

CLIMATE TRANSITION PLAN

At Vattenfall, we are committed to net zero emissions across our full value chain by 2040.



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“The transition won’t happen overnight, and it can’t be achieved by one actor alone. It requires collaboration across sectors, clear and stable policy frameworks, and continued innovation”

→ [Management letter on page 3](#)



“The energy transition must be achieved while respecting the ecosystems and communities that we operate in”

→ [Our plan on page 4](#)



“Challenges and opportunities ahead increasingly lie in supporting customer decarbonisation and reducing emissions across the supply chain”

→ [Our decarbonisation approach on page 15](#)



“We’re working actively to both drive the transition through our own operations and value chain, and contribute to enabling more system-wide progress and facilitate the engagement of other stakeholders”

→ [Advocating for fossil freedom on page 24](#)

Fossil freedom: Our business strategy

Climate change is one of the defining challenges of our time. While the energy transition is not the sole solution to the climate crisis, it is a crucial piece of the puzzle. Vattenfall has both the responsibility and the opportunity to be a driver of change in this transition.

At Vattenfall, we're convinced that sustainability, competitiveness, and resilience go hand in hand, and that companies that act decisively today will be best positioned to succeed tomorrow. For more than a century, Vattenfall has evolved to meet changing societal needs. Ten years ago, we took another important step by making fossil freedom our business strategy and committing to our science-based targets of net-zero emissions by 2040 and significant emission reductions by 2030. Fossil freedom has since guided our investments, shaped our portfolio, and strengthened our ability to create value while more than halving our emissions.

This transition plan builds on the progress we have made over the past decade and outlines how we will continue to accelerate our contribution to the energy transition. The next phase is about accelerating the

transition, scaling proven solutions, and making fossil freedom possible for more customers, industries and communities.

We know that the transition brings both opportunities and challenges for our customers and partners. They need solutions that are sustainable, reliable, affordable and competitive. We work with partners and customers to decarbonise by investing fossil-free electricity, grids, products and solutions. The transition won't happen overnight, and it can't be achieved by one actor alone. It requires collaboration across sectors, clear and stable policy frameworks, and continued innovation.

The next phase is about accelerating the transition, scaling proven solutions and making fossil freedom possible for more customers, industries and com-

munities. Our approach is ambitious in direction, disciplined in execution and grounded in long-term value creation. With a focus on both sustainability and profitability, we know there's a way to enable electrification, ensure a secure and reliable energy supply, and accelerate the shift away from fossil fuels.

Andreas Regnell

Head of Strategic Development



Our climate transition plan

Driving the energy transition is our business strategy.

The climate crisis is one of the defining challenges of our time. To limit global warming in line with the Paris Agreement (1.5°C), a rapid transition away from fossil fuels is required across energy systems, industry, and society. To succeed, we need to scale fossil free solutions while simultaneously reducing our dependency on fossil fuels.

At the same time, the energy transition must be achieved while respecting the ecosystems and communities that we operate in. That’s why our transition plan builds on the principles of a just and nature-inclusive transition.

Our early commitment to a fossil-free business model has made our business more competitive and resilient. And our market strategy as a profitable, integrated energy company means we are uniquely positioned to be a leader in the energy transition.



We have ambitious, science-based climate targets

Vattenfall is committed to net-zero emissions by 2040, requiring at least a 90% reduction in absolute emissions across our full value chain. Our climate targets are fully aligned with a 1.5°C pathway and the Paris Agreement goal of limiting global warming to well below 2°C. They cover our entire value chain, from our own operations to our customers and supply chain, across all geographies where we operate. Our targets help mitigate negative impacts, reduce transition risks, and capture opportunities arising from the energy transition.

2030

65% emission reduction

Group strategic target covering the full value chain

- Target is based on verified near-term science-based targets

2040

Net Zero emissions

Achieve net-zero emissions in the full value chain

- At least 90% emission reduction across all emission scopes
- Verified long-term science-based targets

Residual emissions

Any emissions remaining in 2040 must be permanently removed in line with SBTi standards

Our science-based climate targets ¹	Unit	2017	2030	2040
Own operations (Scope 1-2)	gCO2e/ kwh	98	-77%	-91.7%
Sold electricity (Scope 3.3d)	gCO2e/ kwh	196	-78.1%	-95.4%
Sold fossil fuels (Scope 3.11)	MtCO2e	17.2	-54.6%	-90%
Supply chain (Rest of scope 3)	MtCO2e	6.4	n/a	-90%



1. Targets are validated by SBTi and are gross targets that exclude use of emission removals and carbon credits for fossil CO2e. The target boundary includes land-related emissions and removals from bioenergy feedstocks.

Supporting commitments



First Movers Coalition

- **Steel:** 10% of annually procured steel is near-zero² steel
- **Aviation fuel:** replace at least 5% with sustainable aviation fuel (SAF)
- **Concrete:** 10% of procured concrete is near-zero² concrete

2. As defined by the [First Movers Coalition](#)
3. [SteelZero Initiative](#)



Vattenfall has committed to using 50% low emission steel by 2030 and 100% by 2040 in our wind business³



Fossilfritt Sverige

Through the Fossil Free Sweden initiative, we participate in three challenges: fossil-free transport, electrifying our vehicle fleet, and installing solar panels.

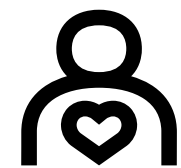
[→ Read more at Fossilfritt Sverige](#)

We're working for a just and nature-inclusive transition

At Vattenfall, a sustainable energy transition is guided by respect for the people, communities, and ecosystems affected by the transformation.



Just transition



The energy transition must be a just transition. That's why we continuously engage with stakeholders to address concerns, minimise negative impacts and create benefits for affected people, communities, and ecosystems.

The transition to a net-zero economy will affect societies, local communities, consumers, and employees across the value chain. While it opens opportunities for sustainable development, it will also involve trade-offs that don't affect all stakeholders equally.

Vattenfall's approach focuses on areas where we have direct influence and where impacts are most tangible. For example, we collaborate with local communities to make sure that assets are developed in a way that addresses local concerns and benefits the communi-

ties e.g., by creating local employment or community benefit funds.

Through targeted objectives and locally adapted actions, Vattenfall aims to contribute to a transition that supports social progress alongside climate action, while avoiding or restoring degradation of ecosystems.

[→ Read more about a just transition](#)

Nature-inclusive transition



The energy transition must be nature-inclusive. This drives us to continuously explore new ways to integrate biodiversity management into our operations and land management.

Decarbonising our assets and customers and scaling up new fossil-free electricity are the greatest contributions we can make to halting biodiversity loss. At the same time, investing in these activities has an impact on the environment and natural ecosystems around us.

Our Biodiversity Transition Plan 2030 is a response to the impact we have on nature. With this plan, we support the Kunming-Montreal Framework in its efforts to halt and reverse biodiversity loss by 2030. Our efforts focus on minimising impacts and enhancing biodiversity while tackling climate change.

We are doing this through:

1. Mitigation, restoration and nature-based solutions
2. Innovation & biodiversity Research & Development
3. Accelerate partnerships and collaboration

[→ Read more in our Biodiversity Transition Plan 2030](#)
[→ Read more about our biodiversity projects](#)

One of Europe's leading energy companies

Vattenfall is one of Europe's largest producers and retailers of electricity and heat. We are wholly owned by the Swedish state and have our headquarters in Solna, Sweden.

 **7.4 million**
Electricity customers

 **1.0 million**
Electricity network customers

 **0.5 million**
Heat customers

 **2.4 million**
Gas customers

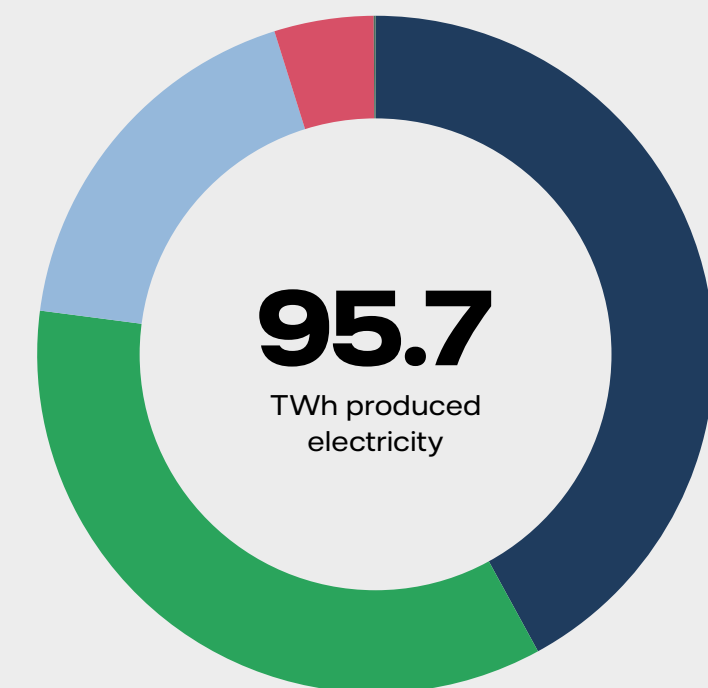
Read more about Vattenfall

→ [Annual and Sustainability Report 2025](#)

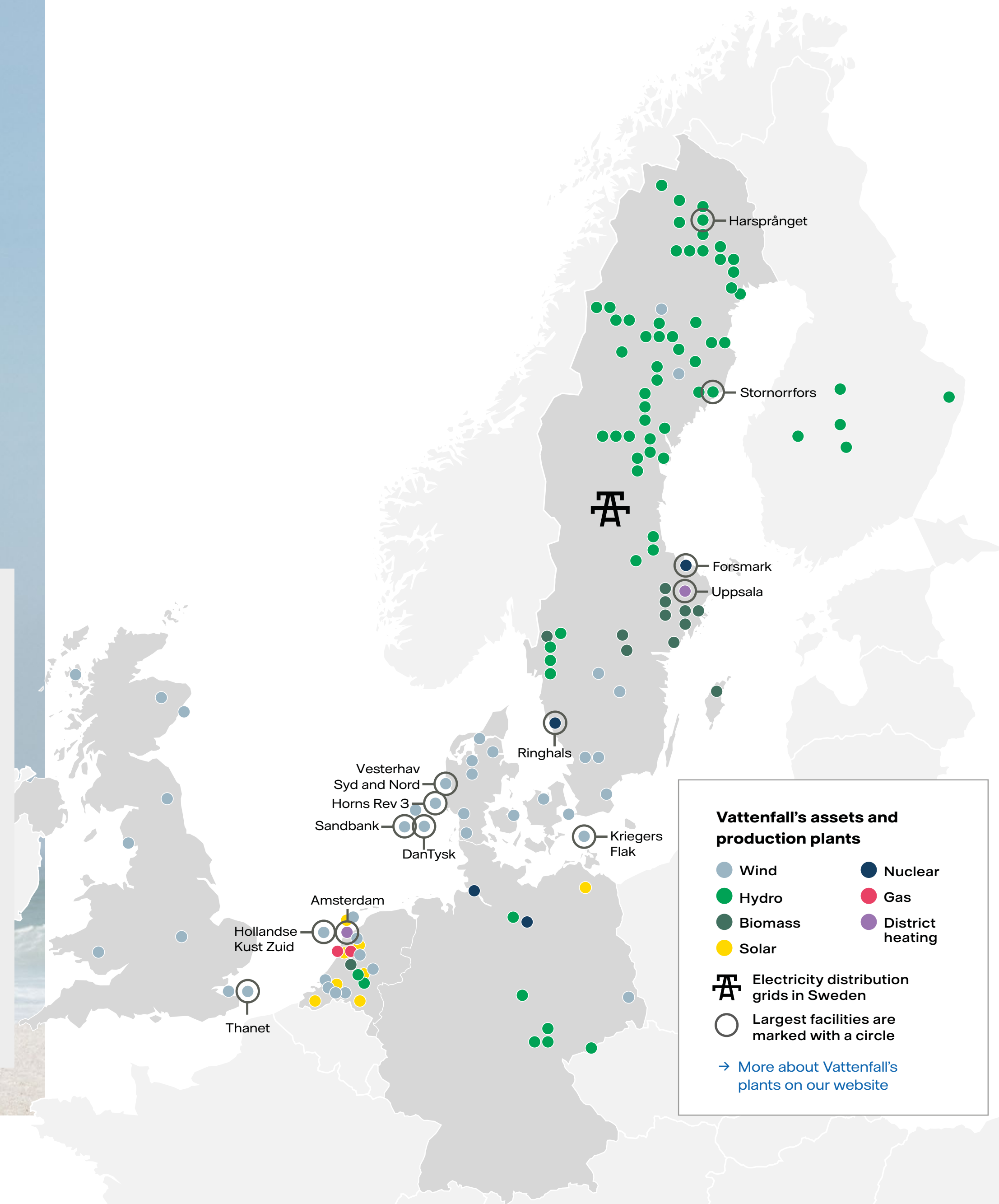
→ [Corporate Factbook March 2026](#)

Diversified electricity generation

Electricity generated by source, 2025



 Nuclear	 Hydro	 Wind	 Fossil	 Biomass
42%	35%	18%	5%	0%



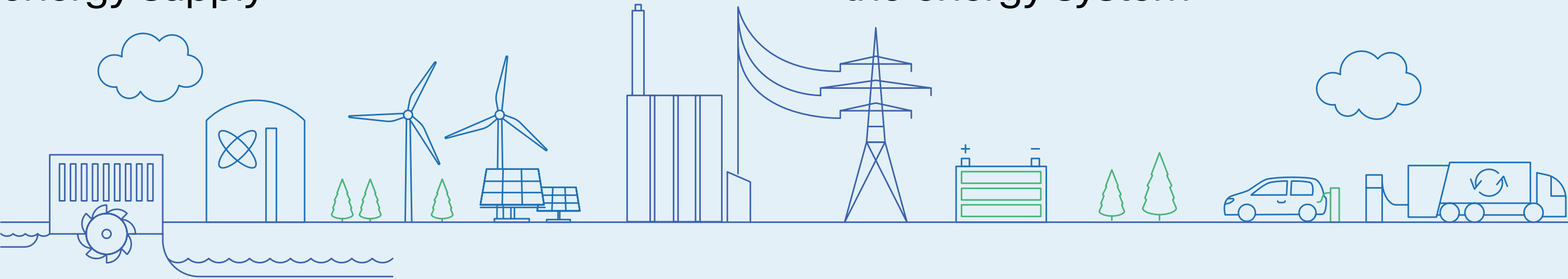
Enabling fossil freedom at scale

Our integrated utility business model – where we are active in the entire energy value chain, from production, via flexibility and distribution all the way to the end-consumer – enables us to capture business opportunities across the value chain and to spread our risks.



Generation

We secure a fossil free energy supply



Hydropower and nuclear power

We are one of Europe’s largest hydropower operators. Our hydro- and nuclear power operations provide reliable, fossil-free electricity and play a key role in balancing the power system. Pumped hydropower enables large-scale energy storage to be used in periods of high demand or low renewable generation.

Wind and solar power

We are one of Europe’s largest offshore wind operators with a strong portfolio of onshore and offshore wind and continued expansion in large-scale solar generation.

Heat from renewable sources

We generate heat from biomass and waste, enabling efficient energy use in district heating systems. In Sweden, our district heating and combined heat and power production have fully phased out fossil oil and now rely solely on biofuels and energy from recycled materials.

90% of Vattenfall’s power and heat generation is fossil free.

System

We connect and optimise the energy system

Distribution networks

We are one of Sweden’s largest grid owners and operators, with around 140,000 km of electricity grids. Building a resilient and robust grid is essential to supporting our customers’ transition to fossil-free energy and enabling the broader energy transition in society.

Flexibility solutions

We’re investing in flexibility solutions, such as battery storage, and working with our customers to expand and utilise flex capacity e.g., through time-of-use optimisation, smart charging, and vehicle-to-grid solutions. This flex capacity helps balance the grid and integrate renewables as fossil assets are being phased out.

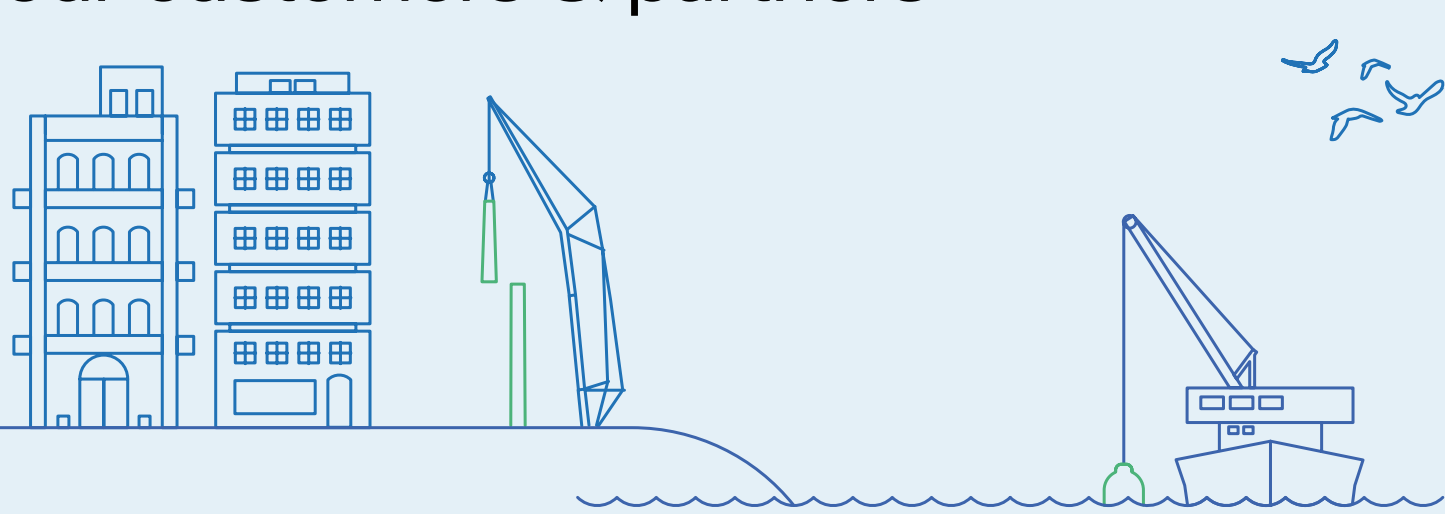
E-mobility

We operate a public EV charging network in Europe, with more than 600 MW charging capacity across Sweden, the Netherlands and Germany. Powered by 100% fossil free electricity, we scale profitably and aim to remain one of Europe’s top players in enabling electrified mobility.

1 million distribution customers in Sweden, accounting for more than half of the country’s total electricity consumption.

Customers

We drive decarbonisation with our customers & partners



Customers

Across our markets, we supply electricity to more than 7 million, gas to more than 2 million and heat to around 0.5 million customers. To decarbonise these customers, we’re investing in fossil-free electricity supply and supporting fossil gas customers’ transition to fossil-free solutions. This includes offering PPAs and technologies such as heat pumps, biomethane, and e-boilers.

[→ Read more on page 19](#)

Partners

We collaborate with suppliers, customers, and innovators to develop and scale fossil-free solutions across the value chain. Our partnerships such as HYBRIT enable the decarbonisation of materials, transport, heating, and industry through fossil-free electricity, grid connections, and electrification.

[→ Read more on page 13](#)

100% fossil-free electricity sales across Sweden, as well as to B2C customers in the Netherlands and Germany.

Transforming our business

Vattenfall has always evolved to meet society’s changing energy needs. Building on this strong foundation, we have continued to transform our business through strategic investments, divestments and the phase-out of fossil assets.

Since 2017, we have accelerated our transition through focused action to reduce emissions across our value chain. By investing in fossil-free solutions and building partnerships that enable fossil freedom, we are actively contributing to the energy transition. We have already made significant progress in reducing emissions from our own operations and electricity sales. Building on this progress, the next phase of our transition increasingly focuses on supporting customer decarbonisation and reducing emissions across the supply chain.

**We’ve made great progress
in transitioning our operations**

40% → 90%
Fossil free generation

We have increased the share of fossil free generation to over 90% from around 40% in 2017. This includes a 3x increase in wind and solar generation, and decommissioning and sales of fossil generation capacity.

2024
Full phase out of coal

In 2024, we completely phased out coal in own operations.

>80%
**EU-Taxonomy aligned
capex investments**

In the last 4 years, more than 80% of our capex investments have contributed to climate change mitigation and are EU-taxonomy¹ aligned.

1. The EU taxonomy is a classification system established to define which economic activities are environmentally sustainable

We have reduced our emissions by 56%

Our commitment is widely recognised



NZ-1 (Leading) score



#1 sustainable energy company in Sweden



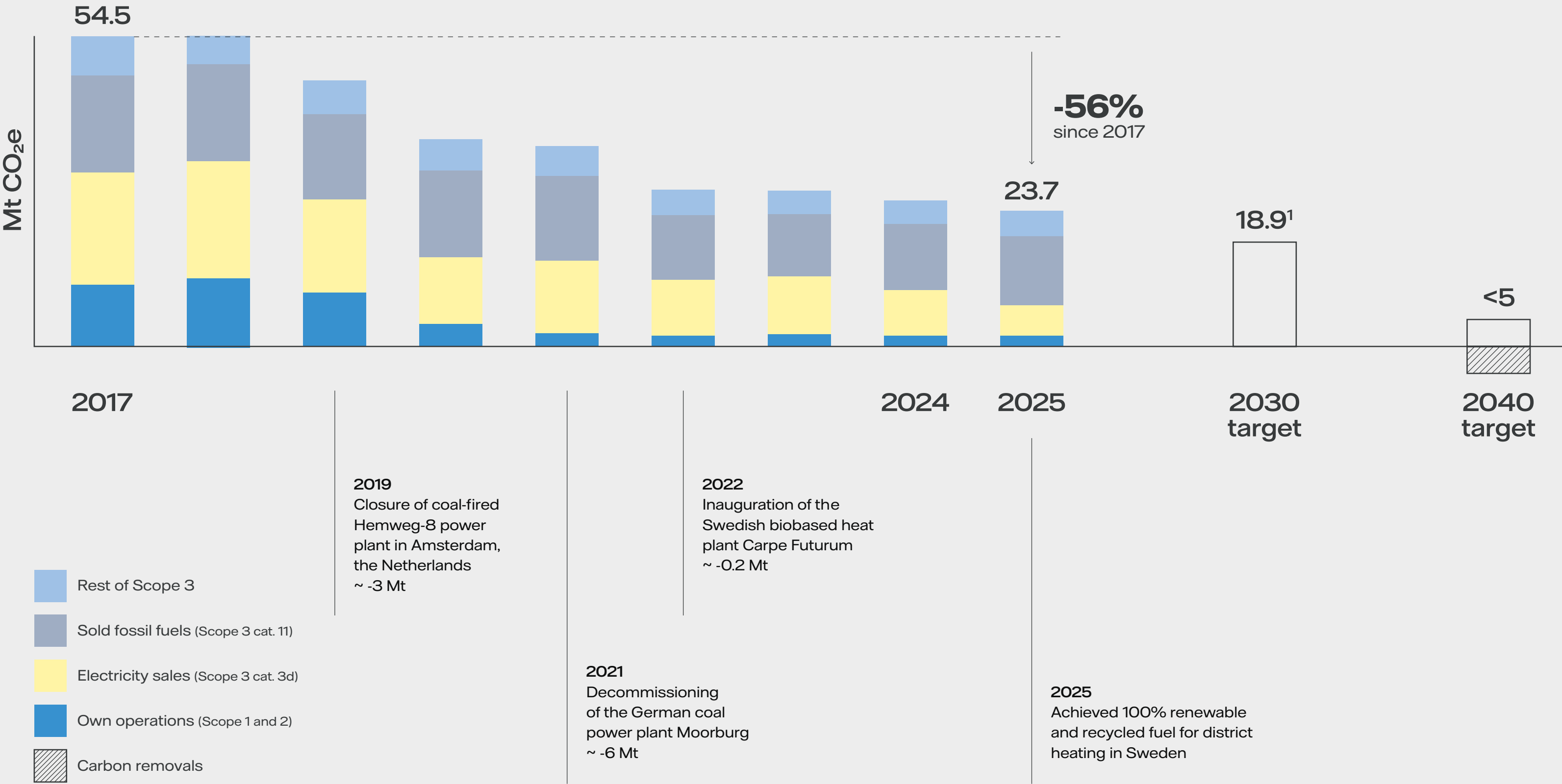
Platinum rating. 98/100 environment score



Climate A-list, highest standard for transparency, ambition and action



AAA Leader



¹ Strategic target based on near-term science based targets. Not externally verified.

We're investing heavily in the energy transition

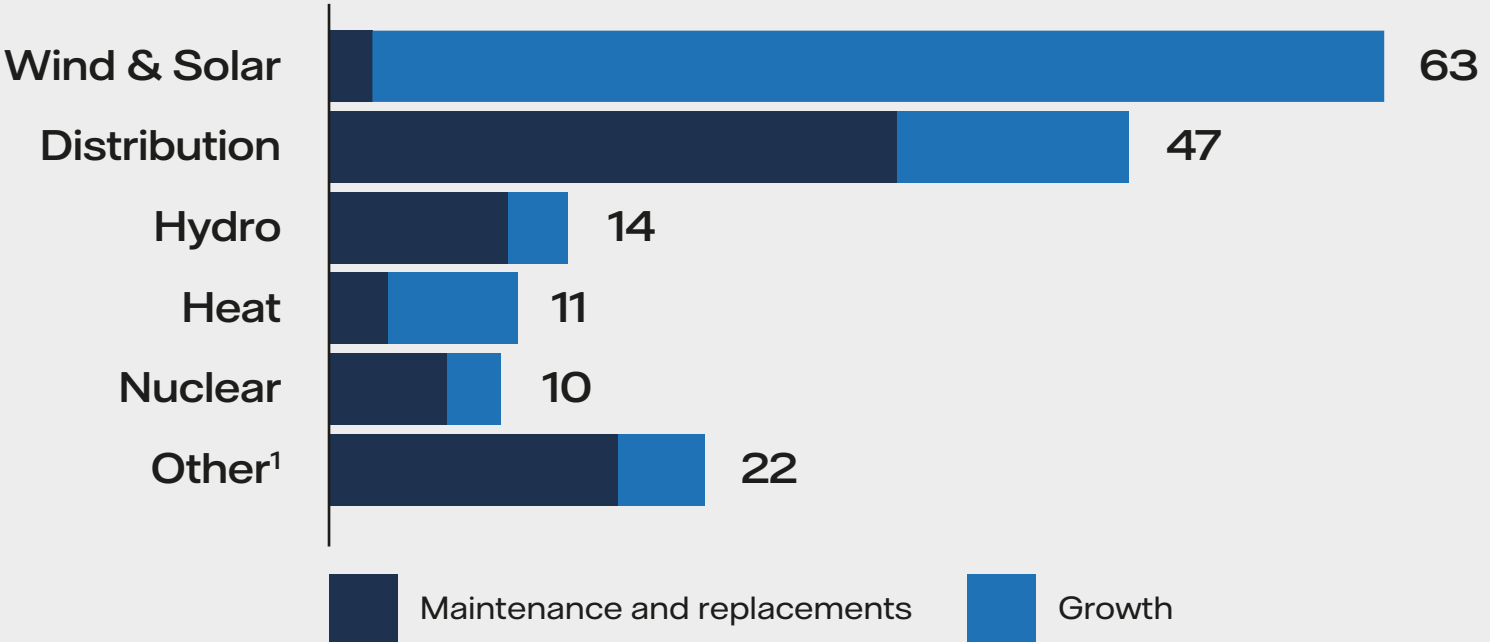
To drive the transition, we maintain, optimise, and extend the lifetime of our existing assets while investing in new assets and solutions that enable fossil freedom.

Our investment plan

165
SEK billion
net capex
2026-2030

2000+ MW

Planned fossil free and electricity build out 2026-2030, mainly in offshore wind and solar



¹Mainly E-mobility, facility and IT investments

Read more
→ [Annual and Sustainability Report 2025 \(page 21\)](#)



Harsprånget G3
630 MSEK Investment in new turbine for Harsprånget hydropower plant. Planned completion 2028.



Solar and batteries
10.9 GW of solar and battery capacity in development², including the 254 MW Brunsbüttel Battery Project in Germany.
² including capacity managed but not owned



Nordlicht I & II
Germany's largest offshore wind project with over 1.6 GW fossil free capacity. Planned completion 2028/2029, generating around 6 TWh of electricity annually, enough to power more than 1 million homes.

We multiply our impact through strategic partnerships and knowledge-sharing

Operations

Transitioning our operations requires new investments in fossil free energy capacity. Partnerships enable larger investments with less risk to accelerate the transition.



Industrikraft

Vattenfall and the industrial consortium Industrikraft are collaborating and jointly investing in the development of new nuclear power in Sweden.



Zeevonk

Vattenfall and Copenhagen Infrastructure Partners are collaborating on a pioneering energy initiative that integrates offshore wind (delivering 1 GW in 2029, followed by 1 GW in 2032), floating solar and large-scale renewable hydrogen production.

Selected examples of partnerships. This is not an exhaustive list.

Customers

Transitioning our customers requires a broad range of electrification solutions such as heat pumps and e-mobility to phase out fossil heat and transport. Partnerships enable Vattenfall to offer effective solutions for specific customer needs.



Vehicle to grid pilots

Vattenfall has carried out a large scale Vehicle to Grid (V2G) pilot in Sweden with Volkswagen and Energy Bank, and launched a pilot in the Netherlands with Kia and Hyundai. These pilots demonstrate how electric vehicles can act as flexible assets.



Connecting customers

Vattenfall has partnered with service providers of batteries, heat pumps, home insulation and more, enabling both B2C and B2B customers to easily find and implement effective decarbonisation solutions.

Supply chain

Transitioning our supply chain requires development and scaling of fossil-free solutions for fuels, products and services. Our partnerships can accelerate this development through, for example, financing, purchase commitments and pilots.



HYBRIT

Vattenfall has partnered with SSAB and LKAB to produce fossil free steel using H-DRI technology which replaces coal with fossil-free hydrogen. Once fully operational, HYBRIT could reduce emissions equivalent to 10% of Sweden's emissions per year.



First Movers Coalition

Vattenfall is a founding member of First Movers Coalition (FMC) which launched in 2021 to drive demand for emerging decarbonisation technologies. As part of FMC, Vattenfall has set ambitious decarbonisation commitments for steel, concrete and aviation fuel by 2030.

Our integrated business model makes us resilient

We are well positioned to capture opportunities

Transitioning towards a fossil free energy system creates significant growth opportunities for Vattenfall as demand for electrification increases across sectors. As an integrated energy utility, we can find and capture opportunities in the full value chain as the needs of our systems, infrastructure and customers change.

We are well positioned to handle climate risks

Vattenfall faces various risks from the changing climate and from the energy transition, including for example infrastructure damage from flooding. To handle and minimise these risks we continuously monitor, invest in and modernise our assets and revisit our business strategy. We do this based on scenario analysis, including climate scenarios for both physical and transitional risks.

Read more about our impacts, risks, opportunities and scenario analysis process

→ [Annual and Sustainability Report 2025 \(page 85-86\)](#)

Examples of how we handle climate risks



Continuous investments in the electricity grid strengthen resilience to climate change

The electricity grid is increasingly exposed to climate-related risks such as storms, heavy precipitation, flooding and heat. Vattenfall works systematically to improve resilience by modernising and weatherproofing the grid.

Actions include undergrounding overhead lines, expanding vegetation management and maintenance, improving insulation and corrosion protection, and strengthening organisational readiness to manage critical situations and maintain continuity of supply.



Hydropower is dimensioned to ensure robust and safe operations in a changing climate

Hydropower is affected by climate change through altered flow regimes driven by changes in temperature, precipitation and snowmelt.

Hydropower dams are dimensioned in line with industry dam-safety standards, taking climate scenarios into account. Vattenfall continuously invests in modernising hydropower plants with a strong focus on operational safety.

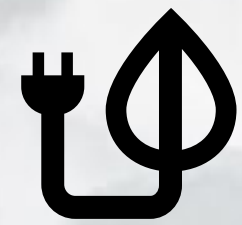
We are committed to net-zero emissions by 2040

We've made great progress in decarbonising our full value chain, especially in our own operations and electricity sales. Challenges and opportunities ahead increasingly lie in supporting customer decarbonisation and reducing emissions across the supply chain. These emission reductions are enabled by system-wide progress.



5 areas of action to decarbonise the energy system

Our climate transition plan is built on concrete actions. Together, these five areas form the foundation of our approach to decarbonise the energy system.



Investing in fossil free electricity generation and infrastructure

Fossil free electricity generation is the basis of a fossil free energy system, enabling wider electrification and decarbonisation.



Implementing low emission heat generation technologies

Low emission heat technologies such as e-boilers, waste heat and heat storage can replace fossil heat generation for district heating.



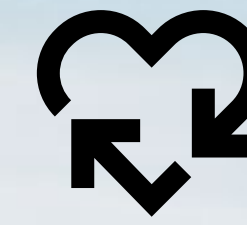
Switching to fossil free and renewable fuels

Where electrification and other decarbonisation solutions are difficult to implement or not yet developed, fossil fuels can be substituted with low emission alternatives.



Implementing alternative heat sources for customers

Emissions from fossil gas-based heating can be reduced by transitioning customers to low- and no-carbon heating sources such as electrification via heat pump or e-boiler, or transitioning to district heating.



Using circular and low emission goods, materials and services

Reducing emissions from materials requires collaboration across the value chain. We partner with suppliers and customers to scale circular and low-emission solutions.

We're taking action to decarbonise our full value chain

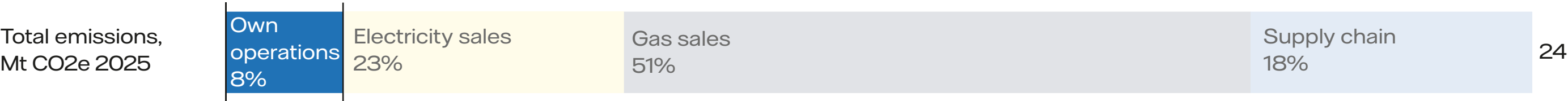
Read the full emission inventory
→ [Annual and Sustainability Report 2025](#)
(page 93)



	Own operations	Customers		Supply chain
Emission category	<div>Own operations</div> <div>Scope 1 and 2</div> <div>Direct emissions from assets Vattenfall owns or operates, such as power plants and vehicles, and indirect emissions from purchased energy that Vattenfall uses in own operations.</div>	<div>Sold electricity</div> <div>Scope 3.3d, electricity sales</div> <div>Emissions from generation of electricity that is purchased for resale to our customers.</div>	<div>Sold fossil fuels</div> <div>Scope 3.11, sold fossil fuels</div> <div>Emissions from use of sold fossil gas for heat and other uses by our customers.</div>	<div>Supply chain</div> <div>Rest of scope 3</div> <div>Emissions from the remaining value chain, such as extraction of fuels, transportation and emissions embodied in materials.</div>
Areas of action	<div><div></div><div>Investing in fossil free electricity generation and infrastructure</div></div> <div><div></div><div>Implementing low emission heat generation technologies</div></div> <div><div></div><div>Switching to fossil free and renewable fuels</div></div>	<div><div></div><div>Investing in fossil free electricity generation and infrastructure</div></div>	<div><div></div><div>Implementing alternative heat sources for customers</div></div> <div><div></div><div>Switching to fossil free and renewable fuels</div></div>	<div><div></div><div>Using circular and low emission goods, materials and services</div></div>
Total emissions CO2e 2025	<div><div>8%</div><div>23%</div></div>	<div>51%</div>	<div>18%</div>	24 Mt

Decarbonising our own operations

Scope 1 and 2



Though our own operations are already largely fossil free, with more than 90% of our heat and power generation coming from fossil-free sources, we do have fossil gas-based assets remaining in our portfolio. These assets are transitional and we are actively working to decarbonise them. Until then, they continue to support grid stability and help meet periods of peak demand.

More than 95% of the emissions from our own operations (Scope 1 and 2) come from fossil heat and energy generation. Remaining emissions include purchased energy and company vehicles. Grid losses are covered by purchases of fossil free electricity.

- [Read more about how we source biomass](#)
- [Read more about how we source nuclear fuel](#)

Key emission sources and their decarbonisation approach

Emission source	Fossil gas used in power plants 	Fossil gas in district heating 	Fossil share of emissions from waste incineration for district heating 
Emissions (2025)	1.7 Mt (scope 1 and 2)		0.2 Mt (scope 1 and 2)
Decarbonisation approach	Investing in fossil free electricity generation Switching to fossil free and renewable fuels		Implementing low emission heat generation technologies Switching to fossil free and renewable fuels Working to proactively influence the fossil content of waste

Our plan to net zero

Areas of action



Investing in fossil free electricity generation and infrastructure
Fossil free electricity generation both decarbonises the electricity mix and displaces fossil-based generation. At the same time, infrastructure such as grids and flexibility solutions are needed to enable fossil free electricity generation. Vattenfall has and will continue to make significant investments into fossil free electricity generation and supporting infrastructure.

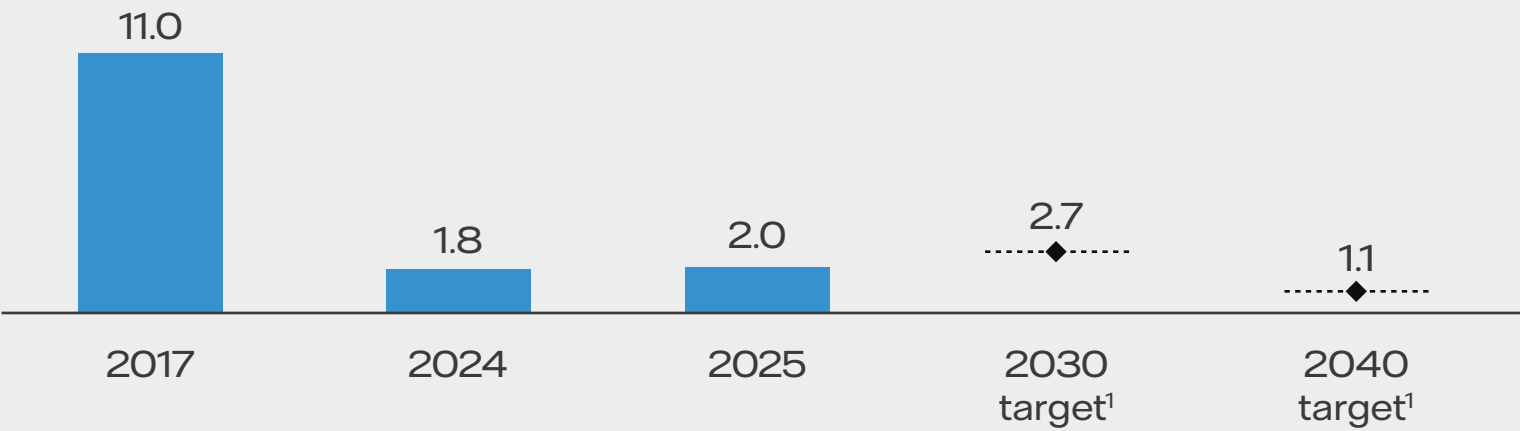


Implementing low emission heat generation technologies
Solutions such as heat storage, waste heat, and e-boilers enable reduced use of fossil fuels in our heat plants. For example, an e-boiler can replace part of the production capacity in a fossil heat plant when electricity prices are low. Vattenfall continues to innovate and invest in solutions, such as operating the second largest e-boiler in the EU (150MW Diemen e-boiler).



Switching to fossil free and renewable fuels
Fossil fuels can be replaced with fossil free or renewable fuels such as biofuels, biomethane or even hydrogen. In 2024, we completely phased out coal in own operations and in 2025 we achieved 100 percent renewable and recycled fuel for district heating in Sweden.

Targets and progress, Mt CO₂e



1. Science-based intensity target converted to resulting absolute emissions, this is thus not a formal target. The formal target is found on page 90 in our Annual and Sustainability Report 2025

Decarbonising our customers

Scope 3.3d and 3.11



We're well-positioned to support households and businesses in moving away from fossil-based energy use. Aside from providing millions of electricity, heat and gas contracts across our markets, we offer a broad portfolio of decarbonisation solutions. We're also working to advance the conditions needed to support more widespread decarbonisation for our customers.

In Sweden, our electricity sales are already fossil free, and in our continental markets we are working to expand fossil-free electricity sales and help customers shift from fossil gas to solutions such as heat pumps, district heating, e-boilers, and biomethane. We also actively support policy that helps ensure that affordable alternatives and sufficient fossil-free energy supply are available to our customers.

Emission sources and their decarbonisation approach

Emission source	Generation of electricity purchased for customer resale <div>🇸🇪 🇩🇪 🇩🇰 🇫🇮 🇳🇴 🇫🇷 🇬🇧</div>	Use of fossil gas in households and industry <div>🇸🇪 🇩🇪</div>
Emissions (2025)	5.4 Mt (scope 3.3d)	12 Mt (scope 3.11)
Decarbonisation approach	Investing in fossil free electricity generation	Implementing alternative heat sources for customers Switching to fossil free and renewable fuels

Our plan to net zero

Areas of action



Investing in fossil free electricity generation and infrastructure
Fossil free electricity generation both decarbonises the electricity mix and displaces fossil-based generation. At the same time, infrastructure such as grids and flexibility solutions are needed to enable fossil free electricity generation. Vattenfall has and will continue to make significant investments into fossil free electricity generation and supporting infrastructure.

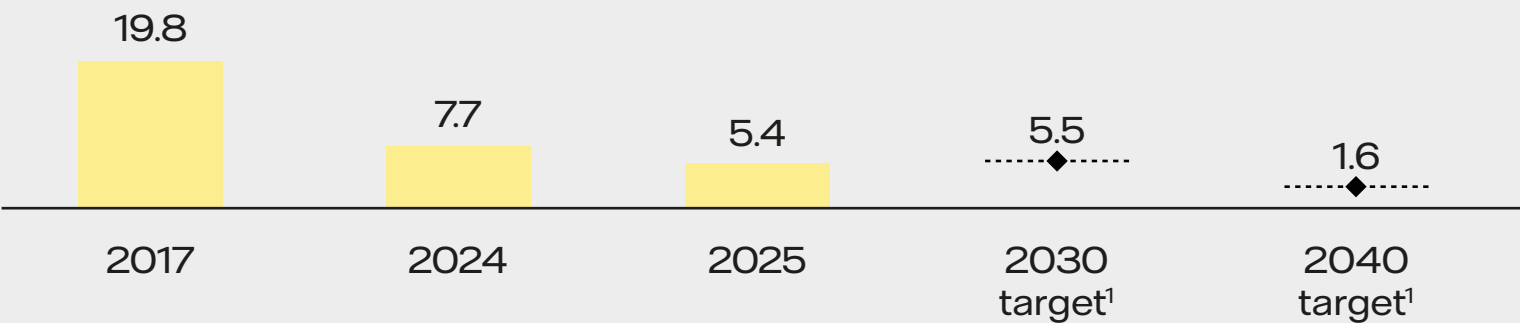


Implementing alternative heat sources for customers
Vattenfall helps customers move away from gas by offering heat pumps, district heating and other tailored heating solutions for homes and businesses.

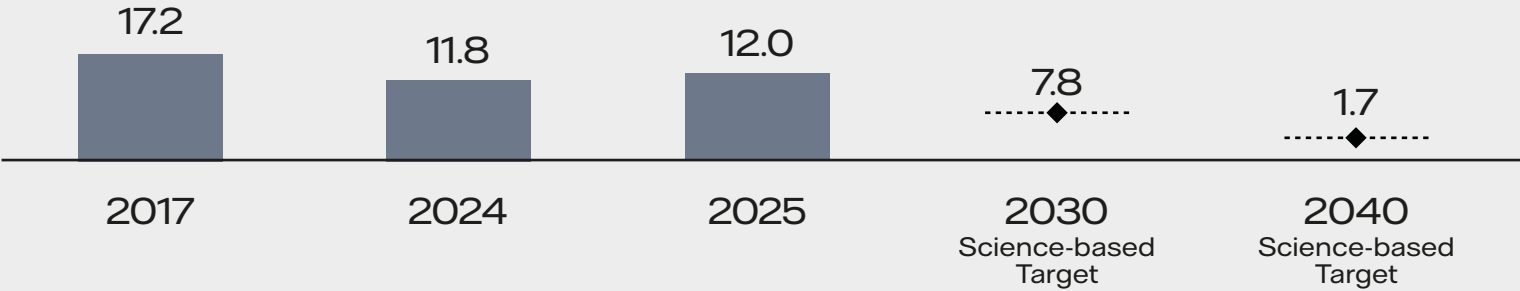


Switching to fossil free and renewable fuels
Fossil-free and renewable fuels reduce emissions where customers still rely on fuel-based solutions. Vattenfall offers lower-carbon alternatives such as biomethane to replace part of the remaining fossil gas demand for our customers.

Targets and progress, sold electricity, Mt CO2e



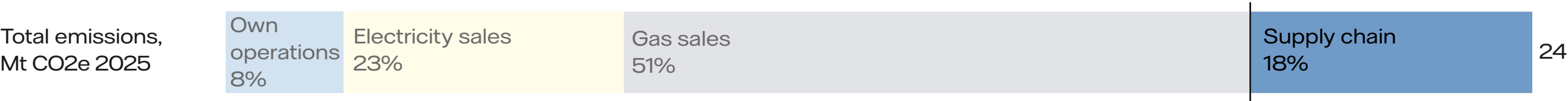
Targets and progress, sold fossil fuels, Mt CO2e



1. Science-based intensity target converted to resulting absolute emissions, this is thus not a formal target. The formal target is found on page 90 of our annual report

Decarbonising our supply chain

Rest of scope 3 emissions



Decarbonising our supply chain is essential to deliver on our commitment to net zero.

As we continue to expand our generation of fossil free electricity, emissions embedded within our supply chain are expected to increase. Embedded emissions are those that arise from goods, materials and services that we purchase.

Other emissions in this category include upstream emissions from fuel processing and minor emissions from sources like business travel and waste management. Upstream emissions from fuel processing are significant but are expected to be reduced mainly by phasing out our own and our customers’ use of fossil fuels.

Emission sources and their decarbonisation approach

Emission source	Use of resources driving emissions in supply chain	Upstream emissions from own and customer fuel use	Other emissions – minor emission categories
Emissions (2025)	1 Mt (scope 3.1 and 3.2)	3.2 Mt	~0.1 Mt
Decarbonisation approach	Using circular and low emission goods, materials and services	Reducing emissions in own operations and customers is expected to be the main driver for emission reductions. We also continue to work with suppliers to explore low-carbon options	Initiatives include: <ul style="list-style-type: none">Office energy savings and waste reductionClimate certification of officesReduced flight travel emissionsTransition to electric company cars

Our plan to net zero

Areas of action



Using circular and low emission goods, materials and services

Replacing conventional materials and services with lower-emission alternatives reduces supply chain emissions. Vattenfall is increasing climate requirements in procurement, working with suppliers and partners to scale lower-emission alternatives, and driving circularity measures such as reduced material use and greater use of recycled and lower-emission inputs.

Supply chain decarbonisation commitments until 2030

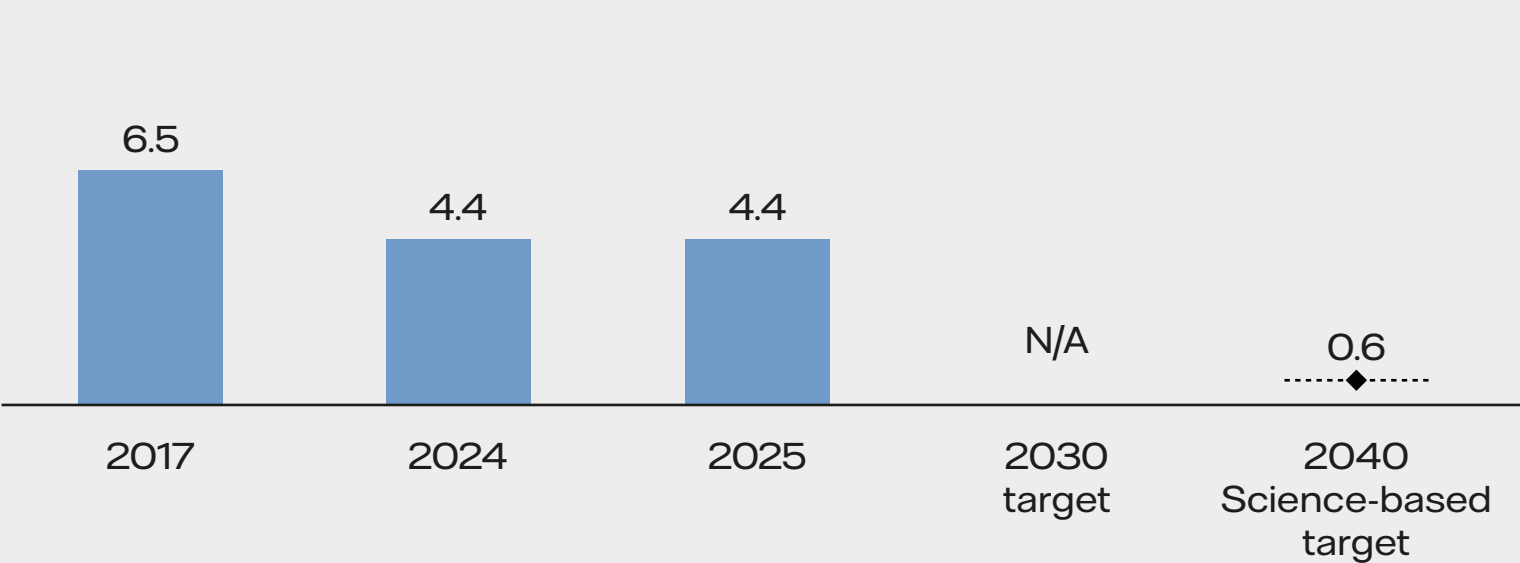


Steel: 10% of annual procured steel is near-zero emission
Aviation fuel: replace at least 5% of conventional aviation fuel with sustainable aviation fuel
Concrete: 10% of procured concrete is near-zero emission



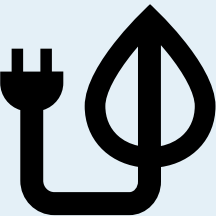
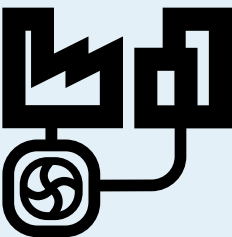
We have committed to using 50% low emission steel by 2030 and 100% by 2040 in our wind business.

Targets and progress, supply chain, Mt CO2e



5 areas of action

to decarbonise the energy system (1/3)

	Decarbonisation impact		Decarbonisation approach	Examples of actions taken	Examples of actions planned
	Direct	Indirect			
<div>Investing in fossil free electricity generation and infrastructure</div> <div></div>	Own operations Sold electricity	Supply chain Sold fossil fuels	We are: <ul style="list-style-type: none">Investing in new fossil free generation, flexibility and grid capacityOptimising, maintaining and extending the lifetime of our existing assetsStrengthening our fossil free electricity customer offering through, for example, PPAs	<ul style="list-style-type: none">More than 20.6 GW installed fossil free electricity generation capacity (2025)Connected more than 250 MW wind and solar power to the grid in 2025 from over 4,000 installations100% fossil free electricity sales in Sweden100% fossil free electricity sales B2C in the Netherlands and GermanyIncreased fossil free electricity sales from 80% to 85% 2024-2025Signed corporate PPAs to decarbonise industry customers such as LyondellBassel, Salzgitter and Evonik through fossil free electricity	<ul style="list-style-type: none">Deliver our investment plan for 2025-2029, with SEK 165 billion in planned net investments and 61% dedicated to growth investmentsBuild out major offshore wind, onshore wind and large-scale solar capacity, including Nordlicht I (980 MW), Nordlicht II (630 MW) and additional onshore wind and solar capacityIncrease hydropower capacity and flexibility, including through the Harsprånget G3 (102 MW) project.Extend lifetime of Forsmark and Ringhals nuclear assets by up to 20 yearsContinue progressing new nuclear at Ringhals as part of securing long-term fossil-free power supply
<div>Implementing low emission heat generation technologies</div> <div></div>	Own operations	Supply chain Sold fossil fuels	We are: <ul style="list-style-type: none">Increasing the use of third-party heat from, for example waste treatment facilities and data centresReplacing fossil heat generation with geothermal and aquathermal heatExploring innovative solutions for heat generation, such as e-boilers, heat pumps and heat storage	<ul style="list-style-type: none">Achieved 100% renewable and recycled fuel for district heating in Sweden since 2025Commissioned the second largest e-boiler in the EU and accompanying thermal heat storage (150MW Diemen e-boiler)	<ul style="list-style-type: none">Connect residual heat from data centres to heat networks in Amsterdam (Westpoort Warmte project)Explore utilisation of geothermal heat in our Dutch heat networksExplore potential utilisation of wastewater heat recovery in the Dutch heat network

5 areas of action

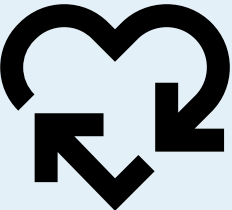
to decarbonise the energy system (2/3)

	Decarbonisation impact		Decarbonisation approach	Examples of actions taken	Examples of actions planned
	Direct	Indirect			
<div><div><div>Switching to fossil free and renewable fuels</div><div></div></div></div> <div></div>	Own operations Sold fossil fuels	Supply chain	We are: <ul style="list-style-type: none">Replacing fossil fuels with biofuelsOffering biomethane blend-in tariffs to our gas customersInvestigating the use of hydrogen in our power plants	<ul style="list-style-type: none">Achieved 100% phase out of coal in own operations since 2024Commissioned biofuel powered expansion of combined heat and power plant Lignum in SwedenStarted offering biomethane contracts in The Netherlands and GermanyProcured 100% certified biofuels and biomethane through RED III	<ul style="list-style-type: none">Achieve Fossil free Swedens challenges: 100% fossil-free domestic transports, electrify own vehicle fleet and install solar panels¹ by 2030100% of NL B2C gas sales to be biomethane based in 2040
<div><div><div>Implementing alternative heat sources for customers</div><div></div></div></div> <div></div>	Sold fossil fuels	Supply chain	We are: <ul style="list-style-type: none">Offering tailored and effective low-carbon heat solutions to our customersOffering advisory and financing services for low-carbon heat solutions	<ul style="list-style-type: none">Built a portfolio of energy solutions, including heat pumps, wall boxes and solar panels for our customersStarted to offer consulting and financing services for low-carbon energy solutionsBuilt an energy system installation network in Germany to support customers in installing low-carbon solutions such as heat pumpsStarted offering hybrid and drop-in heat pump solutions to accelerate customer electrification	<ul style="list-style-type: none">Expand alternatives to natural gas for households and SMEs, including (hybrid) heat pumps, district heating and biomethaneScale heat pump solutions for existing homes to support the switch away from gasOffer business customers alternatives to gas-based heating and production, including e-boilers, for example

1. Fossilfritt Sverige

5 areas of action

to decarbonise the energy system (3/3)

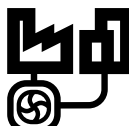
	Decarbonisation impact		Decarbonisation approach	Examples of actions taken	Examples of actions planned
	Direct	Indirect			
<div>Using circular and low emission goods, materials and services</div> <div></div>	Supply chain		<div>We are:</div> <ul style="list-style-type: none">Partnering with suppliers to develop and scale fossil-free and circular goods and materialsCreating demand through procurement commitments and contractsIntegrating circularity requirements and life-cycle data into design, sourcing and procurement decisions	<ul style="list-style-type: none">Entered partnerships and offtake agreements for near-zero cement and fossil free steel (Cemvision and HYBRIT)Used low-emission materials in our projects such as low-emission steel for our Juliusburg/Krukow solar park, offshore wind farm Nordlicht I and onshore wind farm Clash IISigned an agreement for delivery of the world's first fossil-free steel hydropower dam gateImplemented internal steering on emission reduction for large projects	<ul style="list-style-type: none">Deliver on our First Movers Coalition commitment that at least 10% of procured cement and concrete procured will be near-zero carbon by 2030Achieve 100% circular outflow of permanent magnets from decommissioned wind farms from 2030Achieve 100% circular outflow of composite materials from wind turbines by 2030



See more actions
→ [Annual and Sustainability Report 2025 \(page 93-94\)](#)

We’re supporting system-wide progress

The energy transition is a societal transformation that requires collaboration between businesses, government and people to succeed. At Vattenfall, we’re working actively to both drive the transition through our own operations and value chain, and contribute to enabling more system-wide progress and facilitate the engagement of other stakeholders.

Pace of action is dependent on system-wide progress		
	Investing in fossil free electricity generation and infrastructure	Further investments in fossil free electricity generation require a stable and beneficial policy environment that enables long term investment planning. This includes efficient processes for environmental permits and grid connections, as well as solutions to connect and optimise the energy system.
	Implementing low emission heat generation technologies	To accelerate the adoption rate, low emission solutions need to be more financially attractive and competitive. This requires a favourable policy environment and robust carbon pricing. Increased generation of fossil free electricity also enables solutions such as e-boilers and heat storage that balance the grid when there is an oversupply of electricity.
	Switching to fossil free and renewable fuels	Switching to fossil free and renewable fuels requires availability, demand, cost competitiveness and quality. Clear political incentives and robust carbon prices make investments in biofuels and renewable hydrogen production more attractive. As biofuel demand already exceeds supply in Europe, it’s critical that biofuels are responsibly sourced and produced.
	Implementing alternative heat sources for customers	Clear political incentives and financial support are necessary to make alternative heat sources an affordable option. This is especially true for B2C customers who may need to insulate their home before replacing a gas boiler with an electric heat pump. Customers need to be able to feel more confident about investments in alternative heat sources.
	Using circular and low emission goods, materials and services	Integrating low emission and circular goods, materials, and services can challenge project timelines and business cases. Several potential solutions, such as H-DRI steel, are not always commercially available or sufficiently cost competitive. Driving demand for low-emission solutions in tier 1+ suppliers can be challenging and requires concerted effort, partnerships and transparency.

What needs to happen

- High climate ambition in our markets and the EU
- Policy that enables electrification and robust carbon pricing
- Clear political incentives and financial support for industries and households to transition
- Customer demand for fossil free energy
- Availability and cost competitiveness of low emission fuels, materials, products and services

How we are supporting progress

- We advocate for policy and market frameworks that accelerate electrification and investment in fossil free energy [→ Read more on page 25](#)
- We invest in fossil-free generation, grids and flexibility solutions to help scale the system
- We support customers with practical decarbonisation and transition solutions
- We work with suppliers and partners to develop and scale lower-emission materials, fuels and technologies

We’re advocating for policies that enable fossil freedom

The transition won’t happen fast enough without the right policy framework. So we’re actively working to shape the conditions needed to accelerate electrification, unlock investment and phase out fossil fuels. We help shape the conditions for a fair, competitive, and sustainable energy transition through dialogue with policymakers, collaboration with industry partners, and by listening to the evolving needs and expectations of our customers.

We promote policies that:

	Accelerate and removes barriers for electrification	Creating a beneficial policy landscape for electrification is key to the transition. This includes investment conditions, permitting processes, taxation and tariff structures and more.
	Create robust carbon pricing	Strong carbon price signals from a robust and predictable EU ETS is central to creating long-term investment confidence and demand for low-emission solutions. This also includes extension of carbon pricing to more sectors through ETS2.
	Support timely and consistent implementation of agreed EU climate and energy legislation	Timely and consistent implementation of legislation creates a reliable common policy environment, creating more beneficial conditions for long-term investments and innovation.

Further details on Vattenfall’s views on energy and climate policy
→ [Vattenfall position papers](#)



Our environmental governance

Environmental topics are integrated into how Vattenfall is governed, managed and followed up across the business as a core part of both the management system and key business processes.

Environmental policy and management system

Vattenfall's environmental topics are primarily governed by the Group Environmental Policy and Environmental Management System (EMS). Vattenfall's Environmental Policy sets the direction for environmental management across the Group. Combined with the EMS, it covers Vattenfall's own operations as well as relevant parts of the upstream and downstream value chain and focuses on all environmental aspects. In addition, Vattenfall's Environmental Action Plan drives deliverables in three key focus areas: climate change, biodiversity and circularity.

Environment in core business processes

Environmental governance is embedded in Vattenfall's Corporate Management System and connected to core business processes. This includes strategy and business planning, risk management, project and operational processes, and follow-up of environmental targets. Environmental risks are managed through Enterprise Risk Management, while related opportunities are considered in the annual strategy and business planning process. For the upstream value chain, additional requirements are set through the Code of Conduct for Suppliers and Partners.

Accountability

The Board of Directors approves the Environmental Policy, while the CEO together with Executive Group Management has overall accountability for environmental performance. Legal accountability follows the organisational structure, and implementation happens across business areas and local operations.

Follow-up and assurance

Implementation is supported by annual environmental management reviews across the business, where adherence to the Environmental Policy, management system and environmental targets is assessed. At year-end 2025, nearly 100 per cent of Vattenfall's production and distribution portfolio was covered by an environmental management system certified according to ISO 14001. These certifications are subject to annual third-party audits and recertification every third year.

Climate offsetting

Offsets and removals are governed by a group wide instruction. All offsets need to follow selected external certification frameworks. Offsets are not used to claim climate neutral products, counted towards climate targets, nor to replace the need for emission reductions.

Remuneration

Vattenfall's remuneration framework is designed to support the company's long-term interests, including sustainability. Vattenfall's total GHG emissions (Scope 1, 2, and 3) are part of Vattenfall's variable pay programme, where sustainability related metrics account for at least 15 percent of the proportion for variable remuneration. For senior executives, remuneration is fixed, moderate in character and does not include variable remuneration¹.

Read more:
[→ Annual and Sustainability Report 2025 \(page 83-87\)](#)

1. Ownership requirement



