inventories are valued at the lower of cost and net realisable value. Cost includes expenses for land acquisition and design as well as expenses for construction.

The value of the energy stored in the form of water in reservoirs is not reported as an asset.

Note 15 Inventories, cont.

Inventories

	2024	2023
Inventories held for own use		
Nuclear fuel	8,394	7,573
Materials and spare parts	4,281	3,635
Fossil fuel	67	72
Renewable fuel	491	417
Other	568	809
Total	**13,801**	**12,506**
Inventories held for trading		
Fossil fuel	3,486	1,569
CO_2 emission allowances/certificates	2,462	1,960
Biomass	61	264
Total	**6,009**	**3,793**
Develop to sell projects		
Wind power	2,358	206
Solar power	2,906	2,097
Total	**5,264**	**2,303**
Total inventories	**25,074**	**18,602**

Inventories recognised as an expense in 2024 amount to SEK 4,899 million (10,050). Impairment losses for inventory for own use amounted to SEK 0 million (56) during the year. Reversed impairments amounted to SEK 87 million (67).

Note 16 Advance payments paid

Accounting policy

A margin call paid is a marginal security (collateral) that Vattenfall pays its counterparty, that is, to the holder of a derivative position to cover the counterpart's credit risk, either bilaterally via OTC or through an exchange. Margin calls paid within energy trading are recognised on the balance sheet as advance payments paid and are recognised in the statement of cash flows as cash flows from changes in operating assets.

Advance payments paid

	2024	2023
Margin calls paid, energy trading	3,461	17,749
Other advance payments	877	1,087
Total	**4,338**	**18,836**

Note 17 Assets held for sale

Accounting policy

Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. To be classified as held for sale a number of criteria must be met. Assets held for sale are valued at the lower of their carrying amount and fair value less costs to sell and are not subject to amortisation or depreciation.

Financial information

There are no assets (or liabilities) held for sale as of 31 December 2024.

Assets (and liabilities) held for sale as of 31 December 2023 referred to the heat operations in Berlin and the Norfolk Offshore Wind Zone. The divestment of Norfolk Offshore Wind Zone was completed in the first quarter of 2024. The divestment of the heat operations in Berlin was completed in the second quarter of 2024.

Assets held for sale

	2024	2023
Intangible assets, non-current	–	133
Property, plant and equipment	–	29,163
Other non-current assets	–	900
Trade receivables and other receivables	–	4,146
Cash and cash equivalents	–	6,921
Total assets	**–**	**41,263**
Interest-bearing provisions	–	6,623
Other non-current liabilities	–	865
Trade payables and other liabilities	–	8,497
Total liabilities	**–**	**15,985**

Note 18 Trade payables and other liabilities

■ **Accounting policy**
Refer to Note 36, Financial instruments for accounting principles.

■ **Key accounting estimates and judgements**
Supplier finance arrangements
Vattenfall has established a supplier finance arrangement with external finance providers that is offered to some of the Groups larger suppliers. The participating suppliers can choose to receive earlier payments from the finance providers for a fee that the finance providers keep. The arrangement also enables Vattenfall to extend its payment terms up to 120 days from the standard payment terms of 60 days at no additional cost. The supplier finance arrangement is an integrated part of the commercial relationships with suppliers and the liabilities are part of the working capital in Vattenfall's normal operating cycle. The Group provides no collateral or guarantees to the finance provider. Vattenfall assessment is that the liabilities that is part of the supply financing arrangement are closely related to operating purchase activities and that the arrangement does not lead to any significant change in the nature or function of the liabilities. The liabilities that are part of the supplier finance arrangement are therefore included in Trade and other payables in the consolidated balance sheet as part of accounts payable.

The arrangement has a multi-bank set up with five banks involved which limits the liquidity risk. The bank with the largest balance represents 53% on 31 December 2024.

Trade payables and other liabilities

	2024	2023
Accounts payable – trade	20,324	28,422
Liabilities to associated companies	2,361	159
Other liabilities	12,886	10,460
Total	**35,571**	**39,041**
Accounts payable that are part of supplier finance arrangements	503	2,324
Of which suppliers have received payment from the finance provider	499	2,053

Note 19 Advance payments received

■ **Accounting policy**
A margin call received is marginal security (collateral) that Vattenfall's counterparty pays to Vattenfall as the holder of a derivative position to cover Vattenfall's credit risk, either bilaterally via OTC or through an exchange. Margin calls received within energy trading are recognised on the balance sheet as Advance payments received and are thereby recognised in the statement of cash flows as cash flows from changes in operating liabilities.

Advance payments from customers regarding larger projects are recorded as Other advance payments.

Advance payments received

	2024	2023
Margin calls received, energy trading	8	1,152
Other advance payments	1,235	1,297
Total	**1,243**	**2,449**

Note 20 Accrued expenses and deferred income

	2024	2023
Accrued personnel-related costs	3,293	2,732
Accrued expenses, CO_2 emission allowances	2,422	2,224
Accrued nuclear power-related fees and taxes	415	201
Accrued interest expense	1,131	1,518
Other accrued expenses	9,028	8,845
Deferred income, energy	1,629	2,026
Accrued expenses, energy	5,948	4,561
Other deferred income	924	748
Total	**24,790**	**22,855**

Note 21 Acquired and divested operations

Aquired and divested operations 2024
Acquisitions 2024
No major operations have been acquired during the year.

Divestments 2024
The divestments during the year mainly consist of:

Norfolk
On 27 March 2024, Vattenfall concluded the sale of Norfolk Offshore Wind Zone to RWE. The agreed purchase price for the shares was GBP 1,025 million, corresponding to an enterprise value of GBP 963 million. The capital gain amounted to SEK 4,629 million.

Heat operations in Berlin
On 19 December 2023, Vattenfall and the State of Berlin signed an agreement regarding the divestment of the heat operations in Berlin. The divestment was completed on 2 May 2024, with financial settlement on 31 December 2023. The purchase price for the shares amounted to EUR 1,409 million. The capital loss amounted to SEK 1,716 million. The operational result of the heating operations in Berlin during the period 1 January to 2 May 2024 was positive, which explains the capital loss.

Nordlicht 1 and 2
Vattenfall owned 100% of the shares in the offshore windfarms Nordlicht 1 and 2 until April 2024 when Vattenfall divested 49% of the shares to BASF. The purchase price for the shares amounted to EUR 501 million and the capital gain amounted to SEK 5,084 million. The capital gain was reported in the income statement as Vattenfall was no longer considered to have control, based on the existing shareholder agreement at the time of the sale.

During the third quarter, the shareholder agreement was updated. Based on the new shareholder agreement, Vattenfall was considered to have regained control. Nordlicht 1 and 2 are reported as subsidiaries and consolidated in the Vattenfall Group as of the third quarter 2024. Vattenfall owned 51% of the shares in Nordlicht 1 and 2 per 31 December 2024.

Financial information divestments

	2024
Intangible assets: non-current	134
Property, plant and equipment	31,396
Investment property	2
Biological assets	30
Other shares and participations	4
Current tax assets, non-current	68
Deferred tax assets	388
Other non-current receivables	706
Total non-current assets	**32,728**
Inventories	1,366
Biological assets	14
Intangible assets: current	70
Trade receivables and other receivables	13,004
Advance payments paid	46
Derivative assets	843
Prepaid expenses and accrued income	79
Current tax assets	1
Cash and cash equivalents	1,583
Total current assets	**17,006**
Total assets	**49,734**
Other interest-bearing liabilities	9,030
Pension provisions	2,662
Other interest-bearing provisions	2,343
Deferred tax liabilities	1,749
Total non-current liabilities	**15,784**
Trade payables and other liabilities	2,961
Derivative liabilities	1,166
Accrued expenses and deferred income	1,949
Current tax liabilities	617
Total current liabilities	**6,693**
Total liabilities	**22,477**
Total net assets	**27,257**
Owners of non-controlling interest (minority)	476
Sales price	35,818
Capital gain (+)/loss (–) net recognised in the income statement	**8,085**

Note 22 Property, plant and equipment

■ Accounting policy

Property, plant and equipment are reported as assets if it is probable that future economic benefits associated with the item will flow to the company and the cost of the asset can be measured reliably. Cost includes the purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates, and any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Examples of directly attributable expenses included in cost are delivery and handling, installation, land registration and consulting services. Borrowing costs directly attributable to investment projects in property, plant and equipment, which take a substantial period of time to complete, are included in the cost of the asset during the construction period.

Acquisition cost may include a calculated present value for the estimated cost for dismantling, removing assets and restoring the site to its original state. The equivalent estimated cost calculated on the basis of the present value is reported initially as a provision, refer to Note 32, Interest-bearing provisions.

Subsequent costs

Subsequent costs for property, plant and equipment are only added to the acquisition cost if it is likely that there will be future financial benefits associated with the asset for the company and the cost can be calculated in a reliable manner. All other subsequent costs are reported as expenses in the period in which they are incurred. What is decisive for the assessment when a subsequent cost is added to the acquisition cost is whether the cost concerns the replacement of identified components, or parts of them, whereby such costs are capitalised. Also in cases where new components are created, the cost is added to the cost of the asset. Any undepreciated reported values of replaced components, or parts of components, are retired and recorded as an expense in connection with the replacement. Repair and maintenance costs are expensed as incurred.

Depreciation principles

Depreciation is reported on a straight-line basis in the income statement over the estimated useful life of the asset. The Group applies component depreciation, which means that the components' estimated useful life provides the basis for the straight-line depreciation. Assessments of the residual value and useful life of an asset are conducted annually. Land and water rights are not subject to depreciation.

Estimated useful life

Hydro power installations	5–50 years
Nuclear power installations	3–60 years
Combined heat and power installations	5–50 years
Wind power installations	10–25 years
Solar power installations	5–25 years
Distribution assets	10–35 years
Office and warehouse buildings and workshops	15–100 years
Office equipment	3–10 years

Estimated useful lives are unchanged compared to last year.

■ Key accounting estimates and judgements

Assumptions related to impairment testing

Property, plant and equipment are tested for impairment in accordance with the accounting policies described in Note 27, Impairment losses and reversed impairment losses. The recoverable amount for cash-generating units is determined by calculating the value in use or fair value less costs to sell. For these calculations, certain estimations must be made regarding future cash flows along with other adequate assumptions regarding for example the required rate of return.

Estimates of useful life

The useful life is based on historical experience and judgement, and as a result it may differ from the actual useful life.

Property, plant and equipment

	2024				
	Land and buildings[1]	Plant and machinery and other technical installations	Equipment, tools, fixtures and fittings	Construction in progress[2]	Total
Cost					
Cost brought forward[3]	52,970	437,670	10,055	35,095	**535,790**
Acquired companies	–	–	31	21	**52**
Investments[4]	699	1,226	960	25,359	**28,244**
Advance payments capitalised	–	–	–	95	**95**
Change in control	–	–	–	310	**310**
Capitalised/reversed future expenses for decommissioning, restoration	-3	-501	–	5	**-499**
Transfer from construction in progress	1,212	29,589	247	-31,048	**–**
Divestments/disposals	-724	-1,159	-904	-265	**-3,052**
Other reclassifications	48	16	188	-145	**107**
Assets held for sale	-6	-87	-6	-1,940	**-2,039**
Divested companies	-43	–	–	–	**-43**
Translation differences	685	7,965	197	699	**9,547**
Accumulated cost carried forward	**54,838**	**474,719**	**10,768**	**28,186**	**568,511**
Depreciation according to plan					
Depreciation brought forward	-20,914	-208,697	-7,084	–	**-236,695**
Acquired companies	–	–	-7	–	**-7**
Depreciation for the year	-1,481	-16,245	-1,072	–	**-18,798**
Divestments/disposals	732	924	858	–	**2,514**
Other reclassifications	3	-3	3	–	**3**
Assets held for sale	–	–	-5	–	**-5**
Divested companies	5	–	–	–	**5**
Translation differences	-246	-3,970	-142	–	**-4,358**
Accumulated depreciation according to plan carried forward	**-21,901**	**-227,991**	**-7,449**	**–**	**-257,341**
Impairment losses					
Impairment losses brought forward	-3,810	-31,800	-141	-436	**-36,187**
Impairment losses for the year	-7	-1,024	–	-702	**-1,733**
Reversed impairment losses for the year	–	15	–	–	**15**
Divestments/disposals	–	48	–	–	**48**
Assets held for sale	–	971	–	–	**971**
Divested companies	38	–	–	–	**38**
Translation differences	-101	-548	-3	-15	**-667**
Accumulated impairment losses carried forward	**-3,880**	**-32,338**	**-144**	**-1,153**	**-37,515**
Balance carried forward	**29,057**	**214,390**	**3,175**	**27,033**	**273,655**
Advance payments to suppliers					**52**
Total					**273,707**

Note 22 Property, plant and equipment, cont

	2023				
	Land and buildings[1]	Plant and machinery and other technical installations	Equipment, tools, fixtures and fittings	Construction in progress[2]	Total
Cost					
Cost brought forward[3]	66,074	478,402	10,972	41,063	**596,511**
Acquired companies	–	399	6	535	**940**
Investments[4]	278	433	928	33,335	**34,974**
Advance payments capitalised	–	–	–	79	**79**
Capitalised/reversed future expenses for decommissioning, restoration	–	-1,319	–	711	**-608**
Transfer from construction in progress	567	29,588	266	-30,548	**-127**
Divestments/disposals	-411	-2,539	-1,389	-41	**-4,380**
Other reclassifications	399	-574	115	-149	**-209**
Assets held for sale	-14,381	-67,434	-776	-10,161	**-92,752**
Divested companies	–	-762	-93	–	**-855**
Translation differences	444	1,476	26	271	**2,217**
Accumulated cost carried forward	**52,970**	**437,670**	**10,055**	**35,095**	**535,790**
Depreciation according to plan					
Depreciation brought forward	-29,823	-244,004	-7,794	–	**-281,621**
Acquired companies	–	-335	-4	–	**-339**
Depreciation for the year	-1,578	-15,422	-996	–	**-17,996**
Divestments/disposals	376	2,004	1,236	–	**3,616**
Other reclassifications	4	25	-246	–	**-217**
Assets held for sale	10,390	50,401	672	–	**61,463**
Divested companies	–	16	64	–	**80**
Translation differences	-283	-1,382	-16	–	**-1,681**
Accumulated depreciation according to plan carried forward	**-20,914**	**-208,697**	**-7,084**	**–**	**-236,695**
Impairment losses					
Impairment losses brought forward	-3,907	-33,408	-410	-439	**-38,164**
Impairment losses for the year	–	-997	–	-3,769	**-4,766**
Reversed impairment losses for the year	–	392	–	3,769	**4,161**
Divestments/disposals	4	406	1	2	**413**
Other reclassifications	11	–	245	–	**256**
Assets held for sale	76	1,075	1	–	**1,152**
Divested companies	–	746	29	–	**775**
Translation differences	6	-14	-7	1	**-14**
Accumulated impairment losses carried forward	**-3,810**	**-31,800**	**-141**	**-436**	**-36,187**
Balance carried forward	**28,246**	**197,173**	**2,830**	**34,659**	**262,908**
Advance payments to suppliers					**123**
Total					**263,031**

1. Cost for land and buildings includes cost of land and water rights amounting to SEK 10,381 million (10,218), which are not subject to depreciation.
2. Borrowing costs during the construction period have been reported as an asset in the amount of SEK 0 million (0) for the year. The average interest rate for 2024 was 4.04% for borrowings in SEK, 2.34% for borrowings in EUR and 6.82 % for borrowings in GBP.
3. Government grants received, balance brought forward, amount to SEK 8,343 million (8,093).
4. Government grants received during the year amounted to SEK 734 million (297).

At 31 December 2024, contractual commitments for the acquisition of property, plant and equipment amounted to SEK 8,389 million (12,115).

Note 23 Intangible assets: non-current

■ Accounting policy

Goodwill

Goodwill is measured at cost less any accumulated impairment losses. Goodwill is not subject to amortisation but is tested at least annually for impairment. Goodwill that arises on acquisition of associated companies or joint ventures is included in the carrying amount of Participations in associated companies and joint ventures.

Other intangible non-current assets

Other intangible non-current assets such as concessions, patents, licences, trademarks and similar rights as well as renting rights, and similar rights are reported at cost less accumulated amortisation and impairment losses. Development costs relates to development of business related IT-systems.

Principles for amortisation

Amortisation of Intangible non-current assets other than goodwill is reported on a straight-line basis in the income statement over the estimated useful life of the asset, provided the useful life is not indefinite.

Estimated useful life

Development costs	3-4 years
Concessions and similar rights	3-30 years
Costs to obtain a contract	1-6 years
Renting rights and similar rights	3-50 years

Estimated useful lives are unchanged compared to the preceding year.

■ Key accounting estimates and judgements

Assumptions related to impairment testing

Intangible assets are tested for impairment in accordance with the accounting policies described in Note 27 to the consolidated accounts, Impairment losses and reversed impairment losses. The recoverable amount for cash-generating units is determined by calculating the value in use or fair value less costs to sell. For these calculations, certain estimations must be made regarding future cash flows along with other adequate assumptions regarding for example the required rate of return.

Note 23 Intangible assets: non-current, cont

Intangible assets, non-current	2024					
	Goodwill	Development costs	Concessions and similar rights with finite useful lives	Costs to obtain a contract	Renting rights and similar rights with finite useful lives	Total
Cost						
Cost brought forward	41,118	2,684	17,098	2,127	114	**63,141**
Acquired companies	–	–	1	–	–	**1**
Investments	58	592	283	760	–	**1,693**
Divestments/disposals	-9	-51	-29	-522	–	**-611**
Reclassifications	–	6	-140	134	–	**–**
Assets held for sale	–	-18	-5	–	–	**-23**
Translation differences	1,374	21	582	64	1	**2,042**
Accumulated cost carried forward	**42,541**	**3,234**	**17,790**	**2,563**	**115**	**66,243**
Amortisation according to plan						
Amortisation brought forward	–	-1,651	-13,974	-1,418	-35	**-17,078**
Acquired companies	–	–	-1	–	–	**-1**
Amortisation for the year	–	-178	-392	-776	-1	**-1,347**
Divestments/disposals	–	48	29	522	–	**599**
Reclassifications	–	-2	90	-87	–	**1**
Assets held for sale	–	18	3	–	–	**21**
Translation differences	–	-21	-444	-42	-1	**-508**
Accumulated amortisation according to plan carried forward	**–**	**-1,786**	**-14,689**	**-1,801**	**-37**	**-18,313**
Impairment losses						
Impairment losses brought forward	-26,000	-212	-1,404	–	-69	**-27,685**
Impairment losses for the year	–	–	-20	–	–	**-20**
Translation differences	-885	–	-78	–	–	**-963**
Accumulated impairment losses carried forward	**-26,885**	**-212**	**-1,502**	**–**	**-69**	**-28,668**
Balance carried forward	**15,656**	**1,236**	**1,599**	**762**	**9**	**19,262**

Intangible assets, non-current	2023					
	Goodwill	Development costs	Concessions and similar rights with finite useful lives	Costs to obtain a contract	Renting rights and similar rights with finite useful lives	Total
Cost						
Cost brought forward	41,135	2,465	17,680	1,967	119	**63,366**
Acquired companies	–	–	2	–	–	**2**
Investments	66	288	289	716	–	**1,359**
Transfer from development projects in progress	–	-55	181	–	–	**126**
Divestments/disposals	–	-1	-146	-548	-5	**-700**
Reclassifications	–	67	-5	–	–	**62**
Assets held for sale	–	-81	-912	–	–	**-993**
Translation differences	-83	1	9	-8	–	**-81**
Accumulated cost carried forward	**41,118**	**2,684**	**17,098**	**2,127**	**114**	**63,141**
Amortisation according to plan						
Amortisation brought forward	–	-1,542	-14,464	-1,226	-32	**-17,264**
Acquired companies	–	–	-2	–	–	**-2**
Amortisation for the year	–	-178	-400	-747	-1	**-1,326**
Divestments/disposals	–	1	143	548	-2	**690**
Reclassifications	–	-12	-38	–	–	**-50**
Assets held for sale	–	81	775	–	–	**856**
Translation differences	–	-1	12	7	–	**18**
Accumulated amortisation according to plan carried forward	**–**	**-1,651**	**-13,974**	**-1,418**	**-35**	**-17,078**
Impairment losses						
Impairment losses brought forward	-26,047	-212	-1,420	–	-76	**-27,755**
Impairment losses for the year	–	–	-9	–	–	**-9**
Divestments/disposals	–	–	–	–	7	**7**
Reclassifications	–	–	38	–	–	**38**
Translation differences	47	–	-13	–	–	**34**
Accumulated impairment losses carried forward	**-26,000**	**-212**	**-1,404**	**–**	**-69**	**-27,685**
Balance carried forward	**15,118**	**821**	**1,720**	**709**	**10**	**18,378**

Contractual commitments for acquisitions of non-current intangible assets amounted to SEK 1 million (0) as per 31 December 2024.

Note 24 Intangible assets: current

■ **Accounting policy**

CO_2-emission allowances held for own use

Vattenfall applies the "net liability/ carrying value" approach which means that the allowances received by way of a grant are recorded at a nominal amount (in most cases nil) and purchased rights are recognised at cost less accumulated impairment losses. As carbon dioxide is emitted, an obligation arises to deliver emission allowances (EUAs, CERs, ERUs) to the authorities in the respective countries. The obligation is reported as Cost of purchases and a liability in the amount at which it is expected to be settled.

Certificates held for own use

Vattenfall applies the "net liability/ reimbursement rights" approach for certificates and guarantees of origin. Under this approach accumulated certificates, which are received free of charge, are reported as intangible assets under current assets at fair value when obtained. The corresponding amount is recognised as revenue under Net sales. Purchased certificates for own use are recognised at cost less accumulated impairment losses. When electricity is sold, an obligation arises to deliver certificates to the authorities in the respective countries. The obligation is reported as Cost of purchases and a liability in the amount at which it is expected to be settled and occurs in cases where Vattenfall has a shortage of certificates.

Intangible assets, current

	CO_2 emission allowances		Certificates		Total	
	2024	2023	2024	2023	2024	2023
Balance brought forward	6,153	2,979	52	64	**6,205**	**3,043**
Purchases	11,855	16,023	41	31	**11,896**	**16,054**
Sold	-10,973	-9,861	6	-17	**-10,967**	**-9,878**
Redeemed	-4,746	-2,741	-51	-26	**-4,797**	**-2,767**
Disposals	-45	-38	–	–	**-45**	**-38**
Assets held for sale	29	-99	–	–	**29**	**-99**
Translation differences	189	-110	2	–	**191**	**-110**
Balance carried forward	**2,462**	**6,153**	**50**	**52**	2,512	6,205

Note 25 Participations in associated companies and joint ventures

■ **Accounting policy**

Associated companies

Associated companies are companies in which the Group has a significant influence over their operational and financial management, usually through shareholdings corresponding to between 20% and 50% of the votes. From the point at which the significant influence is acquired, participations in associated companies are reported in the consolidated accounts in accordance with the equity method.

Joint ventures

Joint ventures are companies in which the Group has joint control with one or several other external parties. A joint venture entails that the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Joint ventures are reported in accordance with the equity method.

■ **Key accounting estimates and judgements**

Consolidation method for partnerships

For judgements regarding whether a joint arrangement is a joint venture or a joint operation refer to Note 26, Shares and participations in subsidiaries and joint operations.

Assumptions related to impairment testing

When participations in associated companies and joint ventures are tested for impairment, assumptions need to be made regarding for example future cash flows. For more information regarding accounting principles and assumptions refer to Note 27, Impairment losses and reversed impairment losses.

Participations in associated companies and joint ventures

	2024	2023
Balance brought forward	4,140	7,094
New share issues and shareholders' contributions	478	207
Divested companies	–	-140
Impairment losses	–	-1,745
Changes in other comprehensive income	368	-1,277
Profit participations and dividends	-96	-77
Translation differences	147	78
Balance carried forward	**5,037**	**4,140**

Note 25 Participations in associated companies and joint ventures, cont

Participations in associated companies and joint ventures owned by the parent company or by other group companies

	Corporate Identity Number	Registered office	Participation in % 2024	Carrying amount Group 2024	Carrying amount Group 2023	Carrying amount parent company 2024	Carrying amount parent company 2023
Owned by the parent company Vattenfall AB							
Sweden							
Hybrit Development AB	559121-9760	Stockholm	33	153	190	557	557
Norway							
NorthConnect KS	996625001	Kristiansand	33	45	46	–	–
NorthConnect AS	995878550	Kristiansand	30	12	12	–	–
Owned by other group companies							
Sweden							
Blakliden Fäbodberget Holding AB	559148-3408	Solna	30	57	162	–	–
UK							
East Anglia Offshore Wind Ltd[1]	06990367	London	50	56	52	–	–
Muir Mhòr Offshore Wind Farm Limited	717262	Edinburgh	50	393	280	–	–
Germany							
E & V Windfeld Birkhorst GmbH[1]	HRB 13342	Schenkenberg	50	2	2	–	–
DOTI Deutsche Offshore-Testfeld- und Infrastruktur-GmbH & Co. KG	HRA 200395	Oldenburg	26	–	–	–	–
GASAG AG	HRB 44343	Berlin	32	3,245	2,774	–	–
Kernkraftwerk Brokdorf GmbH & Co. oHG	HRA 99143	Hamburg	20	–	–	–	–
Kernkraftwerk Stade GmbH & Co. oHG	HRA 99146	Hamburg	33	–	–	–	–
SZ Solarpark Schleife GmbH	HRB 42410	Schleife	30	–	–	–	–
Vattenfall Eurofiber GmbH (sold)[1]	HRB 202647	Berlin	0	–	–	–	–
Vattenfall wiwi consult Erneuerbare Energie Südwest GmbH	HRB 52191	Mainz	50	–	–	–	–
Netherlands							
B.V. Nederlands Elektriciteit Administratiekantoor	09018339	Arnhem	23	–	–	–	–
Molenrak B.V.[1]	82937230	Amsterdam	58	390	223	–	–
OSwinT B.V.	74311883	Swifterbant	23	9	8	–	–
V.O.F. Windpark Oom Kees[1]	09210903	Amsterdam	13	4	3	–	–
Westpoort Warmte B.V.[1]	34121626	Amsterdam	50	455	388	–	–
Zeevonk Electrolyser Beheer B.V.[1]	94367892	Amsterdam	50	–	–	–	–
Zeevonk Electrolyser C.V.[1]	94560129	Amsterdam	50	38	–	–	–
Zeevonk Beheer B.V.[1]	93309074	Amsterdam	50	–	–	–	–
Zeevonk C.V.[1]	93311893	Amsterdam	50	178	–	–	–
Total				**5,037**	**4,140**	**557**	**557**

1. Joint ventures.

Share of profit from associated companies and joint ventures

	2024	2023
Sweden		
Blakliden Fäbodberget Holding AB	-102	-95
Hybrit Development AB	-38	-79
Norway		
NorthConnect KS	–	–
NorthConnect AS	–	–
UK		
East Anglia Offshore Wind Ltd	–	–
Muir Mhòr Offshore Wind Farm Limited	–	–
Germany		
E & V Windfeld Birkhorst GmbH	–	–
DOTI Deutsche Offshore-Testfeld- und Infrastruktur-GmbH & Co. KG	–	-27
GASAG AG	193	306
Kernkraftwerk Brokdorf GmbH & Co. oHG	–	–
Kernkraftwerk Stade GmbH & Co. oHG	–	–
SZ Solarpark Schleife GmbH	–	–
Vattenfall Eurofiber GmbH (sold)	–	-187
Vattenfall wiwi consult Erneuerbare Energy	–	–
Netherlands		
B.V. Nederlands Elektriciteit Administratiekantoor	–	–
Molenrak B.V.	-1	-8
OSwinT B.V.	–	–
V.O.F. Windpark Oom Kees	1	2
Westpoort Warmte B.V.	56	77
Zeevonk Electrolyser Beheer B.V.	–	–
Zeevonk Electrolyser C.V.	–	–
Zeevonk II Beheer B.V.	–	–
Zeevonk II C.V.	-14	–
Total	**95**	**-11**

Note 26 Shares and participations in subsidiaries and joint operation

■ Accounting policy

Subsidiaries

Subsidiaries are all entities over which the parent company has control. Control is when the Group is exposed to, or has rights to variable returns from its involvement in the entity and has the ability to use its power over the entity to affect the amount of returns. Business combinations are accounted for using the purchase method. Subsidiaries' financial statements, which are prepared in accordance with the Group's accounting policies, are included in the consolidated accounts from the point of acquisition to the date when control ceases.

Joint operation

A joint operation is when the Group has joint control with one or more external parties over an arrangement. A joint operation entails that the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Arrangements where the parties buy or are assigned all power generated and are responsible for cost coverage are considered a joint operation if Vattenfall has joint control. In a joint operation, the respective owners recognise in relation to their interest in the joint organisation, their assets and liabilities as well as their respective share of assets and liabilities held or incurred jointly.

■ Key accounting estimates and judgements

Consolidation method for partnerships

On establishment of partnerships and in connection with any restructuring of existing partnerships Vattenfall need to assess whether it controls the partnership, i.e. if Vattenfall has control or joint control. When Vattenfall has joint control an assessment of whether it is a joint venture, or a joint operation is needed. In the assessment we consider the decision making, corporate form/legal structure, financing, risks, if Vattenfall is entitled to the net profit (loss) or to income and expenses resulting from the operation and if Vattenfall can use its control to affect the returns from the partnership. The agreements are unique and sometimes difficult to assess.

Assumptions related to impairment testing

When shares in subsidiaries and joint operations are tested for impairment, assumptions need to be made regarding for example future cash flows. For more information regarding accounting principles and assumptions refer to Note 27, Impairment losses and reversed impairment losses.

Shares and participations owned by the parent company Vattenfall AB or by other group companies

	Corporate Identity Number	Registered office	Number of shares 2024	Participation in % 2024	Carrying amount parent company 2024	Carrying amount parent company 2023
Sweden						
Borås Elhandel AB[1]	556613-7765	Borås	1,000	100	100	100
Chlorout AB[6]	556840-9253	Stockholm	500	100	–	–
Enwell Holding AB[1]	556813-3846	Stockholm	1,230,000	100	353	223
Forsmarks Kraftgrupp AB[2]	556174-8525	Östhammar	198,000	66	5,346	198
Försäkrings AB Vattenfall Insurance[6]	516401-8391	Solna	200,000	100	924	924
Gotlands Energi AB[1]	556008-2157	Gotland	112,500	75	13	13
InCharge AB[1]	559178-6081	Stockholm	50,000	100	–	–
Klimatum AB[1]	559030-1148	Stockholm	100	100	39	39
Produktionsbalans PBA AB[2]	556425-8134	Stockholm	4,800	100	5	5
Ringhals AB[2]	556558-7036	Varberg	248,572	70	1,083	379
Svensk Kärnbränslehantering AB[2]	556175-2014	Solna	360	36[7]	–	–
Vattenfall Business Services Nordic AB[6]	556439-0614	Stockholm	100	100	130	130
Vattenfall Computing Services AB[6] Liquidated	559217-9229	Stockholm			–	14

Shares and participations owned by the parent company Vattenfall AB or by other group companies, cont

	Corporate Identity Number	Registered office	Number of shares 2024	Participation in % 2024	Carrying amount parent company 2024	Carrying amount parent company 2023
Vattenfall Elanläggningar AB[5]	556257-5661	Solna	1,000	100	1,201	1
Vattenfall Eldistribution AB[5]	556417-0800	Solna	8,000	100	38,000	38,000
Vattenfall Kundservice AB[6]	556529-7065	Umeå	100,000	100	30	30
Vattenfall Nuclear Fuel AB[2]	556440-2609	Solna	100	100	796	96
Vattenfall Power Management AB[1]	556573-5940	Stockholm	6,570	100	12	12
Vattenfall Services Nordic AB[2]	556417-0859	Stockholm	16,000	100	669	19
Vattenfall Vattenkraft AB[2]	556810-1520	Stockholm	1,000	100	1	1
Vattenfall Vindkraft AB[4]	556731-0866	Stockholm	1,000	100	3,000	3,000
Västerbergslagens Energi AB[1]	556565-6856	Ludvika	14,674	51	15	15
Germany						
Vattenfall GmbH[6]	(HRB) 124048	Berlin	500,000,000	100	51,168	51,168
Netherlands						
Vattenfall N.V.[6]	33292246	Amsterdam	136,794,964	100	44,138	44,138
Denmark						
Vattenfall A/S[6]	213 11 332	Copenhagen	10,040,000	100	82	82
Vattenfall Network Solutions A/S[5]	31894522	Copenhagen	5,000	100	89	89
Vattenfall Vindkraft A/S[4]	31597544	Kolding	150,000	100	4,870	4,870
Vindstød A/S[1] Sold	340 451 43	Aarhus				179
UK						
Vattenfall HEAT UK Limited[1]	2951085	London	17,000,002	100	1,521	1,153
Vattenfall Networks Ltd[5]	2731769	London	15,000,002	100	176	176
Vattenfall Networks Solutions Ltd[5] Liquidated	2692708	London	2,000	100	–	186
Vattenfall Wind Power Ltd4	6205750	London	646,000,001	100	10,510	10,510
Other countries						
Vattenfall AS[4]	931 124 692	Oslo	42,500	100	–	–
		Boulogne				
Vattenfall Eolien S.A.S.[4]	832352538	Billancourt	1,000	100	182	182
Vattenfall IT Services Poland Sp.z.o.o[6]	0000402391	Gliwice	58,000	100	12	12
Vattenfall Oy[1]	1842073-2	Helsinki	85	100	684	684
Total					**165,149**	**156,628**

1. Customers & Solutions
2. Power Generation – Generation
3. Power Generation – Markets
4. Wind
5. Distribution
6. Other
7. The Group owns a further 30% via Forsmarks Kraftgrupp AB.

Note 26 Shares and participations in subsidiaries and joint operation, cont

Larger shareholdings owned by other group companies than the parent company Vattenfall AB
When calculating the participation percentages, consideration is taken for the non-controlling interests in the respective companies.

	Registered office	Participation in % 2024
Sweden		
Vattenfall Kraftgården AB	Ragunda	74
Denmark		
Vattenfall Vindkraft Nørrekær Enge A/S	Esbjerg	100
Germany		
DanTysk Sandbank Offshore Wind GmbH & Co. KG	Hamburg	51
Kernkraftwerk Brunsbüttel GmbH & Co. oHG	Hamburg	67
Kernkraftwerk Krümmel GmbH & Co. oHG	Hamburg	50
Nuon Epe Gasspeicher GmbH	Gronau	100
Solizer Deutschland GmbH	Hamburg	100
Vattenfall Energy Trading GmbH	Hamburg	100
Vattenfall Europe Information Services GmbH	Hamburg	100
Vattenfall Europe New Energy GmbH	Hamburg	100
Vattenfall Europe New Energy Ecopower GmbH	Rostock	100
Vattenfall Europe Sales GmbH	Hamburg	100
Vattenfall Europe Windkraft GmbH	Hamburg	100
Vattenfall Next Energy GmbH	Berlin	100
Vattenfall Real Estate Energy Sales GmbH	Berlin	100
Vattenfall Smarter Living GmbH	Berlin	100
Vattenfall Wasserkraft GmbH	Berlin	100

	Registered office	Participation in % 2024
Netherlands		
DELTA Energie B.V.	Middelburg	100
Feenstra N.V.	Amsterdam	100
Feenstra Verwarming B.V.	Lelystad	100
Nuon Epe Gas Service B.V.	Amsterdam	100
Vattenfall Storage B.V.	Amsterdam	100
Vattenfall Customers & Solutions Netherlands N.V.	Amsterdam	100
Vattenfall Duurzame Energie N.V.	Amsterdam	100
Vattenfall Energy Sourcing Netherlands N.V.	Amsterdam	100
Vattenfall Energy Trading Netherlands N.V.	Amsterdam	100
Vattenfall Klantenservice N.V.	Amsterdam	100
Vattenfall Sales Nederland N.V.	Amsterdam	100
Vattenfall Warmte N.V.	Amsterdam	100
Zuidlob Wind B.V.	Amsterdam	100
UK		
Aberdeen Offshore Wind Farm Ltd	Aberdeen	100
Kentish Flats Ltd	London	100
Nuon UK Ltd	Cornwall	100
Ormonde Energy Ltd	London	51
Pen Y Cymoedd Wind Farm Ltd.	Cornwall	100
Thanet Offshore Wind Ltd	London	100
France		
Vattenfall Energies S.A.	Didenheim	100

Subsidiaries with material non-controlling ownership interests

Forsmarks Kraftgrupp

Forsmarks Kraftgrupp conducts nuclear power operations from three nuclear reactors in Östhammar municipality, Uppsala County. Forsmarks Kraftgrupp is owned by Vattenfall AB (66.0%) and Mellansvensk Kraftgrupp AB (25.5%), the latter of which has Fortum as its largest owner, and Sydkraft Nuclear Power AB (8.5%). The German state is the largest, controlling shareholder of Uniper, which owns Sydkraft Nuclear Power AB.

These part-owners have a consortium agreement that regulates operations and decision making for Forsmarks Kraftgrupp. Forsmarks Kraftgrupp is accounted for as a subsidiary in the Vattenfall Group since, under the consortium agreement, Vattenfall controls Forsmarks Kraftgrupp.

Sales of the electric power that is generated are made on a pro rata basis to the part owners at cost, pursuant to the consortium agreement. In addition, the consortium agreement entails that the part-owners are responsible for the company's funding on a pro rata basis, and that the company's operations shall in principle not generate any profit. Generation in 2024 amounted to 21.8 TWh (24,3), and the average availability for Forsmark was 78.0% (87,3 %).

Ringhals

Ringhals conducts nuclear power operations from four nuclear reactors on the Swedish west coast in Varberg municipality. Two of the reactors have been taken out of operation and decommissioning has begun. Ringhals is owned by Vattenfall AB (70.4%) and Sydkraft Nuclear Power AB (29.6%). The part-owners have a consortium agreement that regulates how the operations of Ringhals are conducted and how decision making is done. Ringhals is reported as a subsidiary in the Vattenfall Group since Vattenfall has control over Ringhals.

Sales of the electric power that is generated are made on a pro rata basis to the part-owners at cost, pursuant to the consortium agreement. In addition, the consortium agreement entails that the part owners are responsible for the company's funding on a pro rata basis, and that the company's operations shall in principle not generate any profit. Generation in 2024 amounted to 16.1 TWh (13.1), and the average availability for Ringhals was 84,3% (70,0 %).

DanTysk Sandbank Offshore Wind

The DanTysk offshore wind farm was one of the first large marine wind farms built in the German North Sea. The wind farm comprises 80 wind turbines with a total capacity of 288 MW. DanTysk began generating electricity in December 2014. The Sandbank wind farm comprises 72 wind turbines with a total capacity of 288 MW. The wind farm is located adjacent to DanTysk and was inaugurated in 2017.

Both wind farms are part of the company DanTysk Sandbank Offshore Wind GmbH & Co. KG, in which Vattenfall Europe Windkraft GmbH owns 51% of the shares, and the partner Stadtwerke München holds 49% of the shares. Vattenfall has control over DanTysk Sandbank Offshore Wind.

Hollandse Kust Zuid

Hollandse Kust Zuid is an offshore wind farm which was inaugurated in September 2023 and is located in the North Sea. The wind farm consists of 139 turbines with an aggregated capacity of 1.5 GW.

Vattenfall Duurzame Energie N.V. owns 50.51% of the shares. The other owners are BASF, 24.25%, and Allianz, 25.24%. Vattenfall has control over Hollandse Kust Zuid.

Financial information for subsidiaries with material non-controlling ownership interests

	2024				2023			
	Forsmarks Kraftgrupp	Ringhals	DanTysk Sandbank Offshore Wind	Hollandse Kust Zuid	Forsmarks Kraftgrupp	Ringhals	DanTysk Sandbank Offshore Wind	Hollandse Kust Zuid
Income statements in summary								
Net sales	7,643	6,554	4,205	2,611	6,380	4,561	4,828	1,591
Profit for the year	706	-495	992	1,162	828	1,538	1,399	677
- of which allocated to non-controlling interests	240	36	486	56	290	50	685	332
Balance sheets in summary								
Non-current assets	60,047	50,145	9,626	31,228	60,007	49,337	11,167	30,040
Current assets	15,868	8,758	1,062	1,308	15,964	8,084	1,545	749
Total assets	**75,915**	**58,903**	**10,688**	**32,536**	**75,971**	**57,421**	**12,712**	**30,789**
Equity	20,469	-66	8,553	28,142	11,985	-505	11,060	26,648
Liabilities	55,446	58,969	2,135	4,394	63,986	57,926	1,652	4,141
Total equity and liabilities	**75,915**	**58,903**	**10,688**	**32,536**	**75,971**	**57,421**	**12,712**	**30,789**
Statement of cash flows in summary								
Cash flow for the year	-26	11	356	-246	-40	-391	-190	-800

Note 27 Impairment losses and reversed impairment losses

■ **Accounting policy**

Assessments are made throughout the year for any indication that an asset may have decreased in value. If there is an indication of this kind, the asset's recoverable amount is measured. For goodwill and intangible assets that are not ready for use, the recoverable amount is measured at least annually or as soon as there is an indication that an asset has decreased in value.

If the essentially independent cash flow for an individual asset cannot be established for the assessment of any need for impairment, the assets must be grouped at the lowest level where it is possible to identify the essentially independent cash flow (a so-called cash-generating unit). An impairment loss is reported when an asset or cash-generating unit's reported value exceeds the recoverable amount. Any impairment loss is recognised in profit or loss. Impairment of assets attributable to a cash-generating unit is allocated primarily to goodwill. Thereafter, a proportional impairment loss is conducted of other assets that are part of the unit.

Calculation of the recoverable amount

The recoverable amount is the higher of fair value less costs to sell and value in use. When calculating value in use, the future cash flow is discounted by a discounting rate that takes into consideration risk-free interest and the risk associated with the specific asset.

Reversal of impairment losses

Impairment of goodwill is never reversed. Impairment of other assets is reversed if a significant and lasting change has occurred in the assumptions that formed the basis for the calculation of the recoverable amount. An impairment loss is reversed only if the asset's carrying amount after reversal does not exceed the carrying amount that the asset would have had if the impairment loss had not been recognised.

■ **Key accounting estimates and judgements**

Assumptions related to impairment testing

The main assumptions that executive management has used in calculating projections of future cash flows in cash-generating units with finite useful lives are based on forecasts of the useful life of the respective assets. The projected cash flows are based on market prices and on Vattenfall's long-term market outlook. The long-term market outlook is based on internal and external input parameters and is benchmarked against external price projections. Based on the price assumptions, the production from the power plants is calculated, taking technical, economic and legal constraints into consideration. Technical flexibility of the assets, that is the ability to adapt generation to changes in spot market prices, has been taken into account. Cash flow projections of non-power producing cash-generating units are based on the business plan for the coming five years, after which their residual value is taken into account, based on a growth factor of 0% (0%–2%). If the final year of the business plan horizon does not represent reasonable basis for assessing long-term value, an extended forecast may be required to arrive at a steady-state earnings situation on which to calculate the terminal value.

Impairment test process

Vattenfall has performed impairment testing by calculating the recoverable amount of the cash-generating units. The structure of the cash-generating units, which represent the smallest group of identifiable assets that generate continuous cash inflows that are largely independent of other assets or groups of assets, is based on the Group's Business Area structure and further split into the Group's Business Unit structure and regions where relevant.

Goodwill is not amortised but is instead tested annually for impairment. Impairment testing of goodwill is included in the impairment testing process described above. 98% of the goodwill for the Group is related to the cash generating unit Customers & Solutions in the Netherlands.

In addition to the regular impairment test for the cash-generating units, Vattenfall reports separate assets held for sale if the expected sales price is below the reported book value of the assets. Furthermore, shareholdings in associated companies for which the equity method is applied are outside a Cash Generating Unit and thus tested for an impairment need on an individual basis.

In Vattenfall's transition plan towards net zero emissions in 2040, meaning at least 90% reduction compared to baseline 2017, Vattenfall has intermediate targets on absolute emissions across all emissions scope for 2030. Those targets include for example reduced fossil emissions from electricity and heat generation from gas and waste to heat, reduced emissions from the supply chain and reduced emissions from sales of fossil gas to customers. The reduction of emissions is in general connected to mitigating actions in the different businesses subject to reducing emissions. More information on Vattenfall's transition plan is found on pages 91–93. The intermediate targets for 2030 have been considered in the business plans for Vattenfall's business units used in the impairment test, and have not resulted in any impairment as a result of the transition plan. The target on reduction of emissions from the supply chain is also considered when investment decisions are taken.

Impairment losses & Impairment reversals 2024

During the first quarter 2024 an adjustment of the expected purchase price related to the divestment of the heat operations in Berlin resulted in an impairment of property, plant and equipment amounting to SEK 958 million.

During the third quarter 2024 Vattenfall announced to pause the development of the Swedish offshore project Kriegers Flak. The future profitability of the project has been negatively impacted by cost increases in supply chain and cost for grid connection. These factors together with the decision to pause further development triggered an impairment assessment of the capitalized project costs which led to an impairment of SEK 345 million in the third quarter, as the recoverable amount was concluded to be zero given the circumstances. The project could be resumed if the prerequisites would improve and Vattenfall still have valid permits.

In addition, impairments amounting to SEK 418 million relating to property, plant and equipment in Business Area Wind have been recorded.

No material previously recognised impairment losses have been reversed in the income statement during 2024.

Sensitivity analysis

The discount rate varies for the various asset classes, depending on their risk. When setting the discount rate for non-regulated business, consideration has been given to the extent of exposure this has for changes in wholesale prices of electricity, fuel, CO_2 emission allowances, and regulatory risks. An increase in the discount rate by 0,5 percentage points would give rise to an impairment need of SEK 0,1 billion in Business Area Wind.

Electricity prices and margins for generation assets represent another major value driver. Electricity prices are relevant for hydro, non-subsidised wind and nuclear power plants, while the most important production margin is the "clean spark spread" for gas-fired power plants. Those spreads include electricity prices as well as the respective cost for fuel and CO_2 emission allowances to produce the electricity, considering fuel type and efficiency factors. Based on the assumptions used in the impairment testing, a decrease in future electricity prices by 5%, with unchanged costs for fuel and CO_2 emission allowances, would result in an impairment need of SEK 0.3 billion in Business Unit Condensing and Business Area Wind.

98% of the goodwill for the Group is related to the cash generating unit Customers & Solutions in the Netherlands. For the annual testing of this goodwill three different scenarios are used. In the most conservative scenario the expected gross margin, which is the key parameter, is reduced by 50% and also this scenario would not result in an impairment need.

Discount rates

	2024		2023	
	Before tax	After tax	Before tax	After tax
Discount rate BA Distribution Sweden, %	5.9	4.7	5.5	4.4
Discount Rate BA Wind, %	6.3–8.9	4.4–6.7	5.8–7.5	4.4–5.7
Discount Rate BU Heat, %	6.4–9.3	5.1–6.8	6.1–8.9	4.5–6.6
Discount Rate BA Customers & Solutions, %	6.7–7.1	5.0–5.3	6.6–6.8	4.7–5.4
Discount Rate BA Power Generation, %	6.7–8.4	5.3–6.9	6.8–8.9	5.4–7.1

Note 28 Short-term investments

	2024	2023
Interest-bearing investments	50,110	21,022
Margin calls paid, financing activities	1,894	3,566
Total	**52,004**	**24,588**

Note 29 Cash and cash equivalents

	2024	2023
Cash and bank balances	30,612	22,193
Cash equivalents	4,505	5,489
Total	**35,117**	**27,682**

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Note 30 Interest-bearing liabilities and related financial derivatives

Accounting policy

Interest-bearing liabilities include Hybrid Capital and other interest-bearing liabilities, mainly bond issues. For accounting policy refer to Note 36, Financial instruments and Note 33, Leasing. Risks arising from financial instruments are described in the section Risks and risk management in this Annual and Sustainability Report.

Hybrid Capital

The hybrid bonds are reported as an interest-bearing liability and are subordinated to Vattenfall's other debt instruments. The credit rating agencies Moody's and Standard & Poor's classify 50% of the hybrid bonds as equity in their credit analyses. The two SEK bonds of SEK 3 billion and SEK 500 million, one GBP bond of GBP 250 million, and one EUR bond of EUR 1 billion, have set terms of 62 years. The second GBP bond of GBP 250 million has a set term of 60.25 years. Vattenfall has an option at specifically defined points in time to redeem the bonds at a call date prior to maturity. These call dates arise for the first time in 2027 for the EUR-denominated bond.

Hybrid Capital

	2024	2023
Balance brought forward	20,987	21,931
Redemption of Hybrid Capital	–	-4,331
Issue of Hybrid Capital	–	3,215
Reclassification to/from other interest bearing debt	5	4
Translation differences	888	168
Balance carried forward	**21,880**	**20,987**

Maturity structure interest-bearing liabilities and attributable derivatives

	Current portion		1-5 years		>5 years		Total	
	2024	2023	2024	2023	2024	2023	2024	2023
Bond issues	10,741	19,988	17,544	30,546	14,728	11,407	**43,013**	**61,941**
Commercial paper	3,929	20,071	–	–	–	–	**3,929**	**20,071**
Liabilities to credit institutions	–	15	–	–	–	–	**–**	**15**
Liabilities pertaining to acquisitions of subsidiaries	183	36	152	298	–	–	**335**	**334**
Liabilities to owners of non-controlling interests	-45	397	–	–	6,879	9,668	**6,834**	**10,065**
Liabilities to associated companies	388	718	–	–	–	–	**388**	**718**
Lease liability	879	864	2,274	2,103	4,028	3,331	**7,181**	**6,298**
Other liabilities	622[1]	287[1]	250	245	166	148	**1,038**	**680**
Total interest-bearing liabilities excl. Hybrid Capital	**16,697**	**42,376**	**20,220**	**33,192**	**25,801**	**24,554**	**62,718**	**100,122**
Hybrid Capital	–	–	21,880	20,987	–	–	**21,880**	**20,987**
Total interest-bearing liabilities	**16,697**	**42,376**	**42,100**	**54,179**	**25,801**	**24,554**	**84,598**	**121,109**
Derivatives (swaps) attributable to the above interest-bearing liabilities	40	-58	144	219	1,223	734	**1,407**	**895**

1. Of which, margin calls within financing activities SEK 622 million (287).

There are no covenants in the loan agreements.

Undiscounted future cash flows

Undiscounted future cash flows including interest payments on the interest-bearing liabilities mentioned above, future cash flow for derivatives, trade payables and financial instruments with contractual payments on 31 December, are shown in the table below. Floating interest cash flows with future interest fixing dates are estimated based on observable interest rate curves at year end. All future cash flows in foreign currency are translated to SEK using the rate on the balance sheet date for the annual accounts.

Undiscounted future cash flows

	Current portion		1-5 years		>5 years		Total	
	2024	2023	2024	2023	2024	2023	2024	2023
Interest-bearing liabilities	18,809	39,383	48,999	59,187	32,270	32,694	**100,078**	**131,264**
Derivatives (swaps)	47	18	186	370	774	887	**1,007**	**1,275**
Trade payables and other financial liabilities	24,010	29,818	362	345	1,476	1,479	**25,848**	**31,642**
Total	**42,866**	**69,219**	**49,547**	**59,902**	**34,520**	**35,060**	**126,933**	**164,181**

The largest benchmark bonds issued by Vattenfall

	Issued	Currency	Nominal amount	Coupon %	Maturity
Euro Medium Term Note	2020	EUR	500	0.050	2025
Euro Medium Term Note	2019	EUR	500	0.500	2026
Euro Medium Term Note	2022	EUR	500	3.750	2026
Euro Medium Term Note	2021	EUR	500	0.125	2029
Euro Medium Term Note	2009	GBP	750	6.875	2039

Note 31 Share in the Swedish Nuclear Waste Fund

According to the Swedish Nuclear Activities Act (1984:3), any organisation in Sweden with a permit to own or run a nuclear installation is obliged to dismantle the plant in a safe manner, to manage spent fuel and other radioactive waste and to conduct necessary research and development. The permit holder shall also finance this dismantling. The financing of future fees for spent nuclear fuel is currently ensured by Swedish law. The reactor owner is required to pay a generation-based fee to the board of the Swedish Nuclear Waste Fund, which manages paid-in funds. The reactor owner receives compensation from the Swedish Nuclear Waste Fund for its expenses as the obligations under Swedish law are fulfilled.

Accounting policy

The share in Swedish Nuclear Waste Fund is accounted for at fair value through profit or loss.

Share in the Swedish Nuclear Waste Fund

	2024	2023
Balance brought forward	52,175	47,682
Payments	2,733	1,811
Disbursements	-2,044	-1,706
Returns	2,786	4,388
Balance carried forward	**55,650**	**52,175**

As stated in Note 32, Interest-bearing provisions, provisions for future expenses for decommissioning within Swedish nuclear power operations amount to SEK 87,817 million (86,370). Contingent liabilities attributable to the Swedish Nuclear Waste Fund are described in Note 40, Contingent liabilities.

Note 32 Interest-bearing provisions

■ Accounting policy

A provision is recognised when the Group has a legal or constructive obligation as a result of a past event and it is probable that an outflow of financial resources will be required to settle the obligation and a reliable estimate of the amount can be made. Provisions are discounted when the effect of the time value of money is material. The discount effect is presented as a financial expense.

Changes in provisions relating to dismantling, restoration or similar measures are recognised against the acquisition value of the respective fixed asset, provided that there is an asset that is active. If there is not an active asset attributable to the provision, the change is recognised in the income statement.

Provisions are reported for onerous contracts when the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Provisions for future commitments for nuclear power operations

Nuclear power producers in Sweden and Germany have a legal obligation upon the cessation of production to decommission and dismantle the nuclear power plants and to restore the plots of land where the plants are located.

Vattenfalls' obligation in Sweden also encompasses the safeguarding and final storage of radioactive waste. The provisions include future commitments for the handling and storing of low- and intermediate-level radioactive waste at SVAFO (a partly owned subsidiary in Vattenfall Group). Vattenfall is responsible for nuclear waste management until the final closure of the final repository, after which the Swedish state takes over the responsibility. According to Swedish law, the reactor owner pays a production-based fee to the Swedish Nuclear Waste Fund, compensation from the fund is received as the obligations under Swedish law are fulfilled, refer to Note 31, Participations in the Swedish Nuclear Waste Fund.

Vattenfalls' obligation in Germany also includes the transfer of radioactive waste to the interim storage facilities operated by the state. Once the radioactive waste has been transferred to the interim storage, the German state takes over the legal responsibility for the operation and costs of the interim storage and final repositories.

■ Key accounting estimates and judgements

Assumptions used to estimate cost for future commitments for nuclear power operations

Provisions are recognised for future commitments regarding decommissioning of Vattenfall's nuclear power plants in Sweden and Germany and regarding managing nuclear waste. In Sweden Vattenfall's exposure to environmental risks related to nuclear waste management extends until the final closure of the repositories (around 2080). Then the Swedish state takes over the legal responsibility. In Germany Vattenfall's exposure to environmental risks related to nuclear waste management extends until the radioactive waste has been transferred to the interim storage, then the German state takes over the legal responsibility. The dismantling in Germany is expected to be completed around 2040.

The provisions are based on long-term cash flow projections for future costs. Key assumptions include technical plans, timing, cost estimates and discount rates.

Inflation and interest has a significant effect on the provisions. The macroeconomic development affects these parameters and in turn the outcome of Vattenfall's reported nuclear power provisions. The ultimate forward rate (UFR) is used beyond the liquid market horizon for Swedish government bonds with a convergence in between. The discount rate for the Swedish nuclear power provisions amounted to 3.00% (2.80). The discount rate for the German nuclear power provisions amounted to 1.00% (0.75).

The above assumptions are reassessed at each balance sheet date to ensure that the provisions represent the best estimate of the costs that will be borne by the Group. A future change in assumptions could have a significant impact on the Group's financial statements.

Discount rate

For other types of provisions than those for future commitments of nuclear power operations, the following discount rates are used, when the discounting effect is material: Sweden 1.50% (1.75), Germany 1.50% (1.75) Netherlands 1.25–1.75% (0.75–1.75), Denmark 1.75% (1,75) and the UK 2.75% (2,50).

Interest-bearing provisions

	Current portion		Non-current portion		Total	
	2024	2023	2024	2023	2024	2023
Future commitments of nuclear power operations	2,354	2,465	105,402	103,361	**107,756**	**105,826**
Dismantling and other environmental measures	76	66	16,450	15,339	**16,526**	**15,405**
Personnel-related (non-pension)	366	407	1,711	1,729	**2,077**	**2,136**
Legal disputes	6	6	734	686	**740**	**692**
Other	114	115	3,073	3,908	**3,187**	**4,023**
Total	**2,916**	**3,059**	**127,370**	**125,023**	**130,286**	**128,082**

Provisions for future commitments for nuclear power operations

	Sweden	Germany	Total
Balance brought forward	86,370	19,456	**105,826**
Recorded in the income statement			
- Additional provisions	3,333	2,322	**5,655**
- Unused amounts reversed	–	-888	**-888**
- Unwinding of discount	1,040	150	**1,190**
Amounts used during the year	-2,288	-1,737	**-4,025**
Revaluations recorded to property, plant and equipment	-638	–	**-638**
Translation differences	–	636	**636**
Balance carried forward	**87,817**[1]	**19,939**[2]	**107,756**

1. Of which, approximately 34% (43) pertains to the dismantling of nuclear power plants and approximately 66% (57) to the handling of radioactive waste.
2. Of which, approximately 68% (72) pertains to the dismantling of nuclear power plants and approximately 32% (28) to the handling of radioactive waste.

Note 32 Interest-bearing provisions, cont

Other provisions than provisions for future commmitments for nuclear power operations

	Dismantling and other environmental measures	Personnel-related (non-pension)	Legal disputes	Other
Balance brought forward	15,405	2,136	692	4,023
Recorded in the income statement				
- Additional provisions	48	396	16	321
- Unused amounts reversed	-18	-41	-5	-1,095
- Unwinding of discount	329	68	41	–
Amounts used during the year	-127	-554	-3	-109
Revaluations recorded to balance sheet	264	-5	–	–
Divested companies	–	–	–	–
Acquired companies	–	2	–	2
Assets held for sale	34	22	-2	3
Reclassified to/from other provision	–	-5	–	–
Translation differences	591	58	1	42
Balance carried forward	**16,526**	**2,077**	**740**	**3,187**

Dismantling and other environmental measures
Provisions are recorded for the dismantling and removal of assets and restoration of sites where the Group conducts its operations other than nuclear.

Personnel-related (non-pension)
Provisions are recorded for future costs regarding long-term time accounts, jubilee payments, severance payments related to restructuring measures, and other costs for giving notice to personnel.

Legal disputes
Provisions are recorded for future commitments due to ongoing legal disputes and actions.

Other
Other provisions include, among others, provisions for onerous contracts, restructuring and guarantee commitments.

Maturity structure of long-term interest-bearing provisions

	Future commitments nuclear Germany	Dismantling and other environmental measures	Personnel-related (non-pension)	Legal disputes	Other	Total
2-5 years	6,919	2,128	679	734	3,013	**13,473**
6-10 years	7,651	6,710	467	–	–	**14,828**
11-20 years	3,015	1,798	515	–	–	**5,328**
Beyond 20 years	–	5,814	50	–	60	**5,924**
Total	**17,585**	**16,450**	**1,711**	**734**	**3,073**	**39,553**

Payments of future commitments for nuclear power in Sweden are not included in the amounts reported above, since the owners of the reactors are compensated in corresponding amounts from the Swedish Nuclear Waste Fund, see Note 31 to the consolidated accounts, Share in the Swedish Nuclear Waste Fund.

Note 33 Leasing

■ Accounting policy
Vattenfall as lessee
Lease contracts are recognised as right-of-use assets as well as interest-bearing lease liabilities in the balance sheet.

The right-of-use-asset is initially measured at cost, which comprise the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset. The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the assessed useful life or the end of the lease term.

The lease liability is initially measured at the present value of the lease payments outstanding at the commencement date, discounted using Vattenfall's incremental borrowing rate, which is updated twice a year. Lease payments included in the measurement of the lease liability comprise:

- Fixed payments
- Variable lease payments that depend on an index or a rate
- Amounts expected to be payable under a residual value guarantee; and
- The exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period, if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease if the Group is reasonably certain to terminate early.

Vattenfall is applying the practical expedient related to leases for which the underlying asset is of low value and short-term leases. These contracts are expensed on a straight-line basis.

Vattenfall as lessor
Assets leased out under finance leases are not reported as property, plant and equipment, since the risks associated with ownership are transferred to the lessee. Instead, a financial receivable is entered for the future minimum lease payments.

Assets leased out under operating leases are recorded as property, plant and equipment and are subject to depreciation.

■ Key accounting estimates and judgements
Measurement of lease liabilities and right-of-use assets
Accounting judgement is applied, when identifying lease contracts and designating identified assets. Accounting judgement is also applied when determining the likelihood of the exercising extension options, and with regard to variable lease payments included in the lease liability.

Vattenfall as lessee
Leased property plant and equipment
Vattenfall mainly leases land for windfarms, office buildings and vehicles.

Right-of-use-assets

	Land	Buildings	Vehicles	Other	Total
Balance as of 1 January	3,695	1,728	430	211	**6,064**
Additions to the right-of-use-asset during the year	385	685	326	–	**1,396**
Depreciation for the year	-220	-466	-188	-191	**-1,065**
Other changes to the right-of-use-asset during the year	105	-52	-38	228	**243**
Translation differences	215	48	7	7	**277**
Balance carried forward	**4,180**	**1,943**	**537**	**255**	**6,915**

Note 33 Leasing, cont.

Lease liability

Lease liability development

Balance as of 1 January	5,434
Additions to the liability	1,396
Repayment of the liability	-1,179
Other changes	360
Translation differences	291
Long-term lease liability balance carried forward	**6,302**
Short-term lease liability	879
Total lease liability balance carried forward	**7,181**

Total leasing related cash-outflows 2024 amounted to SEK 1,343 million of which SEK 164 million is related to interest expenses.

Maturity analysis - contractual undiscounted cash flows

< 1 year	1,046
1-5 years	2,797
> 5 years	4,848
Total as of 31 December 2024	**8,691**

Lease payments amounting to SEK 776 million (712) have been expensed in 2024 relating to short-term leases, leases for which the underlying asset is of low value and variable components of contracts.

Vattenfall as lessor

Leasing revenues

Certain group companies own and operate power facilities on behalf of customers. Revenue from customers are broken down into two components; a fixed component to cover capital expenses and a variable component based on the quantity delivered. As of 31 December 2024, cost of assets leased out amounted to SEK 6,101 million (5,970). Accumulated depreciation amounted to SEK 4,898 million (4,633) and accumulated impairment amounted to SEK 98 million (95). As a lessor Vattenfall has only operating leases.

Future rental income for operating leasing

2025	1,109
2026	105
2027	78
2028	56
2029	30
2030 and beyond	67
Total	**1,445**

Note 34 Pension provisions

■ **Accounting policy**

Vattenfall's pension obligations in the Group's Swedish and German companies are to a large extent defined benefit pension obligations. The pension plans include primarily retirement pensions, disability pensions and family pensions. There are also pension plans in these and other countries that are defined contribution plans.

Defined benefit pension plans

The Group's defined benefit pension obligations are calculated separately for each plan in accordance with the Projected Unit Credit Method by calculating employees' current and past service cost. Estimated future salary adjustments are taken into consideration as well as taxes levied on pension costs, for example, the Swedish special employers' payroll tax ("särskild löneskatt"). The net obligation comprises the discounted present value of the total earned future salaries less the fair value of any plan assets. The discount rate consists of the interest rate o the balance sheet date of high quality corporate bonds with lifetimes that correspond to the Group's pension obligations. When there is no active market in corporate bonds of this kind, the market rate yield on government bonds with an equivalent lifetime should be used instead.

Items related to the earnings of defined benefit pensions and interest on the net of defined benefit plans assets and liabilities are recognised in the income statement. Remeasurements recognised in Other comprehensive income under the heading "Items that will not be reclassified to profit or loss" consist of actuarial gains and losses. Actuarial gains and losses arise from the effects of changes in actuarial assumptions and from experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred). The difference between the actual and the calculated return on pension assets are also recognised in Other comprehensive income.

Note 34 Pension provisions, cont.

Defined contribution pension plans

Defined contribution pension plans are post-employment benefit plans according to which fixed fees are paid to a separate legal entity. There is no legal or constructive obligation to pay additional fees if the legal entity does not have sufficient assets to pay all benefits to the employees. Fees for defined contribution pension plans are reported as an expense in the income statement in the period they occur.

■ **Key accounting estimates and judgements**

Assumptions used to calculate future pension obligations

The value of pension obligations for defined benefit pension plans is determined through actuarial computations that are based on assumptions about the discount rate, future salary increases, inflation and demographic conditions.

For pension provisions in Sweden, the discount rate amounted to 3.50% (3.50). The discount rate is based on mortgage bonds with high credit ratings, which market is large and liquid. In Germany, where the discount rate is based on high quality corporate bonds, the discount rate amounted to 3.50% (3.25).

Financial information

Swedish pension plans

The Swedish pension plans supplement the Swedish social insurance system and are the result of agreements between employer and employee organisations. Essentially all Vattenfall employees in Sweden are enrolled in the collectively bargained ITP-Vattenfall pension plan. For employees born in 1978 and earlier, the plan is mostly a defined benefit solution, while for employees born in 1979 and later, the plan is entirely a defined contribution solution.

In defined benefit pension solutions, the employee is guaranteed a lifetime pension that corresponds to a set percentage of the employee's final salary. Defined benefit pensions are secured through provisions on the balance sheet, and the obligation is covered by credit insurance with PRI Pensionsgaranti. In addition, certain pensions attributable the time prior to Vattenfall's incorporation are covered by a government guarantee via the Swedish National Debt Office. Defined contribution pensions are secured through insurance with any of the insurance companies that are electable within the framework of the ITP plan.

Certain of Vattenfall's obligations in the ITP plan such as spousal benefits and disability pensions are secured through an insurance policy from Alecta. According to a statement (UFR 10) issued by the Swedish Financial Reporting Board, this plan is a multi-employer defined benefit plan. As in previous years, Vattenfall has not had access to information to make it possible to report this plan as a defined benefit plan. The pension plan according to ITP secured by insurance in Alecta is therefore reported as a defined contribution plan. This year's share of the total savings premium in Alecta is 0.33976%, while Vattenfall's share of the total number of actively insured in Alecta is 1.46303%. Alecta's surplus can be distributed among the policyholders and/or the insured. At the end of 2024, Alecta's surplus in the form of its so-called collective funding amounted to 162 % (158 %). Collective funding consists of the fair value of Alecta's assets as a percentage of the insurance obligations calculated in accordance with Alecta's actuarial calculation assumptions.

German pension plans

The pension plans in Germany are based on collective agreements. Substantial defined benefit plans exist for employees in Berlin and Hamburg.

Berlin

Two defined benefit pension plans exist, both secured through Pensionskasse der Bewag, a mutual insurance company based on the statutes of the Bewag pension fund. Obligations are secured through funds paid in by member companies and their employees. Pensionskasse der Bewag's operations are supervised by a regulatory authority.

The pension plan for employees and retirees provided in addition to pension fund benefits shown, is based on a supplementary agreement to grant a pension subsidy. For employees who began their employment before 1 January 1984 and work until retirement age, the pension is based on up to 80% of the salary. Half of the statutory pension and the entire benefit from Pensionskasse der Bewag, including surpluses, are credited to the guaranteed amount. Vattenfall's obligations encompass the entire pension obligation. The plan assets attributable to personnel of Vattenfall companies are differentiated according to the two plans and are reported as plan assets at fair value. The assets of Pensionskasse are investment funds that are not listed on the stock exchange. The fair value is determined by the repurchase price.

The second plan covers employees and retirees who began their employment between 1 January 1984 and 31 December 2006. The pension which is dependent on employment time can amount to maximum 50% of the monthly salary.

Hamburg

Vattenfall has pension obligations for employees in Hamburg that mainly consist of the company's obligations to personnel

Note 34 Pension provisions, cont.

and pensioners employed before 1 April 1991 in the former company HEW AG, and who have been employed for at least 10 years. The sum of the retirement pension, statutory pension and pensions from third parties normally amounts to a maximum of 65% of the pensionable salary.

Dutch pension plans

In the Netherlands Vattenfall has the majority of the pension obligations secured through the ABP pension fund and the "Metaal en Techniek" pension fund. The ABP and "Metaal en Techniek" plans are classified and reported as defined contribution plans.

Defined benefit pension plans

	2024			
		Germany		
	Sweden	Plan Berlin	Plan Hamburg	Total
Present value of unfunded obligations	12,699	87	13,801	**26,587**
Present value of fully or partly funded obligations	–	6,554	68	**6,622**
Present value of obligations	**12,699**	**6,641**	**13,869**	**33,209**
Fair value of plan assets	–	5,261	58	**5,319**
Net defined benefit obligation	**12,699**	**1,380**	**13,811**	**27,890**

	2023			
		Germany		
	Sweden	Plan Berlin	Plan Hamburg	Total
Present value of unfunded obligations	12,613	94	14,179	**26,886**
Present value of fully or partly funded obligations	–	6,876	69	**6,945**
Present value of obligations	**12,613**	**6,970**	**14,248**	**33,831**
Fair value of plan assets	–	5,682	57	**5,739**
Net defined benefit obligation	**12,613**	**1,288**	**14,191**	**28,092**

Changes in obligations

	2024	2023
Balance brought forward	33,831	40,383
Benefits paid by the plan	-2,282	-2,491
Service cost	328	289
Contributions by plan participants	12	22
Actuarial gains (–) or losses (+) due to changes in financial assumptions	-576	3,155
Actuarial gains (–) or losses (+) due to changes in demographic assumptions	–	143
Actuarial gains (–) or losses (+) due to experience adjustments	-28	1,289
Actuarial gains (–) or losses (+) due to reclassifications	4	4
Current interest expense	1,224	1,605
Divested companies	5	–
Liabilities associated with assets held for sale	–	-10,754
Translation differences	691	186
Balance carried forward	**33,209**	**33,831**

Changes in plan assets

	2024	2023
Balance brought forward	5,739	12,571
Benefits paid by the plan	-461	-584
Contributions by employer	50	94
Contributions by plan participants	12	22
Interest income	270	509
Difference between calculated and actual return and effects from asset ceiling	-461	995
Divested companies	-18	–
Assets held for sale	–	-8,058
Translation differences	188	190
Balance carried forward	**5,319**	**5,739**

Plan assets consist of the following

	2024	2023
Shares and participations	3,749	4,098
Interest-bearing instruments	290	331
Property	1,100	1,104
Other	180	206
Total	**5,319**	**5,739**

Pension costs

	2024	2023
Defined benefit plans:		
Current service cost	326	269
Interest expenses	1,224	1,604
Interest income	-270	-509
Past service cost	2	20
Total cost for defined benefit plans	**1,282**	**1,384**
Cost for defined contribution plans	1,024	948
Total pension costs	**2,306**	**2,332**

Actuarial assumptions used

	Sweden		Germany	
%	2024	2023	2024	2023
Discount rate	3.50	3.50	3.50	3.25
Future annual salary increases	2.75	2.75	2.50	2.50
Future annual pension increases	1.75	1.75	0-3.0	0-2.25

Sensitivity to key actuarial assumptions

	Sweden				Germany			
	2024		2023		2024		2023	
	MSEK	%	MSEK	%	MSEK	%	MSEK	%
Impact on the defined benefit obligation at 31 December of a:								
Increase by 50 basis points in the discount rate	-979	-7.7	-904	-7.2	-1,075	-5.2	-1,809	-5.6
Decrease by 50 basis points in the discount rate	1,095	8.6	1,006	8.0	1,186	5.8	2,005	6.3
Increase by 50 basis points in the annual pension increases	1,340	10.5	1,224	9.7	799	3.9	1,199	3.7
Decrease by 50 basis points in the annual pension increases	-1,206	-9.5	-1,117	-8.9	-728	-3.5	-1,029	-3.2

As of 31 December 2024 the weighted duration of pension obligations was 11.6 (12.5) years for Germany and 14.0 (13.1) years for Sweden.

Note 35 Other noninterest-bearing liabilities (non-current)

Of total liabilities of SEK 1,838 million (1,824), SEK 1,476 million (1,479) falls due after more than five years. Of the total liabilities, SEK 1,532 million (1,543) relates to deferred income and SEK 306 million (281) to other liabilities.

Note 36 Financial instruments by measurement category, offsetting of financial assets and liabilities, and financial instruments' effects on income

Accounting policy

Classification and measurement

Financial instruments are initially recognised at fair value including incurred transaction cost, except financial instruments valued at fair value though profit or loss. The financial instruments are subsequently measurement at fair value or amortised cost depending on which business model/category it belongs to. The change in value is reported in other comprehensive income or in the result.

Settlement date accounting is applied for spot purchases and spot sales of financial assets. Other financial assets and liabilities are initially recognized when Vattenfall becomes part of the contractual terms of the instrument. Vattenfall derecognises a financial asset when the rights to receive cash flows from the asset have expired or when substantially all the risks and rewards associated with the asset have been transferred to an external party. Financial liabilities are derecognised when the obligation in the contract is discharged, cancelled or has expired.

Financial assets

Vattenfall has financial assets in the following categories:

Amortised cost

Assets are classified in this category if the objective is to receive contractual cash flows that consist of principal amounts and interest. These assets are measured at amortised cost using the effective interest method, adjusted for expected credit losses. This category includes Other non-current receivables, Trade receivables and other receivables, certain Short-term investments, and Cash and bank balances.

Fair value through profit or loss

This category includes assets held for trading, which entails that the objective is that they will be sold in the near term, assets held for sale, and assets that Vattenfall is monitoring and measuring based on fair value. Derivative assets are classified as held for trading, except for derivative instruments designated as a hedging instrument in an effective hedge, where the principles for hedge accounting are used. Gains and losses as a result of changes in fair value are reported in the income statement when they occur. This category includes Derivative assets that are not designated as effective hedging instruments, Share in the Swedish Nuclear Waste Fund, Other shares and participations, some Short-term investments and Cash equivalents.

Impairment

At each reporting date, Vattenfall record a provision that corresponds to the expected future credit losses for financial assets that are reported at amortised cost.

For information on impairment of trade receivables, refer to Note 13, Trade receivables and other receivables.

For other financial assets reported at amortised cost a loss reserve is reported that corresponds to 12 months' expected credit losses at initial recognition. If the credit risk increases significantly since initial recognition, a reserve corresponding to expected credit losses during the lifetime is reported. Vattenfall presumes that the credit risk has not increased significantly if the instrument has a low credit risk on the balance sheet date (such as instruments with an investment grade rating). The credit risk is considered to have increased significantly if the counterparty's rating has been significantly lowered to a lower rating than at initial recognition. Expected credit losses are calculated by assessing the probability of, the loss in the event of and the exposure to default.

Financial liabilities

Vattenfall has financial liabilities in the following categories:

Fair value through profit or loss

This category include Derivative liabilities that do not qualify for hedge accounting and some Other financial liabilities (contingent consideration). The liabilities in this category are measured at fair value with changes in value recognised in the income statement when they occur.

Other financial liabilities

Liabilities in this category are measured at amortised cost using the effective interest method. This category includes interest-bearing and non-interest-bearing financial liabilities that are not held for trading purposes. This category includes Hybrid Capital, Other interest-bearing liabilities, Trade liabilities and other liabilities. Trade liabilities and other liabilities are recorded to the amount they are expected to be settled.

Accounting for derivative instruments and hedge accounting

Vattenfall uses derivative instruments mainly to hedge commodity price risk but also to hedge currency risk and interest rate risk. The relationship between hedging instruments and hedged items is documented at inception of the transaction, as well as the Groups risk management objective and strategy for undertaking the hedge transaction. The Group also documents its assessment of whether the derivatives that are used in hedging transactions are meeting the hedge accounting effectiveness criteria. The assessment is documented at inception and on an ongoing basis.

Cash flow hedges

Vattenfall use the following cash flow hedges:
i) commodity derivatives to hedge commodity price risk in future purchases and sales,
ii) currency derivatives to hedge currency risk in future purchases and sales, and
iii) interest rate swaps to hedge floating interest rate risk.

The portion of the gain or loss for on the hedging instrument that is determined to be an effective hedge is recognised in Other comprehensive income and accumulated in the Hedging reserve within equity. The ineffective portion is recorded in the income statement. When the hedged amount is due the recorded amount in the hedging reserve is transferred through Other comprehensive income to the income statement, or capitalised in the balance sheet as part of the acquisition value. The hedged amount is capitalised in cases where the hedged item refers to a non-financial balance sheet item (for example when hedging future purchases of fixed assets in foreign currency).

Fair value hedges

Fair value hedges is sometimes used to replace borrowings at a fixed interest rate with a floating interest rate.

Hedges of net investments in foreign operations

Loans in foreign currency is used to hedge the currency risk in Vattenfall's net investments in foreign subsidiaries. The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognised in Other comprehensive income and accumulated in the Translation reserve in equity. Gains and losses recorded in the Translation reserve is transferred to the income statement when the foreign operation is disposed of.

Financial risk management

Risks arising from financial instruments are described in the section Risks and risk management in this Annual and Sustainability Report.

Note 36 Financial instruments by measurement category, offsetting of financial assets and liabilities, and financial instruments' effects on income, cont.

Financial instruments by measurement category

	2024		2023	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Financial assets at fair value through profit or loss/other comprehensive income				
Share in the Swedish Nuclear Waste Fund	55,650	55,650	52,175	52,175
Derivative assets	11,966	11,966	31,951	31,950
Other shares and participations	225	225	330	330
Short-term investments	49,283	49,283	20,196	20,196
Cash equivalents	4,505	4,505	5,489	5,489
Financial assets at amortised cost				
Other non-current receivables	2,818	2,896	4,600	4,704
Trade receivables and other receivables	37,196	37,196	38,112	38,112
Short-term investments	2,721	2,723	4,392	4,392
Cash	30,612	30,612	22,193	22,193
Total financial assets	**194,976**	**195,056**	**179,438**	**179,541**
Financial liabilities				
Financial liabilities at fair value through profit or loss/other comprehensive income				
Derivative liabilities	21,948	21,948	63,923	63,923
Other interest bearing liabilities	335	335	334	334
Financial liabilities at amortised cost				
Hybrid Capital	21,880	21,842	20,987	20,289
Other interest-bearing liabilities	62,383	63,467	99,788	100,730
Trade payables and other liabilities	24,010	24,010	29,818	29,818
Total financial liabilities	**130,556**	**131,602**	**214,850**	**215,094**

Offsetting financial instruments

Presented below are financial assets and liabilities that are subject to enforceable master netting arrangements and similar agreements.

Offsetting financial instruments 31 December 2024

				Related amounts not netted in the balance sheet		
	Gross amount	Gross amount set off on the balance sheet	Net amount presented on the balancesheet	Amount not intended to be settled net[1]	Cash collateral received	Net amount
Financial assets						
Commodity derivatives	82,805	72,642	**10,163**	–	8	**10,155**
Interest rate and currency derivatives	1,803	–	**1,803**	1,224	567	**12**
Total derivative assets	**84,608**	**72,642**	**11,966**	**1,224**	**575**	**10,167**
Financial liabilities						
Commodity derivatives	91,376	72,642	**18,734**	–	3,280	**15,454**
Interest rate and currency derivatives	3,214	–	**3,214**	1,224	1,860	**130**
Total derivative liabilities	**94,590**	**72,642**	**21,948**	**1,224**	**5,140**	**15,584**

Offsetting financial instruments 31 December 2023

				Related amounts not set off on the balance sheet		
	Gross amount	Gross amount set off on the balance sheet	Net amount presented on the balancesheet	Amount not intended to be settled net[1]	Cash collateral received	Net amount
Financial assets						
Commodity derivatives	163,283	133,466	**29,817**	–	980	**28,837**
Interest rate and currency derivatives	2,134	–	**2,134**	1,857	243	**34**
Total derivative assets	**165,417**	**133,466**	**31,951**	**1,857**	**1,223**	**28,871**
Financial liabilities						
Commodity derivatives	192,709	133,466	**59,243**	–	17,736	**41,507**
Interest rate and currency derivatives	4,680	–	**4,680**	1,857	2,741	**82**
Total derivative liabilities	**197,389**	**133,466**	**63,923**	**1,857**	**20,477**	**41,589**

1. These items cannot be settled net as each transaction has a unique due date and they were not entered into with the purpose to be settled net. Settlement can only occur in case of default. ment can be entailed only in case of default.

Calculation of Fair Value

Vattenfall has financial instruments that are valued at fair value. These financial instruments are classified based on the extent to which market data has been used in the calculation of fair value. Level 1 valuation refers to quoted prices in an active market for identical assets or liabilities. Level 2 valuation refers to market-based prices that are observable for the asset or liability either directly or indirectly, derived from prices. Level 3 valuation is based on unobservable data. The financial instruments in Level 3 refer to financial liabilities related to contingent considerations. The valuation has been made considering probability-weighted averages of several possible scenarios and the time value of money.

Note 36 Financial instruments by measurement category, offsetting of financial assets and liabilities, and financial instruments' effects on income, cont.

Fair value hierarchy 31 December 2024

	Level 1	Level 2	Level 3	Total
Assets				
Share in the Swedish Nuclear Waste Fund	55,650	–	–	**55,650**
Derivative assets	–	11,966	–	**11,966**
Short-term investments, cash equivalents, other shares and participations	47,687	6,325	–	**54,012**
Total assets	**103,337**	**18,291**	**–**	**121,628**
Liabilities				
Derivative liabilities	–	21,948	–	**21,948**
Other interest-bearing liabilities	–	–	335	**335**
Total liabilities	**–**	**21,948**	**335**	**22,283**

Fair value hierarchy 31 December 2023

	Level 1	Level 2	Level 3	Total
Assets				
Share in the Swedish Nuclear Waste Fund	52,175	–	–	**52,175**
Derivative assets	–	31,951	–	**31,951**
Short-term investments, cash equivalents, other shares and participations	19,464	6,550	–	**26,014**
Total assets	**71,639**	**38,501**	**–**	**110,140**
Liabilities				
Derivative liabilities	–	63,923	–	**63,923**
Other interest-bearing liabilities	–	–	333	**333**
Total liabilities	**–**	**63,923**	**333**	**64,256**

Sensitivity analysis for electricity and fuel derivatives
The price of electricity is the main factor impacting the change in fair value recognised in other comprehensive income. Changes in fair value that are recognised in the income statement originate from the prices for gas and oil. The sensitivity analysis is based on volumes and market prices at year-end. The analysis pertains to profit before tax.

A change in market value as of 31 December 2024 of +/–10% would change the fair value of Vattenfall's electricity and fuel derivatives by +/- SEK 1,771 million (+/–1,189) in other comprehensive income (hedge-accounted derivatives) and +/- SEK 667 million (+/–493) in the income statement (non-hedge-accounted derivatives).

Effects on income by category
Net gains (+)/losses(–) and interest income and expenses for financial instruments recognised in the income statement:

Effects on income by category

	2024			2023		
	Net gains/ losses[1]	Interest income	Interest expenses	Net gains/ losses	Interest income	Interest expenses
Financial assets at fair value through profit or loss	**16,927**	**1,664**	**-37**	**42,085**	**1,358**	**–**
Financial assets measured at amortised cost	-87	1,917	–	18	2,032	–
Financial liabilities at fair value through profit or loss	10	–	–	-455	–	–
Financial liabilities measured at amortised cost	-1,830	–	-3,952	1,751	–	-3,985
Total	**15,020**	**3,581**	**-3,989**	**43,399**	**3,390**	**-3,985**

1. Exchange rate gains and losses are included in net gains/losses.

Unrealised changes in the fair value of commodity derivatives, for which hedge accounting is not applied, are included in the Cost of purchases with an amount of SEK -9,899 million, see Note 8, Cost of purchases.

Maturity analysis derivative assets and liabilities

	Maturity analysis derivative assets				Maturity analysis derivative liabilities			
	Commodity derivatives		Interest rate and currency derivatives		Commodity derivatives		Interest rate and currency derivatives	
	2024	2023	2024	2023	2024	2023	2024	2023
Current	6,716	23,246	539	931	14,888	46,875	591	2,141
1–2 years	2,345	5,411	279	120	2,569	9,961	297	575
3–5 years	1,026	1,211	296	98	1,032	2,277	415	244
> 5 years	76	-52	688	986	245	130	1,911	1,721
Total	**10,163**	**29,816**	**1,802**	**2,135**	**18,734**	**59,243**	**3,214**	**4,681**

Note 37 Financial income and expenses

■ **Accounting policy**
Interest income is reported as it is earned. The calculation is made on the basis of the return on underlying assets in accordance with the effective interest method. Dividend income is reported when the right to receive payment is established. Interest income is adjusted for transaction costs and any rebates, premiums and other differences between the original value of the receivable and the amount received when due.

For calculation of interest effects attributable to provisions, various discount rates have been used, see Note 34 to the consolidated accounts, Pension provisions, and Note 32 to the consolidated accounts, Other interest-bearing provisions, for the discount rates used. Issue costs and similar direct transaction costs for raising loans are distributed over the term of the loan in accordance with the effective interest method. Borrowing costs directly attributable to investment projects in non-current assets which take a substantial period of time to complete are not reported as a financial expense but are included in the cost of the non-current asset during the construction period. Leasing fees are distributed between interest expense and amortisation of the outstanding debt. Interest expenses are distributed over the leasing period so that each accounting period is charged in the amount corresponding to a fixed interest rate for the reported debt in each period. Variable fees are carried as an expense in the period in which they arise.

Note 37 Financial income and expenses, cont.

Financial income

	2024	2023
Interest income attributable to investments	3,592	3,515
Dividends	68	69
Capital gains from divestments of shares and participations	5	5
Total	**3,665**	**3,589**

Financial expenses

	2024	2023
Interest expenses attributable to loans	4,097	4,174
Interest effects attributable to interest-bearing provisions	1,629	2,133
Interest expenses for the net of pension provisions and plan assets	954	1,095
Exchange rate differences, net	395	522
Net change in value from remeasurement of derivatives	154	528
Net change in value from remeasurement of other financial assets	6	294
Impairment losses for shares and participations	108	–
Total	**7,343**	**8,746**

Note 38 Specifications of equity

Share capital

As of 31 December 2024 the registered share capital comprised 131,700,000 shares with a share quota value of SEK 50.

Translation reserve

The translation reserve comprises all exchange rate differences arising from the translation of financial reports from non-Swedish operations that prepare their reports in a currency other than that in which the Group reports. Further, the translation reserve includes exchange rate differences arising from the reassessment of debts raised as hedges for net investments in non-Swedish operations.

Reserve for hedges

The reserve for hedges comprises mostly unrealised changes in values of commodity derivatives used to hedge future sales (cash flow hedges). The current year change in the reserve for hedges relating to Cash flow hedges, transferred to the income statement amounted to SEK -19,397 million (-14,243), of which SEK -19,397 million (-14,243) has been reported in net sales.

Retained earnings including profit for the year

Retained earnings including profit for the year include earned profits in the parent company and its subsidiaries, associated companies and joint ventures, and effects of remeasurements of defined benefit pension plans.

Translation exposure of equity in other currencies than SEK

	Equity		Hedging after tax		Net exposure after tax		Average net exposure after tax	
	2024	2023	2024	2023	2024	2023	2024	2023
EUR	97,090	66,566	22,722	26,347	74,369	40,219	54,453	59,850
DKK	12,005	14,382	–	–	12,005	14,382	13,029	14,410
GBP	15,346	24,310	6,858	6,336	8,488	17,974	15,359	14,942
Total	**124,441**	**105,258**	**29,580**	**32,683**	**94,862**	**72,575**	**82,841**	**89,202**

Note 39 Specifications of the cash flow statement

Other, including non-cash items

	2024	2023
Undistributed results from participation in associated companies	148	133
Unrealised foreign exchange gains/losses	14	-108
Unrealised changes in values related to derivatives	-9,535	1,744
Changes in the Swedish Nuclear Waste Fund	-689	-104
Changes in provisions	-1,366	-5,839
Other	-1,592	550
Total	**-13,020**	**-3,624**

Dividends received totalled SEK 208 million (193).

Other investments in non-current assets

	2024	2023
Investments in intangible assets: non-current, including advance payments	-1,635	-1,292
Investments in property, plant and equipment, including advance payments	-28,243	-39,691
Total	**-29,878**	**-40,983**

Divestments

	2024	2023
Divestments of operations	34,235	-2,228[1]
Settlement of debt in connection with divested operation	6,340	–
Divestments of intangible assets: non-current	3	2
Divestments of property, plant and equipment	422	5,286
Total	**41,000**	**3,060**

1. The negative cash flow effect is mainly explained by the cash position in divested operations, see Note 21, Acquired and divested operations. in divested operations.

Financial liabilities

	Hybrid Capital	Current other interest-bearing liabilities	Non-current other interest-bearing liabilities	Total
Financial liabilities as at 1 January 2023	-21,931	-75,986	-78,848	**-176,765**
Cashflow	1,112	35,501	22,262	**58,875**
Change in leasing liabilities	–	–	-1,254	**-1,254**
Translation differences	-168	-1,894	411	**-1,651**
Other non-cash items	–	3	-318	**-315**
Financial liabilities as at 31 December 2023	**-20,987**	**-42,376**	**-57,747**	**-121,110**
Cashflow	-5	27,585	14,655	**42,235**
Change in leasing liabilities	–	–	-1,803	**-1,803**
Translation differences	-888	-1,908	-1,552	**-4,348**
Other non-cash items	–	2	426	**428**
Financial liabilities as at 31 December 2024	**-21,880**	**-16,697**	**-46,021**	**-84,598**

Note 40 Contingent liabilities

Accounting policy

A contingent liability is a present oligation that arises from past event but is not recognised as a liability or provision because it is not probable that an outflow of resources will be required to settle the obligation or because the amount of the obligation cannot be measured with sufficient reliability.

Commitments related to Swedish Hydro Power

In certain rivers, joint regulation facilities exist for several hydro power plants. The owners of the power plants have payment obligations for their share of these regulation costs.

Vattenfall has an obligation to compensate certain owners of water rights, in rivers where hydro power stations are built, through the delivery of power. In 2024, such compensation deliveries amounted to 0.9 TWh (0.7), for a value of approximately SEK 231 million (347).

Under Swedish law, Vattenfall has strict and unlimited liability for third-party loss resulting from dam accidents. Together with other dam owners in the Nordic countries, Vattenfall has a liability insurance with a maximum of SEK 10,000 million (10,000) in benefits for these types of claims.

In the Energy Agreement of 2016, it was decided that the hydropower industry itself should finance the transition to modern environmental conditions. The Hydropower Environment Fund Sweden AB was established in 2018 by Vattenfall, Uniper, Statkraft, Fortum, Tekniska verken i Linköping, Mälarenergi, Jämtkraft and Skellefteå Kraft and Holmen. A joint financing of SEK 10 billion, of which Vattenfall accounts for just over 50%, over a 20-year period will be used to improve the water environment in and around the Swedish hydropower plants. In order to safeguard the fund's ability to finance environmental measures in Swedish hydro power in the long term, the owners decided in April 2024, to carry out a review of the fund's general terms and conditions and to pause the possibility to submitting new applications to the fund during the review. In May 2024, the government decided to extend a previously decided pause of the re-evaluations for modern environmental conditions until 1 July 2025. The fund's owners then decided, in October 2024, to pause the handling of payments to existing projects until 1 July 2025, pending the completion of the review of the fund's general conditions. Vattenfall has paid SEK 20 (26) million to the Hydropower Environment Fund in 2024.

Commitments related to German Nuclear Power

In Germany, nuclear power operators have strict and unlimited liability to third parties. By law, nuclear power plants are required to have insurance or other financial guarantees for amounts up to EUR 2,500 million. Claims of up to EUR 256 million are covered by the German Mutual Atomic Energy Reinsurance Pool. The nuclear power plants and their German parent companies (in Vattenfall's case, Vattenfall GmbH) are liable for amounts in excess of this, in proportion to the ownership interests the respective parent companies have in the nuclear power plants. It is not until these resources are exhausted that a joint liability insurance agreement (Solidarvereinbarung) takes force between the owners of the German nuclear power plants (Vattenfall GmbH, E.ON, RWE and EnBW), for amounts up to EUR 2,500 million. Since the liability is unlimited, the nuclear power plants and their German parent companies are ultimately liable for losses that exceed this amount.

Vattenfall owns nuclear power plants in Germany together with a partner in the legal form oHG partnerships. The liability of partners in those partnerships is joint and several. Accounting is based on the assessment that the partnerships themselves as well as the partners are able to fulfil the legal and financial obligations of the partnerships. The total amount of the liabilities (including provisions) of the German nuclear companies as per 31 December 2024 is as follows:

	Share %	Total liabilities	Of which reported in Vattenfall's consolidated statements
Kernkraftwerk Brunsbüttel GmbH & Co. oHG	66.7	12,242	12,242
Kernkraftwerk Krümmel GmbH & Co. oHG	50.0	16,854	8,427
Kernkraftwerk Stade GmbH & Co. oHG	33.3	997	–
Kernkraftwerk Brokdorf GmbH & Co. oHG	20.0	16,118	–

Commitments related to Swedish Nuclear Power

The Nuclear Third Party Liability (NTPL) in Sweden is strict and unlimited. Pursuant to the Act on Liability and Compensation for Radiological Accidents (LRO) (Lag (2010:950) om ansvar och ersättning vid radiologiska olyckor), the owner of a nuclear power reactor shall have an insurance or other economic kind of security that covers EUR 1,200 million. For other Nuclear facilities the required amount is EUR 700 million, except for the years 2022 and 2023 and 2024 when an exemption meant that the coverage needed was EUR 370 million. On 5 December 2024 the government decided that Svafo and SKB would be considered low-risk facilities, which is why the requested security only amount to EUR 70 million and can be covered by insurance.

Insurance covering NTPL is issued by the Nordic Nuclear Insurers (NNI) and by the Nuclear Industry mutually owned insurance company ELINI (European Liability Insurance for the Nuclear Industry). Where the insurance market could not cover the total of the securities required by LRO, the owners of the Nuclear companies have issued Parental Company Guarantees (PCG) as supplementary security. Ringhals, Forsmark and SKB were able to obtain full insurance coverage up to the amount required by LRO for the calendar 2024, and therefore there are no PCGs issued as supplementary security for 2024. However, the previous PCGs issued for calendar year 2022 are still valid for any events that occurred during 2022 and 2023. The PCGs are pro rata, i.e. each owner is only responsible for its part of the PCG. In the special case of the plant in Ågesta, Vattenfall AB is the permit holder and has previously issued the full amount of the required PCG, but after 24 September 2024 no security needs to be provided under the LRO according to a decision from the Swedish Radiation Safety Authority.

Commitments in MEUR

	31 December 2024			
	Share %	Requested collateral MEUR	Of which insurance cover	Of which PCG
Ringhals	70.4	1,200	1,200	–
Forsmark	66.0	1,200	1,200	–
Svafo	53.6	70	70	–
SKB	55.8	70	70	–
Ågesta	100.0	–	–	–

Other commitments

As a consequence of the Group's continuing business activities, companies in the Group become parties to legal processes. In addition, disputes arise in the Group's operations that do not lead to legal processes. Vattenfall's management assesses these legal processes and disputes on a regular basis and recognise provisions in cases where the criterias are fulfilled, refer to Note 32, Interest-bearing provisions. In 2024, Vattenfall was not party to any legal actions, concerning alleged anti-competitive behaviour or incidents of bribery or corruption. For legal processes or disputes that do not meet the criteria for being recognised as a provision, management makes the overall assessment that there is no risk for material impact on the Group's financial result or financial position.

Svafo (a partly owned subsidiary of the Vattenfall Group) is in dialogue with the state regarding the responsibility for certain categories of historical non-nuclear radioactive waste, about which the parties have different views. Vattenfall has reported a provision for nuclear radioactive waste, which is the waste for which Svafo consider itself to have a commitment.

As part of the Group's business activities, in addition to the contingent liabilities stated here, guarantees are made for the fulfilment of various contractual obligations. In addition, customary guarantees and commitments are issued when divesting group companies and operations.

In addition Vattenfall has commitments related to PRI and contingent liabilities related to eSett Oy, Forsmark, Ringhals and Nord Pool Spot A/S.

Note 41 Commitments under consortium agreements

Power plants are often built on a joint venture basis. Under the consortium agreements, each owner is entitled to electricity in proportion to its share of ownership, and each owner is liable, regardless of output, for an equivalent proportion of all the joint venture's costs. Vattenfall's investments often entail a liability for costs in proportion to its share of ownership. For more information, see Note 26 to the consolidated accounts, Shares and participations owned by the parent company Vattenfall AB and other Group companies.

Note 42 Collateral

	2024	2023
Shares in subsidiaries pledged to PRI Pensionsgaranti, as security for credit insurance in respect of pension obligations in the Swedish operations	7,295	7,295
Blocked bank funds as security for trading on the Nordic electricity exchange and trading with CO_2 emission allowances	4,473	5,874
Total	**11,768**	**13,169**

In addition to the collateral mentioned above, Vattenfall has the following significant commitments:

To fulfil the requirements for security in the derivative market Vattenfall has pledged security to its counterparties for the negative fair value of derivative positions. As of 31 December 2024 this security amounted to SEK 3,461 million (17,749) for energy trading and SEK 1,894 million (3,566) for the financial operations. The amounts are reported as assets on the balance sheet, refer to Note 16, Advance payments and Note 28, Short-term investments. The counterparties are obligated to repay these securities to Vattenfall in the event that the negative fair value decreases.

In a similar manner, Vattenfall's counterparties in energy trading and the financial operations have pledged security to Vattenfall. Security received as of 31 December 2024 amounted to SEK 8 million (1,152) for energy trading and SEK 622 million (287) for the financial operations. The amounts are reported as liabilities on the balance sheet, refer to Note 19, Advance payments and Note 30, Interest-bearing liabilities and related financial derivatives.

Note 43 Operations requiring permits

During the year, Vattenfall Group has conducted operations subject to a permit in accordance with the legislation of the respective country where it operates. Vattenfall AB conducts operations that require permits in accordance with the Swedish Environmental Code. These consist primarily of electricity and heat production plants that require permits and/or registration. Vattenfall's other operations requiring permits that make up a significant part of the business are conducted primarily by subsidiaries.

Note 44 Auditors' fees

PwC

	2024	2023
Annual audit assignment	52	48
Audit-related activities besides the annual audit assignment	14	8
Tax consulting	1	1
Other assignments	5	1
Total	**72**	**58**

Audit assignment relates to the statutory review of the annual report, accounting records as well as the administration of the Board and the Managing Director, other tasks on the company's auditor; and advice or other assistance prompted by observations from such audits or the performance of other such tasks. Non-audit services refer to services related to compliance as well as other services. Of the total fee for audit services, SEK 15 million (15) was invoiced by PricewaterhouseCoopers Sweden for the statutory audit. Of total other fees, SEK 2 million (2) was invoiced by PricewaterhouseCoopers Sweden (the statutory auditors of Vattenfall AB (publ.) and are mainly related to matters of a one-off nature.

Note 45 Related party disclosures

Vattenfall AB is 100%-owned by the Swedish state. The Vattenfall Group's products and services are offered to the state, state authorities and state companies in competition with other vendors under generally accepted commercial terms. In a similar manner, Vattenfall AB and its Group companies purchase products and services from state authorities and state companies at market prices and otherwise under generally accepted commercial terms. No significant share of the Vattenfall Group's net sales, purchasing or earnings is attributable to the Swedish state or any of its authorities or companies.

Disclosures of transactions with key persons in executive positions in the company are shown in Note 11 to the consolidated accounts, Number of employees and personnel costs.

Disclosures of transactions with associated companies and joint arrangements in 2024 and associated receivables and liabilities as of 31 December 2024 are described below.

	Associated companies		Joint ventures	
	2024	2023	2024	2023
Income	82	94	157	86
Expenses	5	292	11	7
Receivables	620	637	4,011	3,008
Liabilities	494	871	2,353	–

Note 46 Events after the balance sheet date

Vattenfall has started a process to assess the ownership of its heat operations. This means that, as part of its continuous portfolio evaluation, Vattenfall will assess future options for its heating operations in the UK, Sweden and the Netherlands, including potential divestment. This process also includes future ownership options for the electricity distribution business in the UK. In addition to this, no other events have occurred after the balance sheet date that are expected to have a significant impact on the consolidated financial statements.

Parent company Vattenfall AB, administration report

Vattenfall AB with corporate identity number 556036-2138, is the parent company of the Vattenfall Group and is headquartered in Solna, Sweden. Vattenfall AB is a non listed company and 100% owned by the Swedish state. Vattenfall AB has issued listed bonds on Nasdaq Stockholm, Sweden and the London Stock Exchange. The company's business is integrated with the business of Vattenfall Group and therefore the administration report sometimes refer to the information for Group with additional description of businesses which is included in the parent company.

Vattenfall AB:s main business activities

- Customer & Solution is responsible for sales of electricity, gas and energy services as well as e-mobility charging solutions for both private and business customers in Sweden, Finland and Norway. The business aims to be the transition partner for customers and a decarbonisation trailblazer. Customer & Solution includes a heating business that is responsible for district heating and decentralised heating solutions in Sweden.
- Generation is responsible for Vattenfall's nuclear and hydro power operations and the part belonging to Vattenfall AB offers different services such as technical, maintenance and project management services to the BA generation business in Sweden.
- Markets is managing physical trade of electricity to and from the trading platforms on behalf of several business areas within Vattenfall Group. Markets are also responsible for executing Vattenfall's hedging strategy and managing financial risks by entering into commodity derivatives on behalf of another business area within Vattenfall Group. Markets offers access to the physical and financial trading markets to larger clients as well as managing ancillary trading.
- Treasury is the internal bank and is responsible for borrowing, liquidity management and management of associated financial risks within Vattenfall Group.
- Staff functions, consist of several corporate support function for Vattenfall Group such as IT, Strategy, Accounting, Insurance, Risk management, Controlling and Investor Relations.

Financing strategy

Vattenfall's financing strategy builds on our financial targets, set by the owner. The capital structure of Vattenfall is managed by a targeted interval of 22–27% for Funds from operations (FFO)/ Adjusted net debt. The target interval should ensure a reasonable financial risk and access to the funding necessary to deliver on Vattenfall's strategic plan.

All external borrowing is done at corporate level with bonds issued by the parent company, Vattenfall AB. Vattenfall finances its operations and investments through a combination of its own generated cash flow and external funding, mainly in the form of corporate bonds. Senior bonds are issued under a Euro Medium Term Note program (EURO 10 billion). For short-term funding, Vattenfall has a European Commercial Paper program (EURO 10 billion). In addition, Vattenfall has access to an undrawn Revolving Credit Facility which serves as a general liquidity back-up and ensures financial flexibility. Vattenfall's long term credit ratings are BBB+ positive outlook by S&P and A3 stable outlook by Moody's.

Market development

Electricity market has during 2024 characterized by lower electricity spot prices in the Nordics in comparison to 2023. The development was mainly driven by a strong hydrological balance, increased wind production and lower continental prices. Lower average electricity prices had a negative effect on the result for Vattenfall Group. However, price hedges increased Vattenfall's achieved price in the Nordics affecting Vattenfall AB:s result in a positive way.

Year in brief

- Net sales amounted to SEK 47,481 million (46,579). The increase is mainly explained by the fact that electricity prices increased.
- Profit before appropriations and income taxes amounted to SEK 45,225 million (48,404). The lowered result is mainly explained by unrealized market value changes for energy derivatives related to future years energy production. Since hedge accounting is not applied, unrealized market value changes for energy derivatives affect the profit and loss statement and the balance sheet to the full extent.
- The net effect of earnings from subsidiaries amounted to SEK 29,171 million (2,103 million) and is mainly attributable to dividends from subsidiaries in Great Britain and Germany.
- Hedge accounting of net investment was finalized during the year. This resulted in unrealized exchange rate changes amounting to SEK 1,625 million, negatively affecting the financial net. In addition to this, the financial net has been affected by higher interest rates both regarding deposits, lending and by a weakened Swedish krona.
- The balance sheet total was SEK 342,985 million (312,275).
- Investments during the period amounted to SEK 4,220 million (1,729).
- Cash and cash equivalents, and short-term investments amounted to SEK 77,420 million (48,920). Dividends received from subsidiaries as well as repayment of loans in connection with the divestment of subsidiaries are important explanations for the increase.
- Shares and participations amounted to SEK 165,724 million (157,310), and is mainly explained by that interest-bearing loan receivables amounting to SEK 5,148 million were converted into shareholder contributions regarding Forsmarks Kraftgrupp AB. During the second quarter, interest-bearing loan receivables amounting to SEK 704 million were converted into shareholder contributions regarding Ringhals AB. During the fourth quarter, shareholder contributions to subsidiaries amounting to SEK 1,980 million, of which the largest contribution was made to Vattenfall Elanläggningar AB.
- Dividend paid to the owner amounted to SEK 4,000 million (4,000).
- Short-term interest-bearing liabilities have decreased, which is largely explained by the early redemption of bonds.
- During October 2024, Vattenfall AB issued new securities to the state to guarantee that sufficient funds are available for the future handling of waste from Ringhals AB and Forsmarks Kraftgrupp AB. Two types of collateral were issued; financing security and completion security. After the increase, these two securities amount to SEK 42 billion, to be compared with SEK 34 billion as of September 30, 2024.

Risk management

Vattenfall's overall risks and risk management are described in the Group section of the Annual and Sustainability Report.

Internal control

Vattenfall has an internal financial control (IFC) process with the overall purpose to ensure Vattenfall Group has internal controls in place to provide reasonable assurance that risks of material misstatements in the financial statements are mitigated. The IFC process also covers Vattenfall AB.

Research and Development

Main information regarding the company's activities for Research and Development is described in Group activities in Vattenfall AB's Annual and Sustainability Report. Examples of research & development activities within Vattenfall AB are related to Business Area Wind but also to development within the Environmental department.

Sustainability report

Vattenfall AB prepare the Sustainability Report according to the Swedish Årsredovisningslagen 6 kap 11§ and includes Vattenfall AB and the subsidiaries within the Group.

Health and Safety

Information regarding the company's activities within Health and Safety are described in Group activities in Vattenfall AB's Annual and Sustainability Report.

Environment

Information regarding the company's activities within Environment are described in Group activities in Vattenfall AB's Annual and Sustainability Report.

Foreign Branches

Vattenfall AB Filial Norge NUF, corporate identity number 979975554, offers B2B solutions to the Norwegian market.

Events after the balance sheet date

Vattenfall has started a process to assess the ownership of its heat operations. This means that, as part of its continuous portfolio evaluation, Vattenfall will assess future options for its heating operations. In addition to this, no other events have occurred after the balance sheet date that are expected to have a significant impact on the financial statements.

Proposed distribution of profits

The Annual General Meeting as at its disposal retained profits including the result for the year, totalling SEK 137,684,210,929. In accordance with the dividend policy adopted by the Annual General Meeting of Vattenfall AB, the Board of Directors propose, in view of the result for the year, that the profits to be distributed as follows:

To be distributed to the shareholder	7,000,000,000
To be carried forward	130,684,210,929
Total	**137,684,210,929**

The Board of Directors statement on the proposed distribution

The company's and the Group's financial position is assessed as solid. The board further considers that the proposed dividend is justifiable taking into account requirements of the company's and the group's operations and related risks place on the size of the equity as well as the company's and the group's consolidation needs, liquidity and position in general. The company and the Group are also deemed to be able to fulfill their obligations both in the short and long term. The proposed dividend distribution can therefore be justified pursuant to Chapter 17, Sections 3.2 and 3.3, of the Swedish Companies Act (the precautionary principle).

Parent company income statement

Amounts in SEK million	Note	2024	2023
Net sales	5	47,481	46,579
Cost of purchases related to production	6	-16,945	12,664
Other external expenses		-5,814	-5,934
Personnel expenses	7	-3,410	-3,176
Other operating incomes		230	295
Other operating expenses		-153	-265
Operating profit before depreciation, amortisation and impairment losses (EBITDA)	**20, 33**	**21,389**	**50,163**
Depreciation, amortisation and impairments	12	-797	-749
Operating profit (EBIT)		**20,592**	**49,414**
Result from participations in subsidiaries	23	29,171	2,103
Result from participations in associated companies	24	1	1
Result from other shares and participations		-108	–
Other financial income	25	5,407	4,115
Other financial expenses	26	-9,838	-7,229
Profit before appropriations and income taxes		**45,225**	**48,404**
Appropriations	27	-3,275	-4,222
Profit before income taxes		**41,950**	**44,182**
Income taxes	8	-2,693	-8,218
Profit for the year		**39,257**	**35,964**

Parent company statement of comprehensive income

Amounts in SEK million	2024	2023
Profit for the year	39,257	35,964
Total other comprehensive income	–	–
Total comprehensive income for the year	**39,257**	**35,964**

Parent company balance sheet

Amounts in SEK million	Note	31 December 2024	31 December 2023
Assets			
Non-current assets			
Intangible assets: non-current	13	715	358
Property, plant and equipment	12	7,436	7,215
Shares and participations	14	165,724	157,310
Deferred tax assets	8	–	1,873
Other non-current receivables	9	3,244	3,453
Other non-current receivables, group	9	65,833	70,694
Total non-current assets		**242,952**	**240,903**
Current assets			
Inventories		568	513
Current receivables	10	12,716	10,948
Current receivables, group	10	8,922	10,991
Current tax assets	8	407	–
Short-term investments	16	51,994	23,762
Cash and cash equivalents	17	25,426	25,158
Total current assets		**100,033**	**71,372**
Total assets		**342,985**	**312,275**

Amounts in SEK million	Note	31 December 2024	31 December 2023
Equity, provisions and liabilities			
Equity			
Restricted equity			
Share capital (131,700,000 shares with a share quota value of SEK 50)		6,585	6,585
Other reserves[1]		586	152
Non-restricted equity			
Retained earnings[1]		98,427	66,895
Profit for the year		39,257	35,964
Total equity		**144,855**	**109,596**
Untaxed reserves	27	**6,483**	**4,823**
Provisions	21	**6,651**	**6,446**
Non-current liabilities			
Hybrid capital	18	21,880	20,987
Other interest-bearing liabilities	18	37,479	45,175
Other interest-bearing liabilities, group	18	226	232
Deferred tax liabilities	8	13	–
Other noninterest-bearing liabilities	19	3,254	4,175
Total non-current liabilities		**62,852**	**70,569**
Current liabilities			
Other interest-bearing liabilities	18	15,093	41,684
Other interest-bearing liabilities, group	18	82,253	55,571
Current tax liabilities		1	144
Other noninterest-bearing liabilities	11	8,289	8,711
Other noninterest-bearing liabilities, group	11	16,508	14,731
Total current liabilities		**122,144**	**120,841**
Total equity, provisions and liabilities		**342,985**	**312,275**

1. For further information see the chapter for Equity.

Parent company cash flow statement

Amounts in SEK million	Note	2024	2023
Operating activities			
Operating profit before appropriations and income taxes		45,225	48,404
Tax paid		-1,724	-811
Capital gains/losses		385	18
Shares and participations		-29,303	-13,103
Impairment		108	11,000
Interest cost which has effected the result but not been paid		-501	251
Interest revenue which have effected the result but not been received		-927	-467
Derivates non-cash items	28	-4,038	-29,329
Other, incl. non-cash items	28	3,936	-1,021
Funds from operations (FFO)		**13,161**	**14,942**
Changes in inventories		-55	-157
Changes in operating receivables		5,777	26,424
Changes in operating liabilities		2,819	-4,342
Changes in margin calls		-2,067	-4,164
Cash flow from changes in operating assets and operating liabilities		**6,474**	**17,761**
Cash flow from operating activities		**19,635**	**32,703**
Investing activities			
Contribution in subsidiaries		-3,048	-728
Investments in associated companies and other shares and participations		–	-26
Other investments in non-current assets		-1,172	-975
Total investments		**-4,220**	**-1,729**
Divestments		–	22
Dividend received from subsidiaries	23	29,194	13,103
Changes in short-term investments	16	-28,232	43,439
Cash flow from investing activities		**-3,258**	**54,835**
Cash flow before financing activities		**16,377**	**87,538**
Financing activities			
Loans raised		34,136	11,293
Amortisation of other debts		-45,005	-130,865
Dividend paid to owner		-4,000	-4,000
Effect of early termination of swaps related to financing activities		–	108
Loan to subsidiaries		-25	-5,296
Amortisation received from subsidiaries		512	225
Group contributions received		207	2,392
Group contributions paid		-1,934	-1,366
Cash flow from financing activities		**-16,109**	**-127,509**
Cash flow for the year		**268**	**-39,971**
Cash and cash equivalents			
Cash and cash equivalents at start of year		25,158	67,882
Calculated currency difference in cash and cash equivalents		-17	-2,753
Cash flow for the year		285	-39,971
Cash and cash equivalents at end of year		**25,426**	**25,158**

Parent company statement of changes in equity

Amounts in SEK million	Share capital	Revaluation reserve	Reserves	Development fund[1]	Non-restricted equity	Total
Balance brought forward 2023	6,585	37,989	1,286	–	31,772	**77,632**
Dividend paid to owner	–	–	–	–	-4,000	**-4,000**
Bonus issue	39,275	-37,989	-1,286	–	–	**–**
Reduction of the share capital	-39,275	–	–		39,275	**–**
Fund for development costs	–	–	–	152	-152	**–**
Profit for the year	–	–	–	–	35,964	**35,964**
Balance carried forward 2023	**6,585**	**–**	**–**	**152**	**102,859**	**109,596**
Dividend paid to owners	–	–	–	–	-4,000	**-4,000**
Reduction of the share capital	–	–	–	434	-434[1]	**–**
Correction of result 2023	–	–	–	–	2	**2**
Profit for the year	–	–	–	–	39,257	**39,257**
Balance carried forward 2024	**6,585**	**–**	**–**	**586**	**137,684**	**144,855**

1. Pertains to the year's capitalised costs less depreciation according to plan for own development work that have been reserved in the Fund for development costs. The capitalised costs are considered to be tax-deductible once the assets they pertain to become operational and depreciation according to plan is made.

As of 31 December 2024 the registered share capital comprised to 131,700,000 shares with a share quota value of SEK 50.

Note 1 Company information

Vattenfall AB (publ) with registration number 556036-2138, is the parent company in Vattenfall Group with registered office at Evenemangsgatan 13 in Solna, Sweden. Vattenfall AB's shares are unlisted and 100% owned by the Swedish state. Vattenfall AB has listed bonds issued on Nasdaq Stockholm and the London Stock Exchange. The Group mainly produces, distributes and sells electricity and heat. The annual report for Vattenfall AB was approved for issue in accordance with the decision of the board and the CEO on 20 March 2025. The balance sheet and income statement of the parent company included in Vattenfall's Annual and Sustainability Report will be submitted at the Annual General Meeting (AGM) on 28th of April 2025.

Note 2 Proposed distribution of profits

The Annual General Meeting as at its disposal retained profits including the result for the year, totalling SEK 137,684,210,929. In accordance with the dividend policy adopted by the Annual General Meeting of Vattenfall AB, the Board of Directors propose, in view of the result for the year, that the profits to be distributed as follows:

To be distributed to the shareholder	7,000,000,000
To be carried forward	130,684,210,929
Total	**137,684,210,929**

For more information see parent company statement of changes in Equity and the administration report.

Note 3 Accounting policies

General
The parent company's accounts are prepared in accordance with the Swedish Annual Accounts Act and recommendation RFR 2 – "Accounting for Legal Entities", issued by the Swedish Corporate Reporting Board (RFR). RFR 2 entails that the Parent Company should apply all standards and interpretations issued by IASB and IFRIC as endorsed by the European Commission for application within the EU. This should be done as far as possible within the framework of the Swedish Annual Accounts Act by taking into consideration the relationship between accounting and taxation.

The parent company does not report leasing in accordance with IFRS 16 as per the exception rule in RFR 2.

Note 3 Accounting policies, cont

The applied accounting policies are outlined in applicable parts of Note 3 to the consolidated accounts, Accounting policies, or in the respective notes for the Group, with the following additions for the parent company.

Important changes in the financial statements compared with the preceding year
No changed accounting standards and interpretations valid from 2024 have had any material effect on the parent company's financial statements.

Inventories
The cost of inventories is calculated, depending on the type of inventory, either through application of the first-in, first-out (FIFO) method or through the application of a method based on average prices. Both methods include costs that arose on acquisition of the inventory assets.

Depreciation and amortisation
As in the consolidated accounts, depreciation and amortisation are based on cost and are applied on a straight-line basis over the estimated useful life of the asset in question. In addition, certain accelerated depreciation/amortisation (the difference between depreciation/amortisation according to plan and depreciation/amortisation for tax purposes) in the parent company is reported under Appropriations and Untaxed reserves, respectively.

Financial instruments
The parent company reports financial instruments in accordance with IFRS 9 – "Financial Instruments". The principles for classification and measurement of financial instruments, impairment of financial assets, and hedge accounting are described in Note 36 to the consolidated accounts – Financial instruments by category, offsetting of financial assets and liabilities, and financial instruments' effects on income.

Foreign currency
Assets and liabilities in foreign currencies that not applies hedge accounting for are recognised at the exchange rates of the balance sheet date.

Capitalised costs for own development work
For costs for own development work that are capitalised, a corresponding amount is transferred from unrestricted equity to the fund for development costs.

Income taxes
Tax legislation in Sweden allows companies to defer tax payments by making provisions to untaxed reserves. In the parent company, untaxed reserves are reported as a separate item on the balance sheet that includes deferred tax. In the parent company's income statement, provisions to untaxed reserves and dissolution of untaxed reserves are reported under the heading Appropriations.

Important estimations and assessments in the preparation of the financial statements
Preparation of the financial statements requires the company's executive management and Board of directors to make estimations and assessments as well as to make assumptions that affect application of the accounting policies and the reported amounts of assets, liabilities, income and expenses. These estimations and assessments are based on historic experience and other factors that seem reasonable under current conditions. The results of these estimations and assessments are then used to establish the reported values of assets and liabilities that are not otherwise clearly documented from other sources. The final outcome may deviate from the results of these estimations and assessments. The estimations and assessments are revised on a regular basis. The effects of changes in estimations are reported in the period in which the changes were made if the changes affected this period only or in the period the changes were made and future periods if the changes affect both the current period and future periods. Important estimations and assessments are described further in Note 14 to the parent company, Shares and participations and Note 27, Impairment losses and reversed impairment losses, Note 30, Interest – bearing liabilities and related financial derivates, Note 34 Pension provisions and Note 32 Other interest – interest bearing provisions in the consolidated accounts. As described in the corresponding Vattenfall group section, inflation and interest rates are parameters with a significant effect on provisions, in particular provisions related to nuclear power operations.

Significant accounting policies applicable as from 1 January 2024
As from 2024, no changed accounting standards and interpretations are considered to have any material effect on the parent company's financial statements.

Note 4 Exchange rates

See Note 5 to the consolidated accounts, Exchange rates.

Note 5 Net sales

Net sales per geographical area

	2024	2023
Sweden	40,932	40,434
Norway	723	1,471
Denmark	386	437
Finland	2,194	1,865
Germany	2,389	1,474
Netherlands	577	608
Other countries	280	290
Total	**47,481**	**46,579**

Net sales for products and services

	2024	2023
Sales of electricity	37,612	36,753
Sales of gas	151	408
Sale of heat and steam	2,531	2,127
Service and consulting	986	324
Total revenues from contracts with customers	**41,280**	**39,612**
Ancillary services revenues	1,813	2,194
Revenues within group	3,728	3,470
Other Revenues	660	1,303
Total net sales	**47,481**	**46,579**

Contract balances

	2024	2023
Contract liabilities	**281**	**264**
– of which, released as revenue from opening balance during the year	-16	-15

Of the parent company's total income from sales transactions with subsidiaries account for 27% (29%).

Note 6 Cost of purchases

	2024	2023
Electricity commodities	-22,280	-21,629
Electricity grid cost	-523	-741
Emission allowances	-458	-456
Gas purchases	-152	-478
Nuclear fuel purchases	985	4,716
Other fuel purchases (coal, oil and bio-fuel)	-1,363	-1,044
Cost related to Nuclear[1]	6,753	32,452
Other	93	156
Total	**-16,945**	**12,664**

1. Costs related to nuclear power refer to the forecast difference between retention in the Nuclear Waste Fund and the company's commitment to restoration of nuclear facilities and waste management.

Of the parent company's total purchase costs, transactions with subsidiaries account for 78% (50%) of purchase costs.

Note 7 Average number of employees and personnel costs

Average number of employees

	2024			2023		
	Men	Women	Total	Men	Women	Total
Sweden	1,506	885	2,391	1,341	752	2,093

Personnel costs	2024	2023
Salaries and other remuneration	2,026	1,714
Social security expenses	1,384	1,462
– of which pension costs[1]	606	732
Total	**3,410**	**3,176**

1. SEK 5 million (5) of the pension costs are attributable to Chief Executive Officer. The company's outstanding pension obligations to these employees amount to SEK 0 million (0).

None of the board members receive any pension benefits in connection with their board duties.

Salaries and other remuneration

	2024			2023		
	Senior executives	Other employees	Total	Senior executives	Other employees	Total
Sweden	67	1,959	**2,026**	71	1,643	**1,714**

Total salaries and other remuneration to board members and Presidents include bonuses of SEK 0 million (0). For benefits to senior executives at Vattenfall AB, see Note 11 to the consolidated accounts, Number of employees and personnel costs.

Note 8 Income taxes

The reported tax income/tax expense is broken down as follows:

	2024	2023
Current tax	-807	-1,099
Deferred tax	-1,886	-7,119
Total	**-2,693**	**-8,218**

The difference between the nominal Swedish tax rate and the effective tax rate is explained as follows:

	2024		2023	
	%	MSEK	%	MSEK
Profit before tax		41,950		44,182
Swedish income tax rate at 31 December	20.6	-8,642	20.6	-9,102
Current tax adjustment attributable to previous years	0.1	-40	0.0	–
Dividend, non-taxable	-14.3	6,014	-6.1	2,699
Non-taxable income	0.0	2	0.0	1
Impairment losses, non-deductible	0.1	-38	5.1	-2,266
Interest expense, non-deductible	0.0	-18	0.0	-6
Other non-deductible expenses	0.0	-11	0.0	-4
Tax reduction	0.0	–	0.0	–
Effect of interest rate limitation	-0.1	40	-1.0	460
Effective tax rate in Sweden	**6.4**	**-2,693**	**18.6**	**-8,218**

Balance sheet reconciliation - Deferred tax:

	Balance brought forward		Changes via income statement		Balance carried forward	
	2024	2023	2024	2023	2024	2023
Non-current assets	20	2	–	–	20	2
Current assets	-1,253	-1,447	-240	482	-1,493	-965
Provisions	84	89	–	-3	84	86
Other non-current liabilities	1,222	3,594	-496	-2,303	726	1,291
Current liabilities	-86	6,754	-954	-5,295	-1,040	1,459
Total	**-13**	**8,992**	**-1,690**	**-7,119**	**-1,703**	**1,873**

There are no tax deficit in the parent company.

Note 9 Other non-current receivables

	2024					2023				
	Receivables from subsidiaries	Receivables from associated companies	Derivative assets	Other receivables	Total	Receivables from subsidiaries	Receivables from associated companies	Derivative assets	Other receivables	Total
Balance brought forward	70,372	323	3,236	217	**74,148**	68,068	299	3,411	425	**72,203**
New receivables	–	25	–	106	**-5,530**	2,713	24	–	26	**2,763**
Payments received	-5,661	–	–	-92	**-92**	–	–	–	-234	**-234**
Foreign exchange gains/losses	775	10	–	2	**787**	-289	-1	–	–	**-290**
Derivative changes	–	–	-148[1]	–	**-148**	–	–	-175[1]	–	**-175**
Other changes	–	-12	–	-76	**-88**	-120	–	–	–	**-120**
Balance carried forward	**65,486**	**346**	**3,088**	**157**	**69,077**	**70,372**	**322**	**3,236**	**217**	**74,147**

1. Net change and measurement at fair value.

Note 10 Current receivables

	2024	2023
Advance payments paid	154	153
Accounts receivable – trade	2,490	3,317
Receivables from subsidiaries	8,921	10,790
Other receivables	3,245	1,036
Derivative assets	3,103	2,047
Derivative assets from subsidiaries	1	201
Prepaid expenses and accrued income	3,724	4,395
Total	**21,638**	**21,939**

Age analysis of current receivables

The collection period is normally 30 days.

	2024			2023		
	Receivables gross	Impaired receivables	Receivables net	Receivables gross	Impaired receivables	Receivables net
Accounts receivable – trade						
Not due	2,174	–	**2,174**	3,166	–	**3,166**
Past due 1–30 days	257	–	**257**	112	–	**112**
Past due 31–90 days	18	–	**18**	20	2	**18**
Past due >90 days	29	-12	**41**	35	14	**21**
Total	**2,478**	**-12**	**2,490**	**3,333**	**16**	**3,317**

Receivables from subsidiaries, Receivables from associated companies, and Other receivables include no receivables that are due for payment.

Note 11 Other noninterest-bearing liabilities (current)

	2024	2023
Accounts payable – trade	1,064	1,343
Liabilities to subsidiaries	16,508	14,731
Other liabilities	592	681
Derivatives debts	60	3,039
Accrued expenses and deferred income	6,573	3,648
Total	**24,797**	**23,442**

Breakdown of accrued expenses and deferred income:

	2024	2023
Accrued personnel-related costs	519	441
Accrued interest expenses	1,054	1,461
Other accrued expenses	4,613	917
Deferred income and accrued expenses, electricity	357	817
Other deferred income	30	12
Total	**6,573**	**3,648**

Note 12 Property, plant and equipment

	2024				
	Land and buildings	Plant and machinery and other technical installations	Equipment, tools, fixtures and fittings	Construction in progress	Total
Cost					
Cost brought forward	1,908	12,373	1,193	358	**15,832**
Investments	–	–	220	663	**883**
Transfer from construction in progress	36	221	66	-323	**–**
Divestments/disposals	-6	43	-103	–	**-66**
Accumulated cost carried forward	**1,938**	**12,637**	**1,376**	**698**	**16,649**
Depreciation according to plan					
Depreciation brought forward	-909	-7,014	-691	–	**-8,614**
Depreciation for the year	-40	-407	-209	–	**-656**
Divestments/disposals	6	-49	103	–	**60**
Accumulated depreciation according to plan carried forward	**-943**	**-7,470**	**-797**	**–**	**-9,210**
Impairment losses					
Impairment losses brought forward	-1	-2	–	–	**-3**
Accumulated impairment losses carried forward	**-1**	**-2**	**–**	**–**	**-3**
Residual value according to plan carried forward	994	5,165	579	698	**7,436**
Accumulated accelerated depreciation	–	-3,733	–	–	**-3,733**
Carrying amount	**994**	**1,432**	**579**	**698**	**3,703**

	2023				
	Land and buildings	Plant and machinery and other technical installations	Equipment, tools, fixtures and fittings	Construction in progress	Total
Cost					
Cost brought forward	1,441	12,713	898	663	**15,715**
Investments	2	–	225	557	**784**
Transfer from construction in progress	28	759	87	-862	**12**
Divestments/disposals	-36	-558	-17	–	**-611**
Reclassifications	473	-541	–	–	**-68**
Accumulated cost carried forward	**1,908**	**12,373**	**1,193**	**358**	15,832
Depreciation according to plan					
Depreciation brought forward	-896	-7,171	-534	–	**-8,601**
Depreciation for the year	-36	-401	-169	–	**-606**
Divestments/disposals	36	534	12	–	**582**
Reclassifications	-13	24	–	–	**11**
Accumulated depreciation according to plan carried forward	**-909**	**-7,014**	**-691**	**–**	-8,614
Impairment losses					
Impairment losses brought forward	-1	-3	–	–	**-4**
Impairment losses for the year	–	1	–	–	**1**
Accumulated impairment losses carried forward	**-1**	**-2**	**–**	**–**	-3
Residual value according to plan carried forward	**998**	**5,357**	**502**	**358**	7,215
Accumulated accelerated depreciation	–	-3,073	–	–	**-3,073**
Carrying amount	**998**	**2,284**	**502**	**358**	4,142

Estimated useful life

Plant and machinery for heat	5–50 years
Buildings	15–100 years
Equipment	3–10 years

At 31 December 2024 there were no contractual commitments for the acquisition of property, plant and equipment.

Note 13 Intangible assets: non-current

	2024		
	Capitalised development costs	Concessions and similar rights and cost to obtain a contract	Total
Cost			
Cost brought forward	775	1,350	**2,125**
Investments	441	57	**498**
Transfer from construction in progress	–	–	**–**
Divestments/disposals	–	-177	**-177**
Accumulated cost carried forward	**1,216**	**1,230**	**2,446**
Amortisation according to plan			
Amortisation brought forward	-379	-1,272	**-1,651**
Amortisation for the year	-64	-76	**-140**
Reclassifications	–	177	**177**
Accumulated amortisation according to plan carried forward	**-443**	**-1,171**	**-1,614**
Impairment losses			
Impairment losses brought forward	-116	–	**-116**
Accumulated impairment losses carried forward	**-116**	**–**	**-116**
Residual value according to plan carried forward	**657**	**59**	**716**

	2023		
	Capitalised development costs	Concessions and similar rights and cost to obtain a contract	Total
Cost			
Cost brought forward	604	1,273	**1,877**
Investments	114	77	**191**
Transfer from construction in progress	-10	–	**-10**
Reclassifications	67	–	**67**
Accumulated cost carried forward	**775**	**1,350**	**2,125**
Amortisation according to plan			
Amortisation brought forward	-303	-1,180	**-1,483**
Amortisation for the year	-64	-92	**-156**
Reclassifications	-12	–	**-12**
Accumulated amortisation according to plan carried forward	**-379**	**-1,272**	**-1,651**
Impairment losses			
Impairment losses brought forward	-116	–	**-116**
Accumulated impairment losses carried forward	**-116**	**–**	**-116**
Residual value according to plan carried forward	**280**	**78**	**358**

Estimated useful life

Development costs	3–4 years
Concessions and similar rights	3–30 years
Costs to obtain a contract	1–6 years

At 31 December 2024 there were no contractual commitments for acquisition of intangible non-current assets.

Note 14 Shares and participations

■ **Key accounting estimates and judgements**

Participations in subsidiaries are tested for impairment in accordance with the accounting policies described in Note 9 to the consolidated accounts, Impairment losses and reversed impairment losses. The recoverable amount for the participations is determined by calculating the value in use or fair value less costs to sell. For these calculations, certain estimations must be made regarding future cash flows along with other adequate assumptions regarding the required rate of return, for example.

	2024			
	Participations in subsidiaries	Participations in associated companies	Other shares and participations	Total
Balance brought forward	156,627	557	126	**157,310**
Shareholder contributions	8,901	–	–	**8,901**
Divestments	-178	–	–	**-178**
Liquidation	-201	–	–	**-201**
Impairment losses	–	–	-108	**-108**
Balance carried forward	**165,149**	**557**	**18**	**165,724**

	2023			
	Participations in subsidiaries	Participations in associated companies	Other shares and participations	Total
Balance brought forward	167,097	537	120	**167,754**
Shareholder contributions	728	20	–	**748**
New share issue	–	–	6	**6**
Impairment losses	-11,198	–	–	**-11,198**
Balance carried forward	**156,627**	**557**	**126**	**157,310**

For a breakdown of the parent company's shares and participations in subsidiaries, associated companies and other shares and participations, see Notes 25–26 to the consolidated accounts.

Note 15 Impairment losses

There were no impairments in 2024 or 2023.

Note 16 Short-term investments

	2024	2023
Fixed-income investments	50,099	20,196
Margin calls, financing activities[1]	1,895	3,566
Total	**51,994**	**23,762**

1. With respect to pledged assets, see Note 42 to the Parent Company accounts, Collateral.

Note 17 Cash and cash equivalents

	2024	2023
Cash and bank balances	20,921	19,670
Cash equivalents	4,505	5,488
Total	**25,426**	**25,158**

Note 18 Other interest-bearing liabilities

	Non-current portion maturity 1–5 years		Non-current portion maturity >5 years		Total non-current portion		Current portion		Total	
	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
Bond issues	17,545	23,927	14,379	16,298	**31,924**	**40,225**	–	19,812	**31,924**	**60,037**
Commercial paper and transactions of repo	–	–	–	–	**–**	**–**	3,854	20,034	**3,854**	**20,034**
Liabilities to credit institutions	–	–	–	–	**–**	**–**	–	–	**–**	**–**
Liabilities to subsidiaries	226	232	–	–	**226**	**232**	10,741	55,571	**10,967**	**55,803**
Derivative liabilities	2,408	2,323	3,147	2,627	**5,555**	**4,950**	82,288	1,379	**87,843**	**6,329**
Other liabilities (margin calls within financing activities)[1]	–	–	–	–	**–**	**–**	463	459	**463**	**459**
Total interest-bearing liabilities excluding Hybrid capital	**20,179**	**26,482**	**17,526**	**18,925**	**37,705**	**45,407**	**97,346**	**97,255**	**135,051**	**142,662**
Hybrid capital[2]	21,880	20,987	–	–	**21,880**	**20,987**	–	–	**21,880**	**20,987**
Total interest-bearing liabilities	**42,059**	**47,469**	**17,526**	**18,925**	**59,585**	**66,394**	**97,346**	**97,255**	**156,931**	**163,649**

1. With respect to pledged assets, see Note 42 to the Parent Company accounts, Collateral.
2. See Note 3 to the consolidated accounts, Interest-bearing liabilities and related financial derivatives.

Note 19 Other noninterest-bearing liabilities (non-current)

	2024	2023
Contract debts	310	283
Future commitments of nuclear power operations	2,940	3,881
Other liabilities	4	11
Total	**3,254**	**4,175**

Of other liabilities, SEK 5 million (11) falls due after more than five years.

Note 20 Leasing expenses

Future payment commitments, as of 31 December 2024 for leasing contracts and rental contracts are broken down as follows:

	Operating leases
2025	57
2026–2029	117
2030 and beyond	1
Total	**175**

Leasing expenses for the year amounted to SEK 249 million (42).

Note 21 Provisions

■ Accounting policies

The Parent Company's defined benefit pension plans are reported in accordance with the simplification rule. For the pension plans that are subject to the Act on Safeguarding of Pension Obligations, ("Tryggandelagen"), the calculation of future obligations to pay pensions is made in accordance with the stipulations of the Act. For other pension plans, the obligations are calculated on the basis of actuarial principles. See also Note 34 to the consolidated accounts, Pension provisions.

Together with Svafo the parent company owns Ågestaverket, a nuclear power station that previously produced district heating in southern Stockholm. For dismantling, restoration and final storage, has the parent company a provision for future costs. These costs are financed through payment to Swedish Nuclear Waste Fund, which is managed by Kammarkollegiet. See also Note 31, Share in Nuclear Waste Fund and Note 32, Other interest-bearing provisions in the notes to the consolidated accounts.

Financial information

	2024	2023
Pension provisions[1,2]	5,113	4,915
Personnel-related provisions for non-pension purposes	311	306
Provisions for environmental measures/undertakings	3	7
Provisions for future commitments of nuclear operations	528	555
Provisions for legal dispute	696	663
Total	**6,651**	**6,446**
1. Of which, information registered by PRI	4,936	4,735
2. Of which, covered by credit insurance with FPG/PRI	4,966	4,912

Note 22 Financial instruments by measurement category

The measurement categories for assets and liabilities below correspond to the categories described in Note 36 to the consolidated accounts, Financial instruments by measurement category, offsetting of financial assets and liabilities, and financial instruments effects on income.

Presented below are assets and liabilities where the carrying amount differs from the fair value.

	2024		2023	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets at fair value through profit or loss				
Derivative assets	9,016	8,236	4,961	3,915
Short-term investments	50,099	49,285	20,196	20,196
Margin calls	1,895	1,895	3,566	3,462
Total	**61,010**	**59,416**	**28,723**	**27,573**
Financial assets at amortised cost				
Other non-current receivables	66,513	66,132	71,435	71,201
Total	**66,513**	**66,132**	**71,435**	**71,201**
Financial liabilities at fair value through profit or loss				
Derivative liabilities	5,898	10,450	9,423	8,439
Total	**5,898**	**10,450**	**9,423**	**8,439**
Financial liabilities at amortised cost				
Other non-current interest-bearing liabilities	43,551	44,222	40,458	46,285
Current interest-bearing liabilities	96,566	100,179	95,876	92,316
Total	**140,117**	**144,401**	**136,334**	**138,601**

Note 23 Result from participations in subsidiaries

	2024	2023
Dividends	29,194	13,103
Impairment losses of shares	–	-11,197
Adjustment acquisition value	–	197
Capital gains/losses on divestments	-23	–
Total	**29,171**	**2,103**

Note 24 Result from participations in associated companies

	2024	2023
Dividends	1	1
Total	**1**	**1**

Note 25 Other financial income

	2024	2023
Interest income from subsidiaries	2,646	1,952
Other interest income	2,658	2,163
Revenue margin calls, subsidiaries	103	0
Total	**5,407**	**4,115**

Note 26 Other financial expenses

	2024	2023
Interest expenses to subsidiaries	2,663	2,725
Other interest expenses	3,768	4,043
Foreign exchange gains and losses, net	3,407	461
Total	**9,838**	**7,229**

Note 27 Appropriations and untaxed reserves

Appropriations

	2024	2023
Group contributions paid	-1,684	-1,934
Group contributions received	69	207
Provision/Dissolution of untaxed reserves, net	-1,660	-2,495
Total	**-3,275**	**-4,222**

Untaxed reserves

	Balance brought forward	Provision (+)/ dissolution (-)	Balance carried forward
Accelerated depreciation	-3,073	-660	-3,733
Tax allocation reserves for 2024 tax years	-1,750	–	-1,750
2015 Fiscal year allocation reserve	–	-1,000	-1,000
Total	**-4,823**	**-1,660**	**-6,483**

Note 28 Specification of the cash flow statement

Other, including non-cash items

	2024	2023
Unrealized foreign exchange gains/ losses	3,262	-1,823
Changes in depreciation	809	749
Changes in provisions	-96	86
Other	-39	-32
Total	**3,936**	**-1,020**

Financial liabilities

	Current	Non-current
Financial liabilities at 1 January 2023	197,297	89,485
Cashflow	-122,045	3,226
Non-cash effecting currency effects	1,919	8
Other non-cash flow effecting items	20,084	-26,325
Financial liabilities at 31 December 2023	**97,255**	**66,394**
Cashflow	-13,864	2,994
Non-cash effecting currency effects	2,876	2,925
Other non-cash flow effecting items	11,078	-12,728
Financial liabilities at 31 December 2024	**97,345**	**59,585**

Note 29 Contingent liabilities

Guarantees pertaining to:

	2024	2023
Swedish Nuclear Waste Fund	49,205	41,191
Contractor guarantees provided by order of subsidiaries	52,914	51,467
Guarantees provided as collateral for the subsidiaries within Vattenfall Energy Trading's energy trading	14,645	19,952
Other contingent liabilities	71,591	51,502
Total	**188,355**	**164,112**

Swedish Nuclear Waste Fund

According to the Swedish Act (2006:647) on the Financing of Nuclear Waste Products, a party that has a permit to conduct nuclear engineering activities, such as Ringhals AB and Forsmarks Kraftgrupp AB, is required to provide security to the Swedish state as a guarantee that sufficient funds exist to cover the future costs of nuclear waste management. The security is provided in the form of guaranteed commitments from the owners of the nuclear power companies. In a decision made on 21 December 2023, the Swedish government set new guarantee amounts for the year 2024. Following this decision, as security for the subsidiaries Forsmarks Kraftgrupp AB and Ringhals AB, the parent company Vattenfall AB will make guarantee commitments for a combined value of SEK 41,750 million (34,136). Two types of guarantees will be issued. The first guarantee – so-called Financing Security, totaling SEK 12,066 million (9,466) – is intended to cover the current deficit of the Nuclear Waste Fund assuming no more nuclear waste fees are paid. This deficit is calculated as the difference between expected costs and existing funds. The second guarantee – so-called Supplementary Security, totaling SEK 29,684 million (24,669) – pertains to potential future cost increases stemming from unforeseen events. The amounts for both of these types of security have been determined based on a probability-based risk analysis in which the former amount has been determined as such that there is a 50% probability that it, together with currently funded amounts (the median value), will provide full cost coverage for all waste produced to date. The later amount consists essentially of the supplement that would be required if the corresponding probability was 90%.

This also includes AB Svafo. The Swedish state decided in November 2022 the amount for the period 2023–2025. The parent company Vattenfall AB will make guarantee commitments for the value of SEK 380 million (323).

See also Note 31 to the consolidated accounts, Share in the Swedish Nuclear Waste Fund and Note 32 to the consolidated accounts, Other interest-bearing provisions.

Commitments related to Swedish Nuclear Power

The Nuclear Third Party Liability (NTPL) in Sweden is strict and unlimited. Pursuant to the Act on Liability and Compensation for Radiological Accidents (LRO) (Lag (2010:950) om ansvar och ersättning vid radiologiska olyckor), the owner of a nuclear power reactor shall have an insurance or other economic kind of security that covers EUR 1,200 million. For other Nuclear facilities the required amount is EUR 700 million, except for the years 2022 and 2023 and 2024 when an exemption meant that the coverage needed was EUR 370 million. On 5 December 2024 the government decided that Svafo and SKB would be considered low-risk facilities, which is why the requested security only amount to EUR 70 million and can be covered by insurance. Insurance covering NTPL is issued by the Nordic Nuclear Insurers (NNI) and by the Nuclear Industry mutually owned insurance company ELINI (European Liability Insurance for the Nuclear Industry). Where the insurance market could not cover the total of the securities required by LRO, the owners of the Nuclear companies have issued Parental Company Guarantees (PCG) as supplementary security. Ringhals, Forsmark and SKB were able to obtain full insurance coverage up to the amount required by LRO for the calendar 2024, and therefore there are no PCGs issued as supplementary security for 2024. However, the previous PCGs issued for calendar year 2022 are still valid for any events that occurred during 2022 and 2023. The PCGs are pro rata, i.e. each owner is only responsible for its part of the PCG. In the special case of the plant in Ågesta, Vattenfall AB is the permit holder and has previously issued the full amount of the required PCG, but after 24 September 2024 no security needs to be provided under the LRO according to a decision from the Swedish Radiation Safety Authority.

Commitments in MEUR

	Share %	Requested collateral MEURO	Of which insurance cover	Of which PCG
Ringhals	70.4	1,200	1,200	–
Forsmark	66.0	1,200	1,200	–
Svafo	53.6	70	70	–
SKB	55.8	70	70	–
Ågesta	100.0	–	–	–

Contract guarantees provided by order of subsidiaries

As collateral for contractors' obligations, Vattenfall AB has issued guarantees amounting to SEK 52,914 million (51,467), mainly attributable to obligations in the Wind Business Area.

Guarantees provided as collateral for subsidiaries in Vattenfall Energy Trading's energy trading

Vattenfall AB has issued guarantees with a total nominal value of SEK 74,646 million (70,677) for energy trading conducted by the subsidiary Vattenfall Energy Trading. As per 31 December 2024 a total of SEK 14,645 million (19,952) of these guarantees had been utilised, which is included in the reported amount of contingent liabilities.

Other contingent liabilities

Other contingent liabilities SEK 71,591 million (51,502) consists mainly of guarantees that Vattenfall AB has issued for the Customers & Solutions and Wind Business Areas (for the latter, see Note 40 to the consolidated accounts, Contingent liabilities), and pension obligations, which amounted to SEK 1,969 million (1,884).

In addition to the contingent liabilities mentioned above, Vattenfall has the following significant commitments

In 2009 Vattenfall AB, together with its subsidiary SKB (the Swedish Nuclear Fuel and Waste Management Company) and the other part-owners of that company, signed a long-term cooperation agreement with the Östhammar and Oskarshamn municipalities. The agreement covers the period 2010 to approximately 2035 and regulates development efforts in association with the implementation of the Swedish nuclear waste program. Through development initiatives in areas such as training, enterprise and infrastructure, over time the parties will generate value-added worth SEK 1,500 million to SEK 2,000 million. The parties are to finance the development efforts in proportion to their ownership interests. The Vattenfall Group's ownership interest is 56%. Implementation of the efforts is being carried out across two periods: a period before all necessary permits have been received (Period 1), and a period during implementation and operation of the facilities (Period 2). In 2024 Vattenfall reported a provision of SEK 414 million (426) for its share of Period 2 activities.

As a consequence of the Group's continuing business activities, companies in the Group become parties to legal processes. In addition, disputes arise in the Group's operations that do not lead to legal processes. Vattenfall's management assesses these legal processes and disputes on a regular basis and makes provisions in cases where it believes an obligation exists and this can be judged with a reasonable degree of certainty. In 2024, Vattenfall was not party to any legal actions, concerning alleged anti-competitive behaviour or incidents of bribery or corruption. For legal processes or disputes where at present it cannot be determined whether an obligation exists or where for other reasons it is not possible to calculate the amount of a possible provision with a reasonable degree of certainty, management makes the overall judgement that there is no risk for material impact on the Group's result of operations or financial position. As part of the Group's business activities, in addition to the contingent liabilities stated here, guarantees are made for the fulfilment of various contractual obligations. In addition, customary guarantees and commitments are issued when divesting subsidiaries and operations.

Note 30 Commitments under consortium agreements

See note 41 to the consolidated accounts, Commitments under consortium agreements.

Note 31 Collateral

Collateral and pledged assets

	2024	2023
Shares pledged to the Swedish insurance company PRI Pensionsgaranti as security for credit insurance for pension obligations in Vattenfall's Swedish operations[1]	7,295	7,295
Pledged security to counterparties (derivative market)[2]	1,895	3,566
Total	**9,190**	**10,861**

Collateral and pledged assets (received)

	2024	2023
Pledged security from counterparties (derivative market)[2]	623	287

1. Pledged shares to PRI Pensionsgaranti relate to 51% Vattenfall Eldistribution AB.
2. To fulfil the requirements for security in the derivative market, in its financial operations Vattenfall has pledged security to counterparties for the negative fair value of derivative positions. The counterparties are obligated to repay this security to Vattenfall in the event the negative fair value decreases. In a similar manner, counterparties of Vattenfall have pledged security to Vattenfall.

Note 32 Gender distribution among senior executives

See Note 11 to the consolidated accounts, Gender distribution among senior executives.

Note 33 Auditors' fees

Annual audit assignment:

Annual audit assignment

	2024	2023
PWC	10	9
Total	**10**	**9**

Auditing activities besides the annual audit assignment

	2024	2023
PWC	6	3
Total	**6**	**3**

Tax consulting

	2024	2023
Other	–	1
Total	**–**	**1**

Note 34 Related party disclosures

Vattenfall AB is 100%-owned by the Swedish state. The Vattenfall Group's products and services are offered to the state, state authorities and state companies in competition with other vendors under generally accepted commercial terms. In a similar manner, Vattenfall AB purchase products and services from state authorities and state companies at market prices and otherwise under generally accepted commercial terms. No significant share of the Vattenfall Group's net sales, purchasing or earnings is attributable to the Swedish state or any of its authorities or companies.

Disclosures of transactions with key persons in executive positions in the company are shown in Note 11 to the Consolidated accounts, Number of employees and personnel costs.

Information about transactions with associated companies in 2024 and related receivables and liabilities is described below.

North Connect KS
Company which was established for planning, construction and operating of a Sea cable between Norway and United Kingdom. Loan asset amounted to SEK 3 million (2).

Blakliden Fäbodberget Wind Holding AB
This is wind farm from which Vattenfall AB purchases electricity. Purchases amounted to SEK 139 million (291). Operating revenue from the company amounted to SEK 178 million (330). Loan assets amounted to SEK 355 million (319) and interest income SEK 25 million (22).

Note 35 Events after the balance sheet date

Vattenfall has started a process to assess the ownership of its heat operations. This means that, as part of its continuous portfolio evaluation, Vattenfall will assess future options for its heating operations. In addition to this, no other events have occurred after the balance sheet date that are expected to have a significant impact on the financial statements.

Audit report

To the general meeting of the shareholders of Vattenfall AB, corporate identity number 556036-2138

Report on the annual accounts and consolidated accounts

Opinions

We have audited the annual accounts and consolidated accounts of Vattenfall AB for the year 2024 except for the statutory sustainability report on pages 74–148 and 150. The annual accounts and consolidated accounts of the company are included on pages 5, 7, 12–14, 28–30, 45–57, 58–73 and 153–206 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2024 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act.

The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2024 and their financial performance and cash flow for the year then ended in accordance with IFRS Accounting Standards, as adopted by the EU, and the Annual Accounts Act. Our opinions do not cover the statutory sustainability report on pages 76–148 and 150.

A corporate governance statement has been prepared. The statutory administration report and the corporate governance statement are consistent with the other parts of the annual accounts and consolidated accounts, and the corporate governance statement is in accordance with the Annual Accounts Act.

We therefore recommend that the general meeting of shareholders adopts the income statement and balance sheet for the parent company and group.

Our opinions in this report on the annual accounts and consolidated accounts are consistent with the content of the additional report that has been submitted to the parent company's Board of Directors in accordance with the Audit Regulation (537/2014) Article 11.

Basis for Opinions

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements. This includes that, based on the best of our knowledge and belief, no prohibited services referred to in the Audit Regulation (537/2014) Article 5.1 have been provided to the audited company or, where applicable, its parent company or its controlled companies within the EU.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Our audit approach

Focus and scope of the audit

We designed our audit by determining materiality and assessing the risks of material misstatement in the consolidated financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the group operates.

Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall group materiality for the consolidated financial statements as a whole. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Key audit matter	How our audit considered the key audit matter
Valuation of tangible fixed assets For information on important estimates and assessments, see Note 3 and for note information regarding impairments, see Note 27 and for tangible fixed assets, see Note 22. Vattenfall reports fixed assets of SEK 273,707 million, which corresponds to 49% of total assets as per 31 december 2024. At each reporting period, Vattenfall must assess whether there are indications as to whether there is a trigger for impairment of any asset or, when applicable, a group of assets. If such an indication exists, a valuation of the asset is prepared and the valuation is compared with the book value. In the valuation models, future cash flows are calculated. In the calculations, assumptions about future price development, volume and discount rate are significant assumptions. Indicators for impairment may include price changes and regulatory / political changes. This area requires and is dependent on estimates and assessments from management. Hence, we have assessed the valuation of tangible assets as a key audit matter in the audit.	• We have assessed Vattenfall's process for identifying indications of impairment and the process for establishing values for impairment tests. • In our audit, we have read Vattenfall's documentation regarding valuation methods prepared. • We have tested prepared calculations with respect to mathematical accuracy. • With regard to input data for price development of raw material prices and calculated discount rates, we have, when possible, verified and compared these on a sample basis with external sources. • We have also assessed how the company has addressed climate-related risks in the valuations. • We have also assessed the reasonableness of the significant assumptions and carried out our own sensitivity analysis when we assessed them to be relevant. • We have also assessed whether the information disclosed is appropriate.
Provisions for future commitments on nuclear power operations For information on important estimates and assessments see note 3 and for note information regarding provisions for future expenses for nuclear expenses see note 32. Vattenfall has significant commitments to manage waste generated from operations and future decommissioning of nuclear power plants in Sweden and Germany. These provisions amounted to SEK 107,756 million in the group's balance sheet as of December 31, 2024. The majority of the cash outflow for this management is far in the future according to a joint decommissioning plan for all nuclear operations in Sweden, which makes the calculation of future expenses complex. This area requires management to make estimates and judgments regarding a number of parameters such as technological development, time horizon, cost estimate and discount rate. In light of this, we have assessed the reporting of provisions for future expenses for nuclear power as a particularly significant area in the audit.	• We have evaluated and assessed Vattenfall's process for reporting provisions for future expenses for nuclear power. • We have evaluated and assessed Vattenfall's accounting principles regarding the accounting of provisions for future expenditures for nuclear power. • We have obtained cost estimates and evaluated how these are generated in relation to decommissioning plans for both decided and planned decommissioning. • We have assessed the reasonableness of the assumptions that the management applied in the calculations for the accounting of the provisions. • We have also assessed whether the disclosures included in the financial statement are appropriate.
Valuation of derivatives and hedge accounting within Markets For information regarding Market, volume and liquidity risks, see pages 54–55, for important estimates and assessments, see Note 3 and for note information regarding derivatives, see Note 36. Vattenfall Market is part of BA Power Generation and is an essential part of Vattenfall's operations. The Markets business contains issues of a complex accounting nature. Vattenfall buys and sells energy via Markets and also uses hedge accounting to reduce volatility. The business uses derivatives of various kinds, including commodity derivatives that are not traded on a marketplace. The fair value valuation of these derivatives can be complicated, especially when markets or periods are illiquid. Hence, we have assessed the valuation of derivatives and hedge accounting within Markets as a key audit matter in the audit.	• We evaluated Vattenfall's procedures related to derivatives and hedge accounting within Markets with a focus on assessments regarding fair value accounting. • We have reviewed significant IT controls. • We have assessed the relevance of the valuation models used, including the reasonableness of assumptions and other input data. • We have reviewed the existence and completeness of open derivative positions and reviewed that hedge accounting is applied in accordance with IFRS 9. • We have also assessed whether the information disclosed is appropriate.

Key audit matters
Key audit matters of the audit are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts and consolidated accounts of the current period. These matters were addressed in the context of our audit of, and in forming our opinion thereon, the annual accounts and consolidated accounts as a whole, but we do not provide a separate opinion on these matters.

Other information than the annual accounts
This document also contains other information than the annual accounts and consolidated accounts and is found on pages 1–4, 6, 8–11, 15–27, 31–44, 149 and 210–221. The Board of Directors and the Managing Director are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and We do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibility of the Board of Directors and the Managing Director
The Board of Directors and the Managing Director are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act. and, as regards the consolidated accounts, according to IFRS Accounting Standards, as adopted by the EU, and the Annual Accounts Act. The Board of Directors and the Managing Director are also responsible for such internal control as they determines is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, the Board of Directors and the Managing Director are responsible for the assessment of the company and group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, cease operations or has no realistic alternative to doing any of this.

Auditor's responsibility
Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts and consolidated accounts.

As part of an audit in accordance with ISA, we exercise professional judgment and maintain professional skepticism throughout the audit. In addition:

- we identify and assess the risks of material misstatement of the annual accounts and consolidated accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- we obtain an understanding of the company's internal control relevant to our audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- we evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors and the Managing Director.
- we conclude on the appropriateness of the Board of Directors and the Managing Director use of the going concern basis of accounting in preparing the annual accounts and consolidated accounts. We also draw a conclusion, based on the audit evidence obtained, as to whether any material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the annual accounts and consolidated accounts or, if such disclosures are inadequate, to modify our opinion about the annual accounts. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.
- we evaluate the overall presentation, structure and content of the annual accounts and consolidated accounts, including the disclosures, and whether the annual accounts represent the underlying transactions and events in a manner that achieves fair presentation.
- we obtain sufficient and appropriate audit evidence regarding the financial information for the units or business activities within the group in order to make an opinion regarding the consolidated accounts. We are responsible for steering, monitoring and carrying out the group audit. We are solely responsible for our opinions.

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit. We must also inform of significant audit findings during our audit, including any significant deficiencies in internal control that we identified.

We must also provide the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and, where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors, we determine those matters that were of most significance in the audit of the annual accounts and consolidated accounts, including the most important assessed risks for material misstatement, and are therefore the key audit matters. We describe these matters in the auditor's report unless law or regulation precludes disclosure about the matter.

Report on other requirements according to laws and other constitutions

The auditor's examination of the administration of the company and the proposed appropriations of the company's profit or loss.

Opinions
In addition to our audit of the annual accounts and consolidated accounts, We have also audited the administration of the Board of Directors of Vattenfall AB for year 2024 and the proposed appropriations of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year. We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent in relation of the parent company and group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled my ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Responsibility of the Board of Directors and the Managing Director
The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the company and group's type of operations, size and risks place on the size of the parent company's equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company's organization and the management of the company's affairs. This includes among other things continuous assessment of the company and group's financial situation and ensuring that the company's organization is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors' guidelines and instructions and among other matters take measures that are necessary to fulfill the company's accounting in accordance with law and handle the management of assets in a reassuring manner.

Auditor's responsibility
Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

- has undertaken any action or been guilty of any omission which can give rise to liability to the company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our objective concerning the audit of the proposed appropriations of the company's profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriations of the company's profit or loss are not in accordance with the Companies Act.

As part of an audit in accordance with generally accepted auditing standards in Sweden, we exercise professional judgment and maintain professional skepticism throughout the audit. The examination of the administration and the proposed appropriations of the company's profit or loss is based primarily on the audit of the accounts. Additional audit procedures performed are based on our professional judgment with starting point in risk and materiality. This means that we focus the examination on such actions, areas and relationships that are material for the operations and where deviations and violations would have particular importance for the company's situation. We examine and test decisions undertaken, support for decisions, actions taken and other circumstances that are relevant to our opinion concerning discharge from liability. As a basis for our opinion on the Board of Directors' proposed appropriations of the company's profit or loss, we examined the Board of Directors' reasoned opinion and a selection of the basis for this in order to assess if the proposal is compatible with the Companies Act.

The auditor's examination of the Esef report

Opinions
In addition to our audit of the annual accounts and consolidated accounts, we have also examined that the Board of Directors and the Managing Director have prepared the annual accounts and consolodated accounts in a format that enables uniform electronic reporting (the Esef report) pursuant to Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528) for Vattenfall AB (publ) for the year 2024.

Our examination and our opinion relate only to the statutory requirements.

In our opinion, the Esef report has been prepared in a format that, in all material respects, enables uniform electronic reporting. We have performed the examination in accordance with FAR's recommendation RevR 18 Examination of the Esef report. Our responsibility under this recommendation is described in more detail in the Auditors' responsibility section. We are independent of Vattenfall AB in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibility of the Board of Directors and the Managing Director
The Board of Directors and the Managing Director are responsible for the preparation of Esef report in accordance with the Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528), and for such internal control that the Board of Directors and the Managing Director determine is necessary to prepare the Esef report without material misstatements, whether due to fraud or error.

Auditor's responsibility
Our responsibility is to obtain reasonable assurance whether the Esef report is in all material respects prepared in a format that meets the requirements of Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528), based on the procedures performed.

RevR 18 requires us to plan and execute procedures to achieve reasonable assurance that the Esef report is prepared in a format that meets these requirements.

Reasonable assurance is a high level of assurance, but it is not a guarantee that an engagement carried out according to RevR 18 and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the ESEF report.

The firm applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The examination involves obtaining evidence, through various procedures, that the Esef report has been prepared in a format that enables uniform electronic reporting of the annual accounts. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement in the report, whether due to fraud or error. In carrying out this risk assessment, and in order to design audit procedures that are appropriate in the circumstances, the auditor considers those elements of internal control that are relevant to the preparation of the Esef report by the Board of Directors and the Managing Director, but not for the purpose of expressing an opinion on the effectiveness of those internal controls. The examination also includes an evaluation of the appropriateness and reasonableness of assumptions made by the Board of Directors and the Managing Director.

The procedures mainly include a validation that the Esef report has been prepared in a valid XHMTL format and a reconciliation of the Esef report with the audited annual accounts and consolodated accounts.

Furthermore, the procedures also include an assessment of whether the consolidated statement of financial performance, financial position, changes in equity, cash flow and disclosures in the Esef report have been marked with iXBRL in accordance with what follows from the Esef regulation.

Auditor's report on the statutory sustainability report

Engagement and responsibility
It is the board of directors who is responsible for the statutory sustainability report for the year 2024 on pages 74-148 and 150 and that it has been prepared in accordance with the Annual Accounts Act according to the prior wording that was in effect before 1 July 2024.

The scope of the audit
Our examination has been conducted in accordance with FAR's standard RevR 12 The auditor´s opinion regarding the statutory sustainability report. This means that our examination of the statutory sustainability report is substantially different and less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinion.

Opinion
A statutory sustainability report has been prepared

PricewaterhouseCoopers AB was appointed as Vattenfall AB's auditor by the general meeting on 29th April 2024 and has been the company's auditor since 28th April 2021.

Stockholm the 24 March 2025
PricewaterhouseCoopers AB

Eva Carlsvi
Auditor in charge
Authorized Public Accountant

Aleksander Lyckow
Authorized Public Accountant

This is a translation of the Swedish language original. In the event of any differences between this translation and the Swedish language original, the latter shall prevail.

Other

Quarterly overview

Amounts in SEK million	2024 Q4	2024 Q3	2024 Q2	2024 Q1	2023 Q4	2023 Q3	2023 Q2	2023 Q1
Income statement items								
Net sales	68,488	48,573	52,010	76,499	73,292	58,337	61,750	96,788
Operating profit before depreciation, amortisation and impairment losses (EBITDA)	10,743	6,654	16,852	26,530	9,912	2,641	5,833	21,300
Operating profit (EBIT)	5,023	1,213	11,860	20,755	6,061	-2,611	-2,791	16,332
Underlying EBIT	531	1,372	4,041	13,884	4,455	946	5,057	9,545
Financial net	-2,006	1,626	3	-514	2,347	-597	-2,125	-394
Profit before income taxes	3,017	2,839	11,863	20,241	8,408	-3,208	-4,916	15,938
Profit for the period	5,084	2,053	9,365	16,879	5,657	-2,186	-4,895	11,818
– of which, attributable to owners of the Parent Company	4,861	1,698	9,146	16,089	4,740	-2,147	-5,130	11,182
– of which, attributable to non-controlling interests	223	355	219	790	917	-39	235	636
Balance sheet items								
Cash and cash equivalents and short-term investments	87,121	76,778	65,219	59,875	52,270	67,825	69,137	83,240
Equity	201,921	183,044	177,302	166,464	139,429	150,201	143,716	141,623
– of which, attributable to owners of the Parent Company	171,196	152,119	147,839	136,220	113,466	123,899	117,791	119,722
– of which, attributable to non-controlling interests	30,725	30,925	29,463	30,244	25,963	26,302	25,925	21,901
Interest-bearing liabilities	84,598	80,312	80,020	114,136	121,109	106,582	121,089	124,935
Net debt	2,767	-3,174	-14,360	-53,719	68,424	-38,245	-48,368	-41,055
Adjusted net debt	-72,118	-73,330	-83,005	-125,982	-139,518	-117,953	126,860	115,222
Provisions	158,176	153,537	148,942	152,648	156,174	164,950	167,455	160,803
Non-interest-bearing liabilities	100,581	169,383	124,410	163,644	145,349	185,859	231,475	272,872
Capital employed, average	313,047	299,803	312,391	323,153	320,041	285,688	311,489	298,531
Balance sheet total	558,497	586,277	530,675	596,892	588,591	607,592	663,735	700,233
Cash flow items								
Funds from operations (FFO)	9,450	5,220	5,282	15,517	8,190	4,919	5,162	11,787
Cash flow from operating activities	16,610	17,715	20,800	6,744	-15,076	15,571	7,079	-32,197
Free cash flow	10,588	13,514	17,649	2,318	-21,045	11,836	2,589	-36,502

Amounts in SEK million	2024 Q4	2024 Q3	2024 Q2	2024 Q1	2023 Q4	2023 Q3	2023 Q2	2023 Q1
Key ratios								
In % unless otherwise stated (x) means times								
Operating margin	7.3	2.5	22.8	27.1	8.3	-4.5	8.5	16.9
Operating margin[1]	0.8	2.8	7.8	18.1	6.1	1.6	9.2	9.9
Pre-tax profit margin	4.4	5.8	22.8	26.5	11.5	-5.5	7.0	16.5
Pre-tax profit margin[1]	-2.0	6.2	7.8	17.5	23.7	0.6	7.6	9.5
Return on equity	19.0	19.8	18.1	9.1	5.9	-9.3	-3.5	2.9
Return on capital employed	12.4	13.3	11.5	6.6	5.3	-4.6	0.5	5.4
Return on capital employed[1]	6.3	7.9	7.5	7.5	6.3	9.8	10.7	12.5
EBIT interest cover, (x)	7.4	7.9	7.3	3.9	3.1	-1.6	0.5	2.6
EBIT interest cover, (x)[1]	4.1	5.0	5.0	4.4	3.6	4.6	4.9	5.7
FFO interest cover, (x)	7.2	7.2	7.2	6.3	5.5	6.5	6.4	7.7
FFO interest cover, net, (x)	18.3	18.6	22.9	13.3	10.9	10.1	8.4	9.4
Cash flow interest cover after maintenance investments, (x)	10.3	3.8	3.4	0.2	-6.8	-22.9	-8.3	-5.9
FFO/gross debt	41.9	42.6	42.4	29.6	24.8	34.2	32.1	36.5
FFO/net debt	-1 281.9	1,077.8	236.1	62.9	43.9	95.3	80.3	111.1
FFO/adjusted net debt	49.2	46.7	40.9	26.8	21.5	30.9	30.6	39.6
EBITDA/net financial items, (x)	51.4	13.9	47.9	26.3	90.9	33.0	9.6	16.5
EBITDA/net financial items, (x)[1]	30.0	13.5	25.6	18.6	89.1	76.9	8.6	11.3
Equity/total assets	36.2	31.2	33.4	27.9	23.7	24.7	21.7	20.2
Gross debt/equity	41.9	43.9	45.1	68.6	86.9	71.0	84.3	88.2
Net debt/equity	-1.4	1.7	8.1	32.3	49.1	25.5	33.7	29.0
Gross debt/gross debt plus equity	29.5	30.5	31.1	40.7	46.5	41.5	45.7	46.9
Net debt/net debt plus equity	-1.4	1.7	7.5	24.4	32.9	20.3	25.2	22.5
Net debt/EBITDA, (x)	0.0	0.1	0.3	1.2	1.7	3.4	1.9	1.2
Adjusted net debt/EBITDA, (x)	1.2	1.2	1.5	2.8	3.5	10.5	5.1	3.3
Other information								
Investments	10,326	6,491	6,346	7,304	10,466	7,739	11,798	12,337
Electricity generation, TWh	24.4	21.1	23.0	31.0	29.0	19.9	23.7	28.2
Sales of electricity, TWh	41.0	35.7	38.0	45.4	46.0	36.9	39.4	45.7
Sales of heat, TWh	1.6	0.5	1.5	5.6	4.5	0.9	2.3	5.7
Sales of gas, TWh	17.3	5.4	8.0	20.2	14.0	4.6	7.6	18.3
Number of employees, full-time equivalents	20,655	20,356	20,193	21,446	20,995	20,642	20,228	19,772

1. Based on Underlying operating profit, that is, Operating profit excluding Items affecting comparability.
2. The value has been adjusted compared with information previously published in Vattenfall's financial reports.

Ten-year overview

Amounts in SEK million	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Income statement items										
Net sales	143,576	139,208	135,114	152,091	166,360	158,847	180,119	239,644	290,168	245,570
Operating profit before depreciation, amortisation and impairment losses (EBITDA)	30,604	27,209	34,399	34,341	42,445	46,507	75,790	30,513	39,685	60,779
Operating profit (EBIT)	-5,069	1,337	18,524	17,619	22,141	15,276	60,271	12,645	16,991	38,851
Underlying EBIT	20,529	21,697	23,203	19,883	25,095	25,790	31,181	37,313	20,005	19,828
Financial net	-4,776	-6,382	-5,755	-3,616	-3,819	-3,270	-898	-12,732	-5,157	-3,678
Profit before income taxes	-9,845	-5,045	12,769	14,003	18,322	12,006	59,373	-87	16,222	37,959
Profit for the year	-19,766	-26,004	9,484	12,007	14,861	7,716	48,013	21	10,395	33,380
– of which, attributable to owners of the Parent Company	-16,672	-26,324	8,333	10,157	13,173	6,489	46,828	-1,102	8,646	31,793
– of which, attributable to non-controlling interests	-3,094	320	1,151	1,850	1,688	1,227	1,185	1,123	1,749	1,587
Cash flow items										
Funds from operations (FFO)	29,009	28,186	26,643	23,275	34,949	35,024	46,096	42,194	30,058	35,469
Cash flow from operating activities	40,934	30,783	25,728	41,054	16,719	41,692	101,832	1,154	-24,624	61,869
Free cash flow	25,013	19,217	13,091	27,575	1,571	29,153	90,820	-11,126	-43,122	44,069
Balance sheet items										
Cash and cash equivalents and short-term investments	44,256	43,292	26,897	40,071	33,155	56,222	170,882	172,386	52,270	87,121
Equity	115,956	83,800	92,332	103,597	108,522	111,192	197,182	128,937	139,429	201,921
– of which, attributable to owners of the Parent Company	103,984	68,272	77,085	88,096	93,631	97,724	180,710	110,473	113,466	171,196
– of which, attributable to non-controlling interests	11,972	15,528	15,247	15,501	14,891	13,468	16,472	18,464	25,963	30,725
Interest-bearing liabilities	110,585	96,667	87,154	88,275	97,627	104,775	126,408	176,765	-121,109	-84,598
Net debt	64,201	50,724	59,260	47,728	64,266	48,178	-44,703	3,858	-68,424	2,767
Adjusted net debt	137,585	124,741	124,360	112,324	132,014	121,480	26,922	76,765	-139,517	-72,118
Provisions	138,263	138,344	131,680	136,642	149,792	155,951	161,475	160,433	156,174	158,176
Non-interest-bearing liabilities	97,513	90,449	88,200	134,094	94,839	91,330	288,948	316,558	145,349	100,581
Capital employed, average	279,435	248,640	240,778	250,283	260,190	265,639	271,674	299,461	320,041	313,047
Balance sheet total	462,317	409,260	409,132	462,608	450,780	463,248	782,358	792,327	588,591	558,497

Amounts in SEK million	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Key ratios *In % unless otherwise stated. (x) means times.*										
Operating margin	-3.5	1.0	13.7	11.4	13.3	9.6	33.5	5.3	5.9	15.8
Operating margin[1]	14.3	15.6	17.2	12.9	15.1	16.2	17.3	15.6	6.9	8.1
Return on equity	-16.8	-33.4	11.1	11.9	14.0	6.7	36.9	-0.7	5.9	19.0
Return on capital employed	-1.8	0.5	7.7	7.0	8.5	5.8	22.2	4.2	5.3	12.4
Return on capital employed[1]	7.3	8.7	9.6	7.9	9.6	9.7	11.5	12.5	6.3	6.3
EBIT interest cover, (x)	-0.8	0.5	3.3	4.3	5.3	4.3	15.8	2.3	3.1	7.4
EBIT interest cover, (x)[1]	4.8	4.6	4.1	4.9	6.0	7.1	8.3	6.4	3.6	4.1
FFO interest cover, (x)	6.5	6.5	5.4	6.5	9.3	10.4	12.9	8.1	5.5	7.2
FFO interest cover, net, (x)	9.4	7.7	6.9	7.8	10.3	12.1	15.9	9.2	10.9	18.3
FFO/gross debt	23.2	27.8	30.6	26.4	35.8	33.4	36.5	23.9	24.8	41.9
FFO/net debt	39.9	53.0	45.0	48.8	54.4	72.7	-103.1	1,093.7	43.9	-1,281.9
FFO/adjusted net debt	18.6	21.6	21.4	20.7	26.5	28.8	171.2	55.0	21.5	49.2
Equity/total assets	25.1	20.5	22.6	22.4	24.1	24.0	25.2	16.3	23.7	36.2
Gross debt/equity	95.4	115.4	94.4	85.2	90.0	94.2	64.1	137.1	86.9	41.9
Net debt/equity	55.4	60.5	64.2	46.1	59.2	43.3	-22.7	3.0	49.1	-1.4
Gross debt/gross debt plus equity	48.8	53.6	48.6	46.0	47.4	48.5	39.1	57.8	46.5	29.5
Net debt/EBITDA, (x)	2.1	1.9	1.7	1.4	1.5	1.0	-0.6	0.1	1.7	0.0
Adjusted net debt/EBITDA, (x)	4.5	4.6	3.6	3.3	3.1	2.6	0.4	2.5	3.5	1.2
Other information										
Dividend to owners of the Parent Company	–	–	2,000	2,000	3,623	4,000	23,414	4,000	4,000	7,000[2]
Investments	25,776	21,921	21,294	21,913	26,833	21,347	25,549	24,624	42,340	30,468
Electricity generation, TWh	117.4	119.0	127.3	130.3	130.3	112.7	111.4	108.9	100.9	99.6
Sales of electricity, TWh	197.2	193.2	157.3	174.1	169.4	164.1	168.9	165.3	168.0	160.2
Sales of heat, TWh	20.6	20.3	18.9	18.3	17.1	13.8	15.6	14.1	13.5	9.1
Sales of gas, TWh	50.7	54.8	56.3	60.7	59.2	56.8	57.1	47.3	44.5	50.9
Number of employees, full-time equivalents	28,567	19,935	20,041	19,910	19,815	19,859	18,883	19,638	20,995	20,655

1. Based on Underlying operating profit, that is, Operating profit excluding Items affecting comparability.
2. Proposed dividend.

Calculations of key ratios

Operating margin, %	= 100 x	EBIT / Net sales	38,851 / 245,570	=	**15.8**
Operating margin excl. items affecting comparability, %	= 100 x	Underlying EBIT / Net sales	19,828 / 245,570	=	**8.1**
Pre-tax profit margin, %	= 100 x	Profit before income taxes / Net sales	37,959 / 245,570	=	**15.5**
Pre-tax profit margin excl. items affecting comparability, %	= 100 x	Profit before income taxes excl. items affecting comparability / Net sales	19,044 / 245,570	=	**7.8**
Return on equity, %	= 100 x	Profit for the period attributable to owner of the Parent Company / Average equity for the period attributable to owner of the Parent Company excl. the Reserve for cash flow hedges	31,793 / 167,576	=	**19.0**
Return on capital employed, %	= 100 x	EBIT / Capital employed, average	38,851 / 313,047	=	**12.4**
Return on capital employed excl. items affecting comparability, %	= 100 x	Underlying EBIT / Capital employed, average	19,828 / 313,047	=	**6.3**
EBIT interest cover, (x)	=	EBIT + financial income excl. return from the Swedish Nuclear Waste Fund / Financial expenses excl. discounting effects attributable to provisions	42,516 / 5,714	=	**7.4**
EBIT interest cover excl. items affecting comparability, (x)	=	Underlying EBIT + financial income excl. return from the Swedish Nuclear Waste Fund / Financial expenses excl. discounting effects attributable to provisions	23,493 / 5,714	=	**4.1**
FFO interest cover, (x)	=	FFO + financial expenses excl. discounting effects attributable to provisions / Financial expenses excl. discounting effects attributable to provisions	41,183 / 5,714	=	**7.2**
FFO interest cover, net, (x)	=	FFO + financial items net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund / Financial items net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	37,518 / 2,049	=	**18.3**
Cash flow interest cover after maintenance investments, (x)	=	Cash flow from operating activities less maintenance investments + financial expenses excl. discounting effects attributable to provisions and interest components related to pension costs / Financial expenses excl. discounting effects attributable to provisions and interest components related to pension costs	48,829 / 4,760	=	**10.3**

FFO/gross debt, %	= 100 x	FFO / Interest-bearing liabilities	35,469 / 84,598	=	**41.9**
FFO/net debt, %	= 100 x	FFO / Net debt	35,469 / -2,767	=	**-1,281.9**
FFO/adjusted net debt, %	= 100 x	FFO / Adjusted net debt	35,469 / 72,119	=	**49.2**
EBITDA/net financial items, (x)	=	EBITDA / Financial items net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	60,779 / 2,049	=	**29.7**
EBITDA excl. items affecting comparability/net financial items, (x)	=	EBITDA excl. items affecting comparability / Financial items net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	40,436 / 2,049	=	**19.7**
Equity/total assets, %	= 100 x	Equity / Balance sheet total	201,921 / 558,497	=	**36.2**
Gross debt/equity, %	= 100 x	Interest-bearing liabilities / Equity	84,598 / 201,921	=	**41.9**
Net debt/equity, %	= 100 x	Net debt / Equity	-2,767 / 201,921	=	**-1.4**
Gross debt/gross debt plus equity, %	= 100 x	Interest-bearing liabilities / Interest-bearing liabilities + equity	84,598 / 286,519	=	**29.5**
Net debt/net debt plus equity, %	= 100 x	Net debt / Net debt + equity	-2,767 / 199,154	=	**-1.4**
Net debt/EBITDA, (x)	=	Net debt / EBITDA	-2,767 / 60,779	=	**0.0**
Adjusted net debt / EBITDA, (x)	=	Adjusted net debt / EBITDA	72,118 / 60,779	=	**1.2**

Facts about Vattenfall's markets 2024

	Sweden	Finland[2]	Denmark	Germany[3]	Netherlands	UK	Total
Installed capacity electricity, MW, 31 December 2024							
Hydro power[1]	8,541	136	–	9	24	–	**8,710**
Nuclear power	5,729	–	–	–	–	–	**5,729**
Fossil-based power	699	–	–	–	1,997	1	**2,697**
- of which, gas	–	–	–	–	1,997	1	**1,998**
- of which, hard coal	–	–	–	–	–	–	**–**
- of which, oil and other	699	–	–	–	–	–	**699**
Wind power	331	–	1,648	576	2,053	1,111	**5,718**
Biomass, peat, waste	85	–	–	17	1	–	**103**
Solar power	–	–	–	5	44	–	**49**
Total	**15,384**	**136**	**1,648**	**607**	**4,119**	**1,112**	**23,006**
Electricity storage installed capacity, MW	–	–	–	2,758	15	42	**2,816**
Electricity storage capability, GWh	–	–	–	18	0	0	**18**
Installed capacity heat, MW, 31 December 2024	**1,889**			**46**	**1,554**	**28**	**3,517**
Generated electricity, TWh							
Hydro power[1]	30.7	0.4	–	0.0	0.1	–	**31.1**
Nuclear power	37.9	–	–		–	–	**37.9**
Fossil-based power	0.0	–	–	2.6	6.7	0.0	**9.3**
- of which, gas	–	–	–	1.9	6.7	0.0	**8.6**
- of which, hard coal	–	–	–	0.7	–	–	**0.7**
- of which, oil and other	0.0	–	–	0.0	–	–	**0.0**
Wind power	0.8	–	6.1	2.0	5.5	2.8	**17.1**
Biomass, peat, waste	0.1	–	–	0.1	0.0	–	**0.3**
Solar power	–	–	–	0.0	0.0	–	**0.0**
Total	**69.5**	**0.4**	**6.1**	**4.7**	**12.2**	**2.8**	**95.7**

	Sweden	Finland[2]	Denmark	Germany[3]	Netherlands	UK	Total
Electricity delivered from storage, TWh	–	–	–	3.5	0.0	–	**3.5**
Production of heat, TWh							
Fossil-based heat	0.0	–	–	3.9	1.3	0.0	**5.3**
- of which, gas	–	–	–	3.0	1.3	0.0	**4.3**
- of which, hard coal	–	–	–	1.0	–	–	**1.0**
- of which, oil and other	0.0	–	–	0.0	–	–	**0.1**
Biomass, peat, waste	3.3	–	–	0.5	0.0	0.0	**3.8**
Total heat production	**3.3**			**4.4**	**1.4**	**0.0**	**9.2**
Sales of electricity, TWh	78.1	2.5	7.3	46.8	25.6	–	**160.2**
Sales of heat, TWh	3.1	–	–	4.5	1.6	–	**9.1**
Sales of gas, TWh	–	–	–	16.730	34.197	–	**50.9**
Number of retail customers	858,885	275,560	–	4,659,463	1,934,571	–	**7,728,479**
Electricity volume, TWh retail customers	6.7	1.6	0.2	13.2	5.6	–	**27.3**
Electricity volume, TWh businesses	25.7	6.4	1.9	9.0	11.9	–	**55.0**
Electricity volume, TWh resellers	6.9	2.1	1.1	23.6	–	–	**33.6**
Electricity volume, TWh other	38.9	-8	4.1	1.0	8.0	–	**44.4**
Number of network customers	977,526	–	–	–	–	–	**977,526**
Number of gas customers	–	–	–	767,379	1,601,064	–	**2,368,443**
Electricity network							
Transited volume, TWh	72.6	–	–	–	–	–	**72.6**
Distribution network, km	125,457	–	–	–	–	–	**125,457**
Number of employees (full-time equivalents)	11,434	92	631	3,897	4,105	496	**20,655**
CO_2 emissions per country, Mtonnes	0.2	0.0	0.0	2.0	2.9	0.0	**5.2**
CO_2 emission allowances received, Mtonnes CO_2/year	0.1	–	–	–	0.0	–	**0.1**
Greenhouse gas emissions per target category in our Science-based targets							
Scope 1 and 2, market-based, Mtonnes	0.2	0.0	0.0	2.0	3.0	0.0	**5.2**
Scope 3.3d, electricity sales, Mtonnes	–	0.5	0.8	4.0	1.6	–	**6.9**
Scope 3.11, sold fossil fuels, Mtonnes	–	–	–	3.4	6.9	–	**10.2**
Other scope 3 categories							**4.3**

1. Hydro power have been adjusted to report electricity delivered from storage, primarily from pumped storage plants, separately.
2. Including data from Norway.
3. Including data from France and Poland.

Facts about Vattenfall's markets 2023

	Sweden	Finland[2]	Denmark	Germany[3]	Netherlands	UK	Total
Installed capacity electricity, MW, 31 December 2023							
Hydro power[1]	8,541	136	–	9	24	–	**8,710**
Nuclear power	5,658	–	–	–	–	–	**5,658**
Fossil-based power	699	–	–	2,107	1,997	0	**6,213**
- of which, gas	–	–	–	1,384	1,997	0	**4,791**
- of which, hard coal	–	–	–	687	–	–	**687**
- of which, oil and other	699	–	–	36	–	–	**735**
Wind power	331	–	1,475	576	1,949	1,111	**5,443**
Biomass, peat, waste	85	–	–	23	1	–	**109**
Solar power	–	–	–	15	60	–	**75**
Total	**15,314**	**136**	**1,475**	**2,730**	**4,031**	**1,111**	**24,798**
Electricity storage installed capacity, MW	–	–	–	2,798	15	42	**2,855**
Electricity storage capability, GWh	–	–	–	18	–	–	**18**
Installed capacity heat, MW, 31 December 2023	1,922-	–	–	5,672	1,554	17	**9,165**
Generated electricity, TWh							
Hydro power[1]	32.3	0.5	–	3.2	0.0	–	**36.1**
Nuclear power	37.4	–	–	–	–	–	**37.4**
Fossil-based power	–	–	–	6.1	7.0	–	**13.2**
- of which, gas	–	–	–	4.6	7.0	–	**11.6**
- of which, hard coal	–	–	–	1.5	–	–	**1.5**
- of which, oil and other	–	–	–	0.2	–	–	**0.2**
Wind power	0.8	–	5.0	1.8	3.1	3.0	**13.7**
Biomass, peat, waste	0.3	–	–	0.3	0.0	–	**0.4**
Solar power	–	–	–	–	–	–	**0.1**
Total	**70.7**	**0.5**	**5.0**	**11.4**	**10.2**	**3.0**	**100.9**

	Sweden	Finland[2]	Denmark	Germany[3]	Netherlands	UK	Total
Electricity delivered from storage, TWh	–	–	–	3.2	–	0.0	**3.2**
Production of heat, TWh							
Fossil-based heat	0.1	–	–	8.5	1.4	0.0	**10.0**
- of which, gas	–	–	–	6.8	1.4	0.0	**8.2**
- of which, hard coal	–	–	–	1.5	–	–	**1.5**
- of which, oil and other	0.1	–	–	0.1	–	–	**0.2**
Biomass, peat, waste	3.3	–	–	1.2	0.0	–	**4.5**
Total heat production	**3.4**	**–**	**–**	**9.7**	**1.4**	**0.0**	**14.5**
Sales of electricity, TWh	79.2	2.3	6.1	58.3	22.1	–	**168.0**
Sales of heat, TWh	3.1	–	–	8.8	1.5	–	**13.5**
Sales of gas, TWh	–	–	–	12.4	32.1	–	**44.5**
Number of retail customers	865,898	300,880	105,116	4 850 007	1,941,982	–	**8,063,883**
Electricity volume, TWh retail customers	6.9	1.7	0.5	13.0	5.5	–	**27.6**
Electricity volume, TWh businesses	25.0	6.2	1.7	8.3	11.2	–	**52.4**
Electricity volume, TWh resellers	6.9	2.3	0.7	35.9	–	–	**45.7**
Electricity volume, TWh other	40.4	-8	3.2	1.0	5.4	–	**42.2**
Number of network customers	972,867	–	–	–	–	–	**972,867**
Number of gas customers	–	–	–	665 220	1,620,572	–	**2,285,792**
Electricity network							
Transited volume, TWh	71.8	–	–	–	–	–	**71.8**
Distribution network, km	124,829	–	–	–	–	–	**124,829**
Number of employees (full-time equivalents)							
Per country	10,510	84	626	5,400	3,909	466	**20,995**
CO_2 emissions per country, Mtonnes	0.2	–	–	4.7	3.0	–	**7.8**
CO_2 emission allowances received, Mtonnes CO_2/year	0.1	–	–	0.4	0.1	–	**0.5**
Greenhouse gas emissions per target category in our Science-based targets							
Scope 1 and 2, market-based, Mtonnes	0.2	0.0	0.0	4.8	3.0	0.0	**8.0**
Scope 3.3d, electricity sales, Mtonnes	–	0.5	0.6	5.0	2.3	–	**8.4**
Scope 3.11, sold fossil fuels[4], Mtonnes	–	–	–	2.5	6.5	–	**9.0**
Other scope 3 categories	–	–	–	–	–	–	**5.8**

1. Hydro power have been adjusted to report electricity delivered from storage, primarily from pumped storage plants, separately.
2. Including data from Norway.
3. Including data from France and Poland.

Pro rata

2024	Sweden	Finland	Denmark	Germany	Netherlands	UK	Total
Installed capacity electricity, MW, 31 December 2024							
Hydro power[1]	8,339	136	–	9	24	–	**8,508**
Nuclear power	3,880	–	–	–	–	–	**3,880**
Fossil-based power	699	–	–	–	1,997	1	**2,697**
- of which, gas	–	–	–	–	1,997	1	**1,998**
- of which, hard coal	–	–	–	–	–	–	**–**
- of which, oil and other	699	–	–	–	–	–	**699**
Wind power	366	–	1,619	310	1,276	1,038	**4,609**
Biomass, peat, waste	85	–	–	17	1	–	**103**
Solar power	–	–	–	5	44	–	**49**
Total	**13,369**	**136**	**1,619**	**341**	**3,343**	**1,038**	**19,846**
Electricity storage installed capacity, MW	**–**	**–**	**–**	**2,758**	**15**	**42**	**2,816**
Electricity storage capability, TWh	**–**	**–**	**–**	**18**	**0**	**–**	**18**
Installed capacity heat, MW, 31 December 2024	**1,780**	**–**	**–**	**46**	**1,544**	**28**	**3,398**
Generated electricity, TWh							
Hydro power[1]	29.7	0.4	–	0.0	0.1	–	**30.2**
Nuclear power	25.7	–	–		–	–	**25.7**
Fossil-based power	0.0	–	–	2.6	6.7	0.0	**9.3**
- of which, gas	–	–	–	1.9	6.7	0.0	**8.6**
- of which, hard coal	–	–	–	0.7	–	–	**0.7**
- of which, oil and other	0.0	–	–	0.0	–	–	**0.0**
Wind power	0.8	–	6.0	1.0	3.4	2.6	**13.8**
Biomass, peat, waste	0.1	–	–	0.1	0.0	–	**0.3**
Solar power	–	–	–	0.0	0.0	–	**0.0**
Total	**56.4**	**0.4**	**6.0**	**3.8**	**10.2**	**2.6**	**79.3**
Electricity delivered from storage, TWh	**–**	**–**	**–**	**3.5**	**0.0**	**–**	**3.5**
Produced heat, TWh	**3.1**			**4.4**	**1.4**	**0.0**	**9.0**
CO_2 emissions per country, Mtonnes	**0.2**	**0.0**	**0.0**	**2.0**	**2.9**	**0.0**	**5.1**

2023	Sweden	Finland	Denmark	Germany	Netherlands	UK	Total
Installed capacity electricity, MW, 31 December 2023							
Hydro power[1]	8,339	136	–	9	24	–	**8,508**
Nuclear power	3,832	–	–	–	–	–	**3,832**
Fossil-based power	699	–	–	2,105	1,997	–	**4,801**
- of which, gas	–	–	–	1,382	1,997	–	**3,379**
- of which, hard coal	–	–	–	687	–	–	**687**
- of which, oil and other	699	–	–	36	–	–	**735**
Wind power	367	–	1,460	310	1,201	1,038	**4,375**
Biomass, peat, waste	85	–	–	23	1	–	**109**
Solar power	–	–	–	15	60	–	**75**
Total	**13,322**	**136**	**1,460**	**2,462**	**3,283**	**1,038**	**21,701**
Electricity storage installed capacity, MW	–	–	–	2,798	15	42	**2,855**
Electricity storage capability, TWh	–	–	–	18	0	0	**18**
Installed capacity heat, MW, 31 December 2023	1,813	–	–	5,635	1,544	17	**9,009**
Generated electricity, TWh							
Hydro power[1]	31.4	0.5	–	0.0	0.0	–	**32.0**
Nuclear power	25.3	–	–	–	–	–	**25.3**
Fossil-based power	–	–	–	6.1	7.0	–	**13.1**
- of which, gas	–	–	–	4.6	7.0	–	**11.6**
- of which, hard coal	–	–	–	1.5	–	–	**1.5**
- of which, oil and other	–	–	–	0.2	–	–	**0.2**
Wind power	0.8	–	5.0	0.9	2.2	2.9	**11.8**
Biomass, peat, waste	0.2	–	–	0.3	–	–	**0.5**
Solar power	–	–	–	–	0.1	–	**0.1**
Total	**57.7**	**0.5**	**5.0**	**7.3**	**9.3**	**2.9**	**82.8**
Electricity delivered from storage, TWh	**–**	**–**	**–**	**3.2**	**–**	**0.0**	**3.2**
Produced heat, TWh	**3.2**	**–**	**–**	**9.6**	**1.4**	**–**	**14.3**
CO_2 emissions per country, Mtonnes	**0.2**	**–**	**–**	**4.7**	**3.0**	**–**	**7.8**

1. Hydro power have been adjusted to report electricity delivered from storage, primarily from pumped storage plants, separately.

Glossary

Ancillary services: Are purchased by the Transmission System Operator in order to ensure a balanced and reliable electric power system and can be provided from power plants, assets with flexible electricity consumption, or energy storage. There are different types of ancillary services where the requirement on endurance and speed differ.

Availability: Refers to technical availability, which is the percentage of planned production time for an asset without unexpected technical difficulties or maintenance needs.

Bankable: Refers to something that is deemed acceptable or suitable for financial support from e.g. institutional investors or approval from a bank or financial institution.
Biomass: Renewable fuel, such as forest residues, bark and pine oil.

Carbon capture, utilisation and storage, (CCUS): A process that involves the capture of CO_2 from sources, such as fossil fuel-powered power generation or industrial facilities. The CO_2 can also be captured directly from the atmosphere. If not being used on-site, the captured CO_2 is compressed and transported by pipeline, ship, rail or truck to be used in a range of applications, or injected into deep geological formations for permanent storage. CCUS using biomass as a fuel is called bio-CCUS.

Circular economy: A circular economy is a framework for sustainable growth – with the overarching goal to reduce society's resource use and the resulting environmental impact.
Co-location/Co-use: The act of placing or using two or more facilities, activities or assets in a single location. For example, agrivoltaic is the combination of sustainable agriculture and solar power generation on the same agricultural land.

Combined heat and power, (CHP): A plant that produces both heat and electricity. In such a plant a large share of the primary energy is used for electricity and heat production, with little wasted heat.

Corporate Power Purchase Agreement (cPPA): A Corporate Power Purchase Agreement is usually a long term agreement between a renewable energy generator and a corporate customer or an organisation.

Decentralised production/energy solutions: Any form of energy provision that is not provided from the central electricity grid, for example local power generation such as rooftop solar panels, heating solutions including heat pumps and storage technologies.

Derivative instrument: A derivative is a financial instrument that is commonly used to manage risk. The value and change in value of derivative instruments are derived from the value of an underlying asset, which can be commodities, precious metals, currency, bonds, stocks, and similar. Examples of derivative instruments are options, forward contracts, and swaps.

Develop-to-sell: Refers to projects that are developed to be sold at completion as opposed to projects that are being built to own.

Dispatchable electricity source: Sources of electricity that can be readily turned on and off and used to adjust the supply of power to the grid on demand.

Efficiency: An efficiency rating indicates the relationship between energy input and energy output in a system.

Electrofuel: Electrofuel is categorised as a sustainable aviation fuel since the only inputs to the process of making electrofuel are fossil-free electricity, water and recycled carbon dioxide (in contrast to virgin fossil feedstock). Electricity will be mainly used to make hydrogen via electrolysis which together with carbon dioxide can be converted into ethanol and next converted to aviation electrofuel.

Environmental Product Declaration, (EPD): A third-party environmental declaration in accordance with ISO 14025 (www.environdec.com).

The EU Emissions Trading System, (EU ETS): The EU's trading system for CO_2 emission allowances. The system sets a cap for emissions from businesses within the system and facilitates optimisation through trading in emission allowances.

Forced labour: All work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily.

Forward market: A market in which buyers and sellers agree on a set price for a future delivery of the underlying instrument, such as an electricity contract (see also derivative instrument).

Fossil fuels: Fuels based on hydrocarbons from ancient sedimentary layers – mainly coal, oil and natural gas.

Global Compact: The United Nations' (UN's) ten principles for companies surrounding human rights, labour issues, the environment and anti-corruption.

Global Reporting Initiative, (GRI): A global standard for sustainability reporting. (see https://www.globalreporting.org/)
Guarantee of origin: Guarantees certify how and where electricity was produced from renewable sources.

Heat only boiler, (HOB): A plant that produces heat for district heating as its sole output.

High-risk minerals: Minerals that are mined in an area of armed conflict and traded illicitly to finance the conflict; deemed essential to the energy transition which may have no viable substitutes, and may face potential disruption in supply; or considered rare earth elements (REE).

Hydrogen: Hydrogen as a fuel source can be produced in several different ways and is typically categorised into different colours depending on the production process. Grey hydrogen is currently the most common form of hydrogen production where the hydrogen is created from natural gas using steam reforming.
Blue hydrogen is also extracted using the steam reforming process, but the carbon emissions released from the production process are captured and stored. Green hydrogen doesn't generate any emissions in its entire life cycle as it is produced by electrolysing water using renewable energy.

Installed capacity: Also known as nameplate capacity. Refers to the maximum amount of electricity that a power plant can produce under specific conditions according to the design data. Commonly measured in MW (Megawatt).

International Financial Reporting Standards, IFRS: Vattenfall has been reporting in accordance with IFRS since 2005.

ISO 14001: An international standard in the ISO 14000 series for establishing environmental management systems.

Just Transition and Responsible Decommissioning:
A process involving employers, unions, governments and communities, planning and delivering the transition of economies, sectors, and companies to low carbon, socially just and environmentally sustainable activities. At the company level, a just transition is process that plans emissions reduction efforts to maximise positive impacts and minimise negative impacts on workers and communities through retention and redeployment, skills training, new job creation, social inclusion and community renewal.

Levelised Energy Cost, (LEC): The average cost of production per kilowatt hour electricity, calculated over the full lifetime of the generating asset. The net present value method is used to discount future costs with the weighted average cost of capital (WACC).

Life cycle analysis (LCA): Methodology to establish a product's total environmental impact during its life cycle, from raw material extraction, through manufacturing processes and usage, to waste management, including all transportation and energy consumption.

Lost Time Injury, (LTI): Work-related accidents resulting in absence longer than one day, and accidents resulting in fatality. Commonly expressed as LTIF, or Lost Time Injury Frequency, the number of such accidents per 1 million hours worked.
Margin call: Margin is collateral and funds that are collected to protect against future or current risk exposures resulting from market price changes or in the event of a counterparty default. A margin call occurs when the price of the underlying asset changes.

Net Promoter Score, (NPS): a score ranging from –100 to 100 that measures the willingness of customers to recommend a company's products or services to others and is used to determine customers' overall satisfaction with a company and loyalty to the brand.

Nord Pool: The Nordic electricity exchange. Started in Sweden and Norway in 1996.

NOX: Collective term for nitrogen oxide, nitrogen dioxide and similar nitrogen compounds.

Offtaker: An offtaker is a party that, in advance, agrees to buy or sell goods that are still to be produced. In the energy market, this typically refers to the party that buys electricity through a PPA (see below).

Over the Counter, (OTC): Trading outside of exchanges (directly or via brokers) in physical and financial contracts.

Particulate Matter: Particulate matter consists of a mixture of solids and liquid droplets. Some particulate matter is emitted directly, otherwise it forms when pollutants emitted by various sources react in the atmosphere. Particulate matter comes in different sizes, with that smaller than 10 micrometers able to enter our lungs and cause serious health problems.

Plannable production: See Dispatchable electricity source,

Power-as-a-service (PaaS): A business model which provides major energy users with guaranteed power services in exchange for a fixed monthly fee.

Power-to-Heat: Converting electricity to heat using electric boilers combined with hot water storage. With Power-to-Heat systems, the excess power generated primarily from renewable energy can be utilised later as district heating.

Power-to-X: An umbrella term referring to the conversion of electricity to an energy carrier, heat, product or raw material. Power-to-X includes e.g. power-to-gas, power-to-liquid, power-to-chemicals and power-to-heat. More specific examples are production of hydrogen, methane, ammonia, methanol, jet fuel, diesel etc. using electricity as the primary energy source.

Price areas: The Nordic electricity system is split into 15 price areas (or bidding areas) and generated electricity is always priced in the area where it is geographically located.

Primary energy: Primary energy is the form of energy that is accessible directly from the original sources. Vattenfall uses the interpretation applied by Eurostat and IEA. This means that all fuels are assigned a primary energy content corresponding to their heating value. Uranium is assigned a primary energy content corresponding to the heat released in the power plant. Solar, wind and hydro power are assigned a primary energy content corresponding to the extracted electricity (or heat).

Psychological safety: An environment where there is a shared expectation that one will not be embarrassed, rejected, or punished for sharing ideas, taking risks, or soliciting feedback.

Renewable energy sources: Non-finite energy sources such as hydro power, biomass, wind, the sun, ocean waves and geothermal energy.

Reservoir levels: Refers to the volume of water stored in a reservoir which on a specific occasion can be used for hydro power generation. Reservoir levels vary during the year depending on precipitation and hydro power generation.

SF_6: A greenhouse gas commonly used for electrical insulation that is 15,000 times more potent than CO_2.

Small modular reactor (SMR): A type of nuclear reactors that are smaller and more flexible than conventional reactors, typically with an electrical power output of up to 300 MW per unit. Due to a modular and standardised design, components of SMRs can be pre-manufactured in a factory, then assembled, commissioned and operated at a separate site.

Smart meter: Smart meters replace existing gas and electricity meters and is usually an electronic device that records information such as consumption of electric energy, voltage levels, current, and power factor of an installation or building. They also have the ability to send and store meter readings automatically and at regular intervals over the internet.

SO_x: Collective term for sulfphur oxides, sulfur dioxide and similar sulfur compounds.

Spot market: A market in which trading is conducted for immediate delivery.

Svensk Kärnbränslehantering AB, (SKB): The Swedish Nuclear Fuel Management Company, responsible for handling radioactive waste in Sweden.

Swap: A financial instrument that is a combination of a spot and forward transaction – a type of financial swap agreement.

System Average Interruption Duration Index, (SAIDI): An index of average power interruption times within electricity distribution. Measured in terms of interruption duration per customer and year.

System Average Interruption Frequency Index, (SAIFI): An index of average power interruption frequency within electricity distribution. Measured in terms of the number of power interruptions per customer and year.

Thermal power: Electricity generated via a heating process, such as a gas turbine or a steam process in a coal or nuclear power plant (compare combined heat and power).

Third Party Integration, (TPI): A process in which excess or waste heat, which would otherwise be released to the atmosphere, is captured from the industrial facilities in which it is produced and integrated into the district heating network.

Value Chain: All activities, operations, business relationships and investment chains of an undertaking and includes entities with which the company has a direct or indirect business relationship, upstream and downstream.

Volatility: A measure of how the price of a product varies during a given period of time.

Whistleblowing: A procedure that is voluntarily implemented by Vattenfall and which allows employees, contractors, suppliers, partners and other external and internal stakeholders to report serious irregularities and other complaints at Vattenfall.

For definitions of financial key ratios, see page 213.
For CSRD definitions, see Annex II of the CSRD delegated act.

Power units
- Power is energy per unit of time
- Power output is measured in watts (W)
- 1 kW (kilowatt) = 1,000 W
- 1 MW (megawatt) = 1,000 kW
- 1 GW (gigawatt) = 1,000,000 kW

Energy units
- Energy is power multiplied by time
- 1 kWh (kilowatt hour) = 1 kW in one hour
- 1 MWh (megawatt hour) = 1,000 kWh
- 1 GWh (gigawat hour) = 1,000,000 kWh
- 1 TWh (terawatt hour) = 1,000,000,000 kWh

Weight units
- ktonnes (kilotonnes) = 1,000 tonnes
- Mt or Mtonnes (megatonnes) = 1,000,000 tonnes

Voltage
- 1 kV (kilovolt) = 1,000 volts (V)

Definitions and calculations of key ratios

The key ratios are presented as percentages (%) or times (x) and are based on full year 2024.

Alternative Performance Measures

In order to ensure a fair presentation of the Group's operations, the Vattenfall Group uses a number of Alternative Performance Measures that are not defined in IFRS or in the Swedish Annual Accounts Act. The Alternative Performance Measures that Vattenfall uses are described below, including their definitions and how they are calculated. The Alternative Performance Measures used are unchanged compared with prior periods.

Operating profit (EBIT, Earnings Before Interest and Tax): The difference between the operating income and the operating expenses, including share of profit from associated companies and joint ventures. Refer to Consolidated income statement.

Operating profit before depreciation, amortisation and impairment losses (EBITDA, Earnings Before Interest, Tax, Depreciation and Amortisation): Refer to Consolidated income statement.

Items affecting comparability: Capital gains and capital losses from shares and other non-current assets, impairment losses and reversed impairment losses and other material items that are of an infrequent nature. Also included here are, for trading activities, unrealised changes in the fair value of energy derivatives, which according to IFRS 9 cannot be recognised using hedge accounting and unrealised changes in the fair value of inventories. Refer to Consolidated income statement for a specification of items affecting comparability.

Underlying operating profit: Underlying operating profit excluding items affecting comparability. This measure is intended to provide a more fair comparison between periods by excluding items affecting comparability that are of an infrequent nature. Refer to Comments on the consolidated income statement for a reconciliation.

Underlying operating profit before depreciation, amortisation and impairment losses (Underlying EBITDA): Operating profit excluding items affecting comparability and depreciation amortization and impairment losses. This measure enables a more fair comparison between periods. This is enabled by excluding items affecting comparability that are of an infrequent nature and in addition excluding items not affecting cash flow such as depreciation amortization and impairment losses. Refer to Comments on the consolidated income statement for a reconciliation.

Interest-bearing liabilities: Refer to Comments on the consolidated balance sheet for a reconciliation.

Net debt: Refer to Comments on the consolidated balance sheet and Supplementary information in connection with the Consolidated statement of cash flow for reconciliations.

Adjusted net debt: Refer to Comments on the consolidated balance sheet for a reconciliation.

Capital employed: Total assets less financial assets, non interest-bearing liabilities and certain other interest-bearing provisions which are not included in adjusted net debt. Refer to Comments on the consolidated balance sheet for a reconciliation.

Funds from operations (FFO): Refer to Consolidated statement of cash flow.

Free cash flow: Cash flow from operating activities less maintenance investments. Refer to Supplementary information in connection to Consolidated statement of cash flow for a reconciliation.

Other definitions

Hybrid Capital: Perpetual subordinated securities, junior to all Vattenfall's unsubordinated debt instruments.

LTIF: Lost Time Injury Frequency (LTIF) is expressed in terms of the number of lost time work injuries (per 1 million hours worked), i.e., work-related accidents resulting in absence longer than one day, and accidents resulting in fatality.

Unavailable Liquidity: Amount of cash on Vattenfalls consolidated balance sheet that are seen as Restricted cash, as determined in accordance with Rating agencys or due to Financial regulations.

Financial calendar 2025

28 April
Annual General Meeting

29 April
Interim report January–March

18 July
Interim report January–June

30 October
Interim report January–September

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About Vattenfall's financial reports

Vattenfall's financial reporting includes interim reports, the year-end report and the annual report. In addition to these reports, the company issues financial information via press releases and on Vattenfall's websites. Vattenfall's Annual and Sustainability Report 2024 is published in Swedish and English. All financial reports are available on Vattenfall's websites. The reports are only available digitally for downloading and can therefore not be ordered in printed versions.

Forecasts and forward-looking statements
This document contains forward-looking statements that are based on Vattenfall's current expectations. Even if Vattenfall's management believes that these expectations are reasonable, no guarantee can be made that these expectations will prove to be correct. The forward-looking statements herein pertain to risks and uncertainties that could have a material impact on future earnings. The statements are based on certain assumptions, including such that pertain to financial conditions in general in the company's markets and the level of demand for the company's products. The outcome may vary significantly compared with what is presented in the forward-looking statements, depending on, among other things, changed conditions regarding the economy, markets and competition, legal requirements and other political actions and variations in exchange rates, as well as other factors referred to in the administration report. This English version of Vattenfall's Annual and Sustainability Report is a translation of the Swedish original, which is the binding version. Rounding differences may occur in this document.

Photos
Łukasz Bera, Elin Bergqvist, Hans Blomberg, Teis Boderskov, Jimmy Eriksson, Kolibri Film, Börje Försäter, Robert Gabrielsson, Peter Hoelstad, Erik van der Horst, HYBRIT, Jeanette Hägglund, Matthias Ibeler, Johan Kronman, Jennie Lind, Oskar Lind, Jorrit Lousberg, Felix Odell, Jan Oelker, Ramboll, Elisabeth Redlig, Gyro Helicopter Service, Martin Sorgenfrei, Hans Strand, Rickard Sund, Charles Walker, Rainer Weisflog, Ulrich Wirrwa, NORD ID/NORD DDB and more.

Production
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