

# Vattenfall FY and Q4 Results 2024

6 February 2025



VATTENFALL

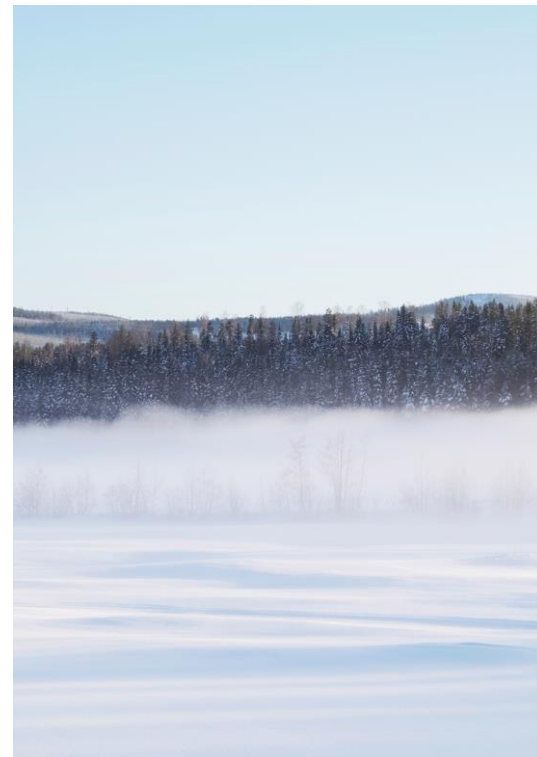
# Vattenfall FY Results 2024

## In brief

- The sale of the heat business in Germany to the State of Berlin was completed
- Vattenfall sold the Norfolk Offshore Wind Zone in the UK
- Strengthened partnership with BASF through sale of 49% of the German offshore wind farms Nordlicht I and II
- Directional decision to extend the operating time of the nuclear power plants Forsmark and Ringhals reactors from 60 to 80 years
- Vattenfall took steps to enable new nuclear at Ringhals including evaluating suppliers and investigating conditions for construction
- Vattenfall and Copenhagen Infrastructure Partners won the tender of the IJmuiden Ver Beta (Zeevonk) offshore wind farm in the Netherlands

- Underlying EBIT decreased by SEK 0.2 bn to SEK 19.8 bn:
  - Higher achieved electricity prices in the Nordics despite lower spot prices, mainly due to price hedging
  - Increased generation from wind power
  - Higher nuclear provisions following updated cost estimates had an offsetting effect

- Profit for the period increased to SEK 33.4 bn from SEK 10.4 bn. Capital gains from the sale of 49% of the Nordlicht I and II offshore wind projects and the sale of the Norfolk Offshore Wind Zone had a positive impact in combination with positive changes in market value of energy derivatives
- The Board of Directors proposes a dividend of SEK 7.0 bn



# Vattenfall FY Results 2024

## Overview

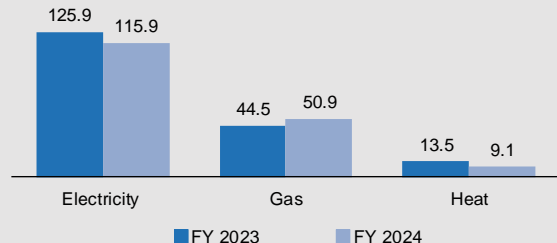
### Result development

SEK BN	FY 2024	FY 2023	Δ
Net Sales	245.6	290.2	-15%
EBITDA	60.8	39.7	53%
Underlying operating profit (EBIT)	19.8	20.0	-1%
EBIT	38.9	17.0	129%
Profit for the period	33.4	10.4	221%

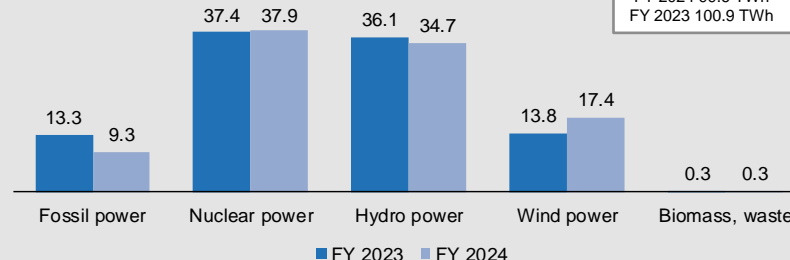
### Financial targets

	FY 2024	FY 2023
Return on capital employed (≥8%)	12.4%	5.3%
FFO/adjusted net debt (22-27%)	49.2%	21.5%

### Customer sales (TWh)



### Electricity production (TWh)



# Strategic targets 2025

Strategic focus area	Strategic targets to 2025	Actual 2024	Actual 2023	Progress FY 2024	Comments
Driving decarbonisation with our customers & partners	Customer engagement, absolute Net Promoter Score (NPS) <sup>1</sup> : <b>+18</b>	+15	+11		Increase in NPS mainly as a result of improvements in the Dutch customer business following lower prices
Securing a fossil-free energy supply	CO <sub>2</sub> Emissions Intensity <sup>2</sup> : <b>≤86 gCO<sub>2</sub>e/kWh</b>	50	69		Improvement due to lower fossil-based generation, mainly due to divestment of the heat business in Berlin
Empowering our people	Lost Time Injury Frequency (LTIF) <sup>3</sup> : <b>≤1.0</b>	1.3	1.5		Above target levels. Further actions required to enhance safety
	Employee Engagement Index <sup>4</sup> : <b>≥75%</b>	82 <sup>3</sup>	80 <sup>3</sup>		Outcome above target level after continued improved performance with more engaged employees
Delivering high-performing operations	Funds from operations (FFO) /Adjusted Net Debt <sup>5</sup> : <b>22-27%</b>	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
	ROCE <sup>6</sup> : <b>≥8%</b>	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

<sup>1</sup> Reported on an annual basis

<sup>2</sup> Consolidated value including the heat business in Berlin until the sale on the 2nd of May 2024. Includes CO<sub>2</sub> and other greenhouse gases such as N<sub>2</sub>O and SF<sub>6</sub>, 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

<sup>3</sup> Rolling 12-month values. LTIF (Lost Time Injury Frequency) is expressed in terms of the number of lost time work injuries per 1 million hours worked. The metric pertains only to Vattenfall employees

<sup>4</sup> Documentation for measurement of target achievement is derived from the results of an employee survey, which is conducted on an annual basis

<sup>5</sup> Rolling 12-month values

<sup>6</sup> Rolling 12-month values. The Return on capital employed based on underlying operating profit amounted to 6.3%

# Customers & Solutions

Further steps towards decarbonisation

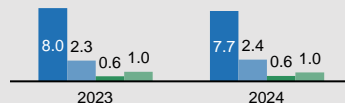
## Highlights

SEK million	FY 2024	FY 2023
Net Sales	188,992	235,201
Underlying operating profit	6,581	9,203

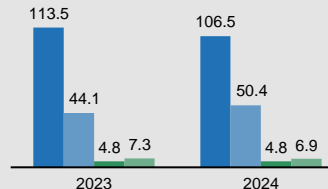
- Net sales decreased by 20% compared to 2023. Underlying operating profit decreased by 28%, driven partly by increased regulatory costs in the German customer business and partly by lower gas prices impacting the heat business
- The customer base decreased by 2% to 12 million contracts compared to year-end 2023
- Vattenfall plans to develop the heat network in Diemen, the Netherlands, focusing on heat sources with lower carbon dioxide emissions
- Acquisition of the heating installation company Geosolar Group in Germany is contributing to Vattenfall's future product offering in the country
- New supply agreements signed with business customers in the Nordics

## Key data<sup>1</sup>

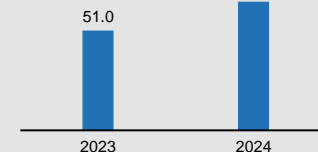
Retail sales development



Sales and production



Charging points for electric vehicles (thousand)



<sup>1</sup> Excluding the divested heat business in Berlin

<sup>2</sup> Other includes the subsidiary Feenstra that offers energy solutions in the Netherlands



# Power Generation

Positive earnings development driven by higher achieved prices in the Nordics

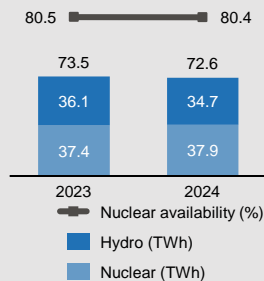
## Highlights

SEK million	FY 2024	FY 2023
Net Sales	169,887	207,510
Underlying operating profit	4,035	3,075

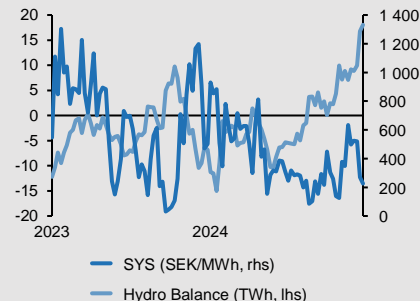
- Net sales decreased by 18% compared to 2023. The underlying operating profit increased, mainly as a result of a higher achieved electricity price in the Nordics. In addition, a higher realised trading result had a contributing effect. This was partly offset by an increase in estimated costs for dismantling 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)
- Vattenfall is investing SEK 700 million in the hydro power plant Harsprånget
- All permits are now in place to begin construction of the final repository for spent nuclear fuel
- Vattenfall is working at a high pace to enable new nuclear power at Ringhals

## Key data

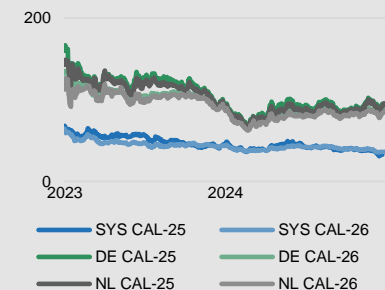
Production and availability



Nordic hydro balance and system price



Electricity futures prices (EUR/MWh)



# Wind

Increased electricity production and continued advancements of new projects

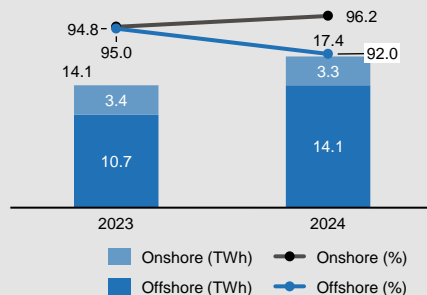
## Highlights

SEK million	FY 2024	FY 2023
Net Sales	21,585	25,373
Underlying operating profit	5,884	6,544

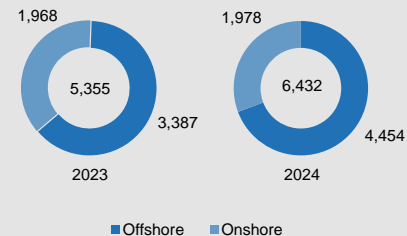
- Net sales decreased by 15% compared to 2023. Underlying operating profit decreased by 10% driven by lower electricity prices, higher costs and depreciation, mainly due to new assets. This was partly counteracted by higher volumes, higher subsidies for German offshore wind farms and some availability warranty payments
- Electricity generation increased by 23% driven by Hollandse Kust Zuid and Vesterhav Offshore wind farms
- Permits received for the offshore wind farm Nordlicht I and the onshore wind farm Eemshaven-West
- Swedish government approved the 1.4 GW Poseidon offshore wind farm
- Investment decision made to construct the Hoofddorp A5 solar power park in Haarlemmermeer in the Netherlands

## Key data

Production<sup>2</sup> and availability



Total installed wind capacity (MW)<sup>1</sup>



# Distribution

Continued investments in the electricity grid and electricity meter replacement project soon completed

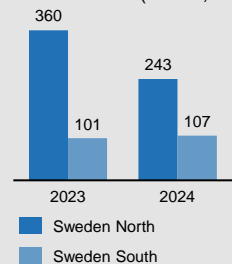
## Highlights

SEK million	FY 2024	FY 2023
Net Sales	13,851	11,139
Underlying operating profit	2,599	1,526

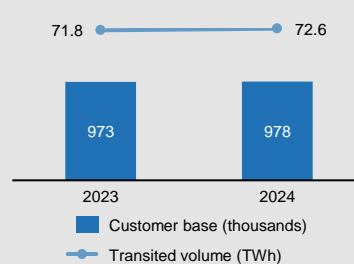
- Net sales increased by 24% compared to 2023. The underlying operating profit increased by 70% primarily due to higher revenues. The comparison is to a great extent affected by the temporary reduction of the electricity grid tariff during the second half of 2023
- Vattenfall is continuing to invest in the electricity grid in a high pace
- Announcement of increase of the electricity grid tariff for customers connected to the local grid, starting from 1 January 2025
- A new smart electricity meter has been installed for over 900,000 customers

## Key data

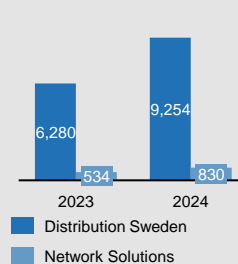
Service level (SAIDI, min)<sup>1</sup>



Customers and volumes



Investments in electricity grids (SEK mn)



<sup>1</sup> All outages longer than 1 second in medium and low voltage networks are included. Vattenfall's Swedish network covers both urban areas and large rural areas.



# Financials



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# Vattenfall FY Results 2024

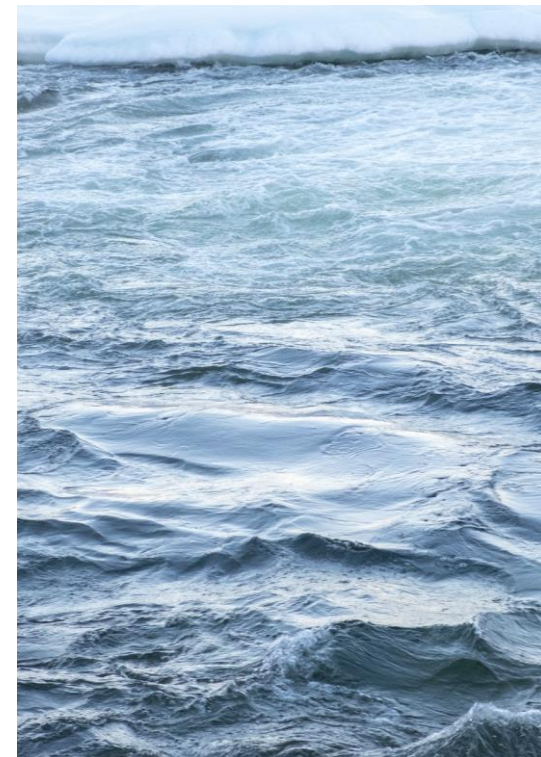
## Financial highlights

### Key data

SEK bn	FY 2024	FY 2023
Net Sales	245.6	290.2
EBITDA	60.8	39.7
Underlying operating profit (EBIT)	19.8	20.0
EBIT	38.9	17.0
Profit for the period	33.4	10.4
Funds from Operations (FFO)	35.5	30.1
Cash flow operating activities	61.9	-24.6
Net debt	-2.8	68.4
Adjusted net debt	72.1	139.5
Adjusted net debt/EBITDA (times)	1.2	3.5
<b>Financial targets</b>		
ROCE (≥8%)	12.4	5.3
FFO/adjusted net debt (22-27%)	49.2	21.5

### Key developments

- Net sales decreased by SEK 44.6 bn to SEK 245.6 bn due to negative price effects for sales of electricity and gas as well as the divestment of the heat operations in Berlin. This was partly offset by higher gas sales to customers
- Underlying EBIT was relatively unchanged and decreased by SEK 0.2 bn in total. Higher achieved electricity prices in the Nordics and increased wind power production had positive effects. Increased nuclear provisions due to higher estimated costs for dismantling nuclear power plants and handling of spent radioactive fuel and nuclear waste had an offsetting impact
- Profit for the period increased to SEK 33.4 bn and was impacted by positive changes in fair value of energy derivatives and capital gains from divestment of offshore wind power projects
- ROCE increased to 12.4% mainly due to positive changes in market value of energy derivatives and divestment of offshore wind power projects
- FFO/Adjusted net debt increased to 49.2% as a result of higher FFO and lower adjusted net debt. The adjusted net debt decreased mainly as a result of net received margin calls, the divestment of the heat operations in Berlin and the sale of offshore wind power projects

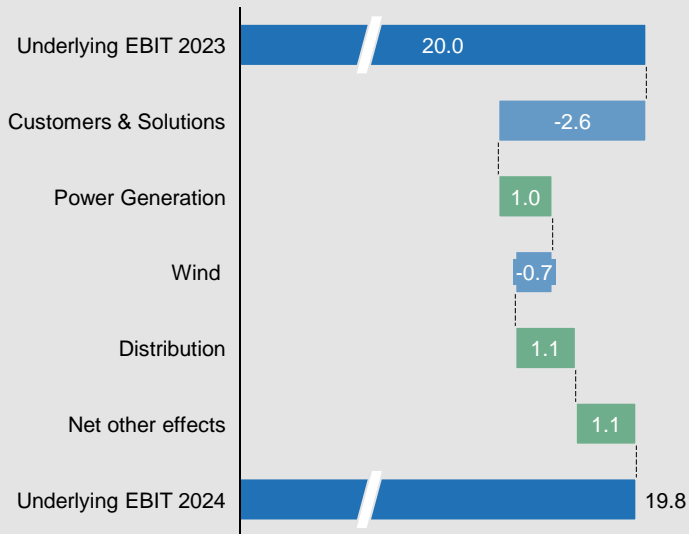


# Development of underlying EBIT FY 2024

Decrease from C&S and Wind partly offset by higher earnings in Power Generation and Distribution

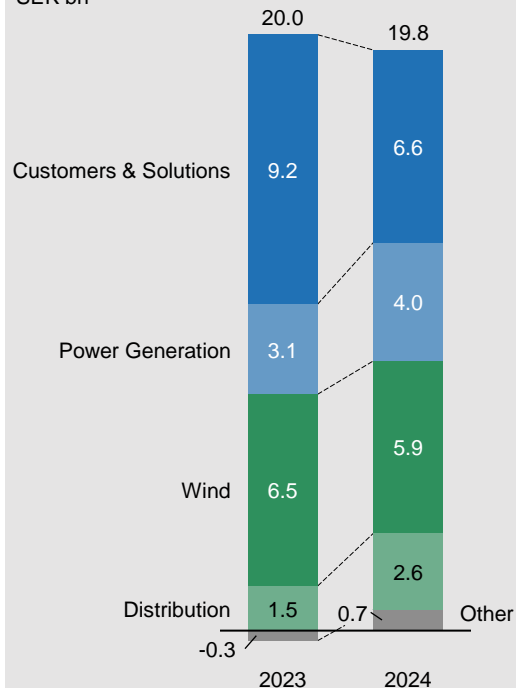
## Change in FY 2024 vs. FY 2023

SEK bn



## Breakdown per operating segment

SEK bn

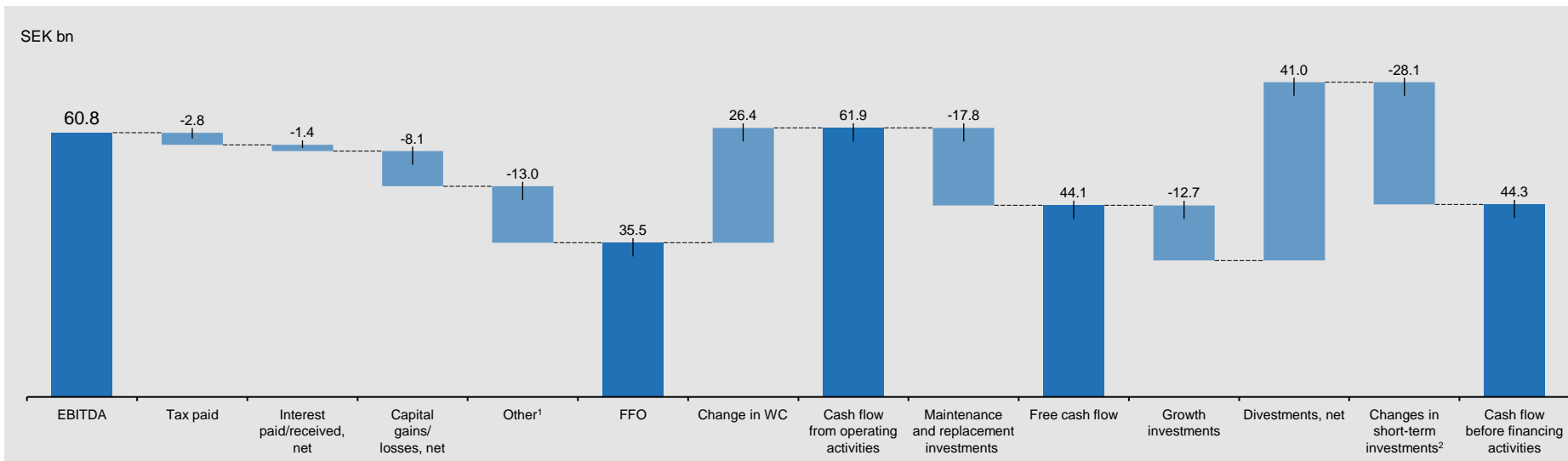


## Highlights

- Customers & Solutions: decrease partly driven by increased regulatory costs in the German customer business, and partly by lower gas prices impacting the heat business
- Power Generation: positive effect mainly 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
- Wind: lower electricity prices, higher costs and depreciation mainly due to new assets
- Distribution: 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

# Cash flow development FY 2024

Negative working capital development mainly related to changes in margin calls



## Main effects

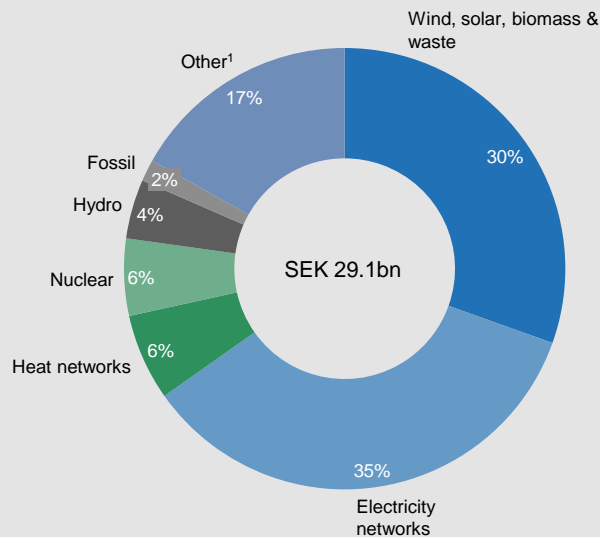
- Change in working capital is mainly driven by net changes in margin calls (SEK +31.2 bn) and lower working capital in operating segment Customers & Solutions (SEK +6.9 bn). This was partially offset by higher working capital in the heat operations in Berlin before the divestment (SEK -10.8 bn) and in operating segment Power Generation (SEK -3.6 bn)
- Divestments include heat operations in Berlin, Norfolk Offshore Wind Zone and 49% of the offshore wind power projects Nordlicht I & II in Germany
- Changes in short-term investments are related to purchases of short-term papers in order to offset the positive impact from the net change in margin calls received

<sup>1</sup> "Other" includes non-cash items included in EBITDA, mainly changes in fair value of commodity derivatives

# Capital expenditures

Majority of investments directed to renewables and electricity networks

Investments per category, FY 2024



Detailed overview of investments, FY & Q4 2024

SEK bn	FY 2024	FY 2023	Δ	Q4 2024	Q4 2023	Δ
Hydro	1.3	0.9	43%	0.5	0.3	46%
Nuclear	1.6	1.7	-6%	0.5	0.5	-3%
Fossil	0.5	1.2	-63%	0.1	0.6	-84%
Wind, solar, biomass & waste	8.9	19.8	-55%	3.3	4.4	-25%
Electricity networks	10.1	6.9	47%	3.7	2.7	37%
Heat networks	1.8	1.7	9%	0.6	0.6	4%
Other	4.9	4.9	1%	1.7	1.5	8%
<b>Total</b>	<b>29.1</b>	<b>37.1</b>	<b>-22%</b>	<b>10.3</b>	<b>10.6</b>	<b>-3%</b>

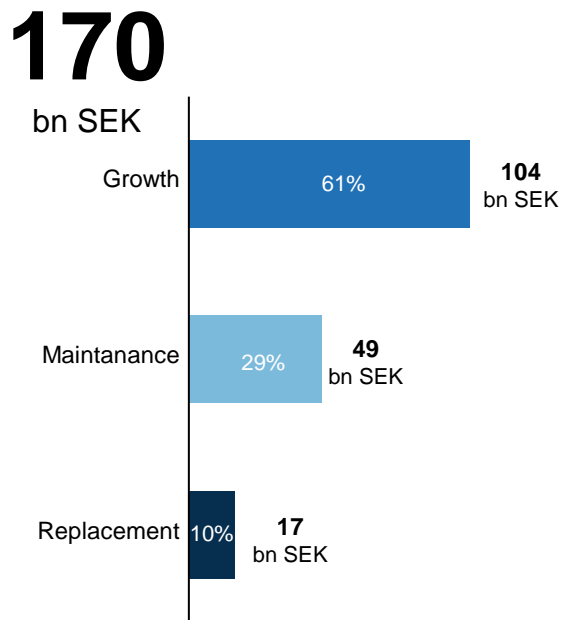
<sup>1</sup> Mainly pertains to investments in other tangible fixed assets and intangible assets



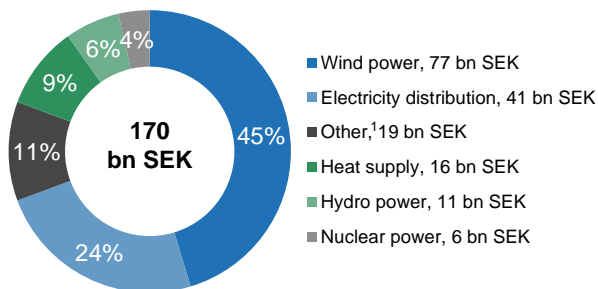
# Investment plan 2025-2029

Total capex

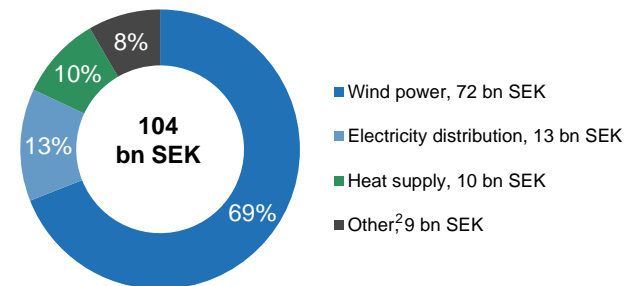
Total capex 2025-2029



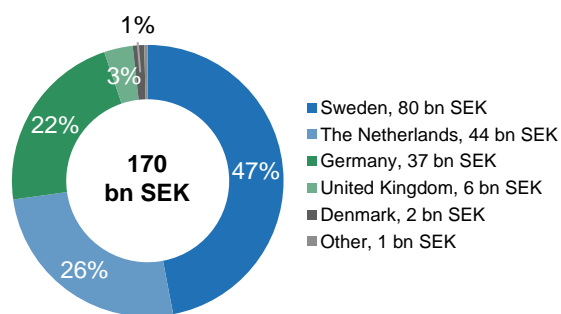
Total capex per technology



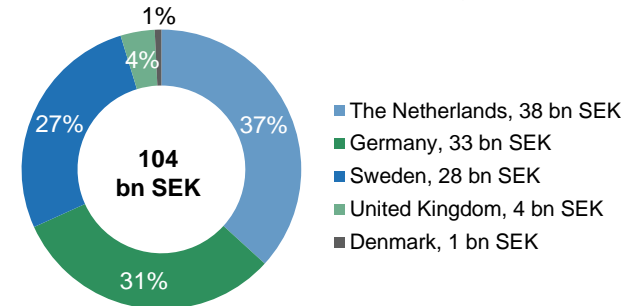
Growth capex per technology



Total capex per country



Growth capex per country

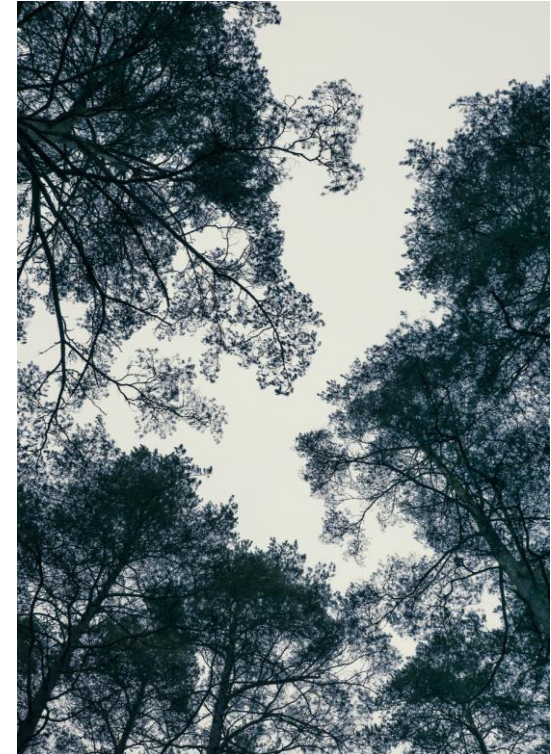


<sup>1</sup> Mainly E-mobility, facility and IT investments

<sup>2</sup> Mainly E-mobility

# Overview of key figures FY and Q4 2024

Amounts in SEK bn unless indicated otherwise	FY 2024	FY 2023	Q4 2024	Q4 2023
Net sales	245.6	290.2	68.5	73.3
EBITDA	60.8	39.7	10.7	9.9
EBIT	38.9	17.0	5.0	6.1
Underlying operating profit (EBIT)	19.8	20.0	0.5	4.5
Profit for the period	33.4	10.4	5.1	5.7
Electricity generation (TWh)	99.6	100.9	24.4	29
Sales of electricity (TWh)	160.2	168	41.0	46
- of which, customer sales (TWh)	115.9	125.9	30.4	33.9
Sales of heat (TWh)	9.1	13.5	1.6	4.5
Sales of gas (TWh)	50.9	44.5	17.3	14
Return on capital employed (≥8%)	12.4	5.3	12.4	5.3
FFO/adjusted net debt (22-27%)	49.2	21.5	49.2	21.5

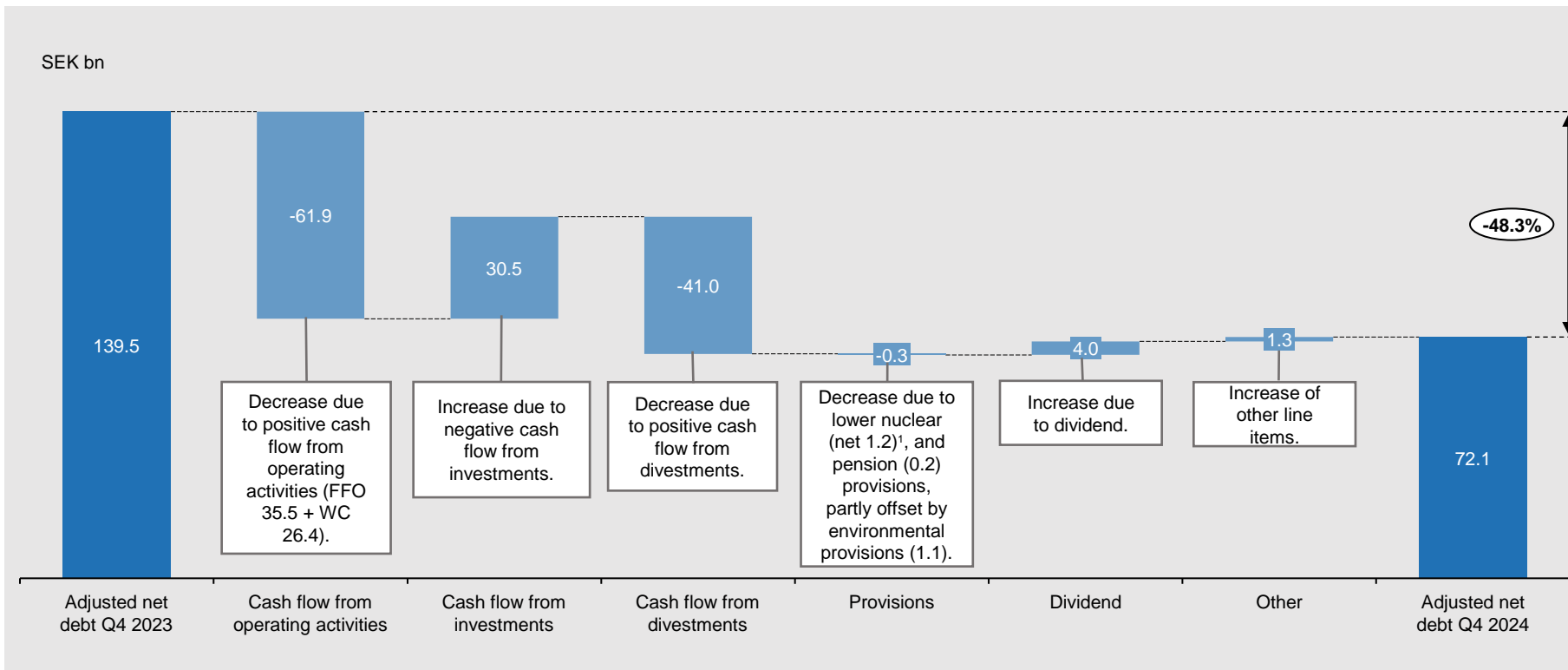


# Appendix



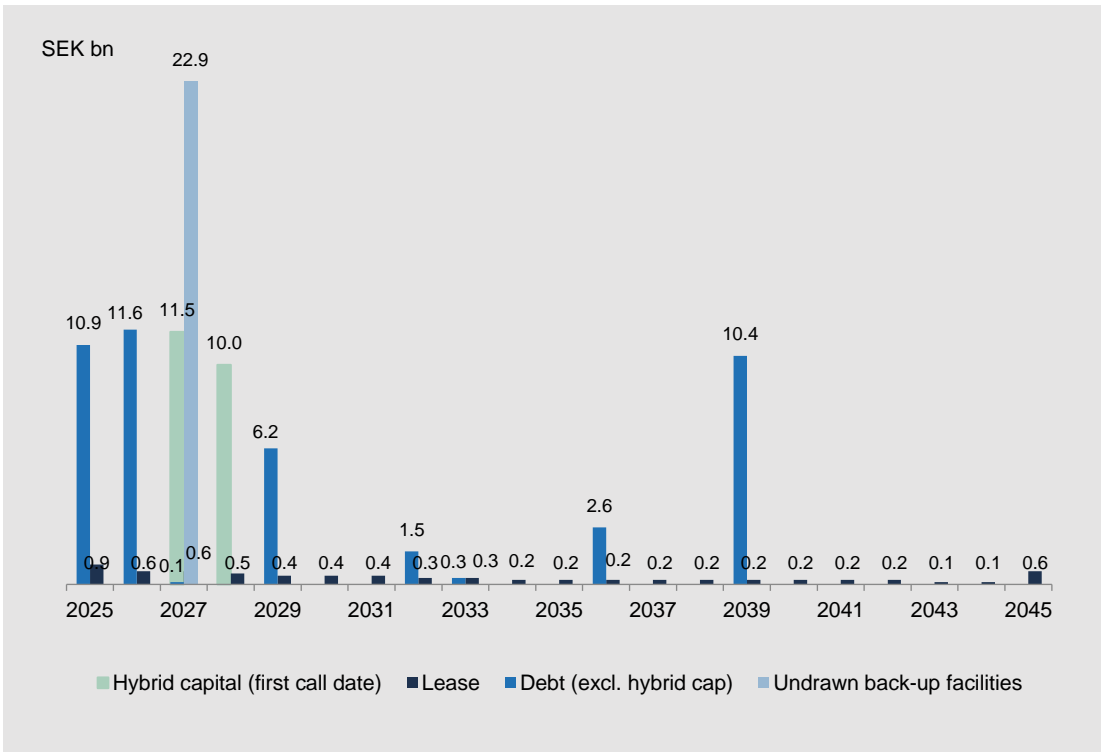
# Development of adjusted net debt FY 2024

Adjusted net debt decreased mainly due to positive cashflow from operating activities and divestments.



<sup>1</sup> Nuclear provision decreased net by SEK 1.2 bn, whereof in Sweden by 1.6, mainly due to higher return from nuclear waste fund, partly offset by higher provisions in Germany by 0.4.

# Debt maturity profile<sup>1</sup>



	31 Dec. 2024	31 Dec. 2023
Duration (years)	4.5	3.5
Average time to maturity (years)	4.8	4.2
Average interest rate (%)	3.6	3.9
Net debt (SEK bn)	-2.8	68.4
Available group liquidity (SEK bn)	83.3	46.8
Undrawn committed credit facilities (SEK bn)	22.9	33.3

**Cumulative maturities excl. undrawn back-up facilities**

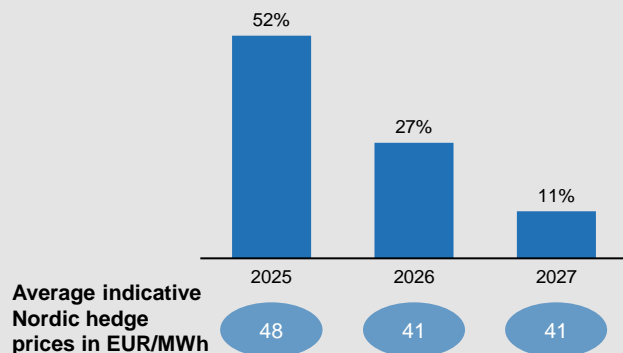
	2025-2027	2028-2030	From 2031
Debt incl. hybrid capital	36.1	17.6	18.5
<i>% of total</i>	50%	24%	26%

<sup>1</sup> Short term debt (Commercial paper and Repo's: 3.9), loans from associated companies, minority owners, margin calls received (CSA) and valuation at fair value are excluded.  
Currency derivatives for hedging debt in foreign currency are included.



# Price hedging

## Estimated Nordic<sup>1</sup> hedge ratio (%) and indicative prices



## Achieved prices<sup>2</sup> - Nordic portfolio, EUR/MWh

FY 2024	FY 2023	Q4 2024	Q4 2023
42	37	41	42

Vattenfall's hedging strategy has the objective to stabilize profits by selling parts of the planned production in the forward markets. The main exposures arise from outright power in the Nordics (nuclear and hydro), with a growing exposure in wind both in the Nordics and on the Continent/UK. Hedging is mainly based on the Nordic system price (SYS) while delivery takes place in the price areas where generation assets are located. The achieved price during the full year of 2024 increased mainly due to price hedges

<sup>1</sup> Nordic: SE, DK, FI

<sup>2</sup> Achieved prices from the spot market and hedges. Includes Nordic (SE, DK, FI) hydro, nuclear and wind power generation

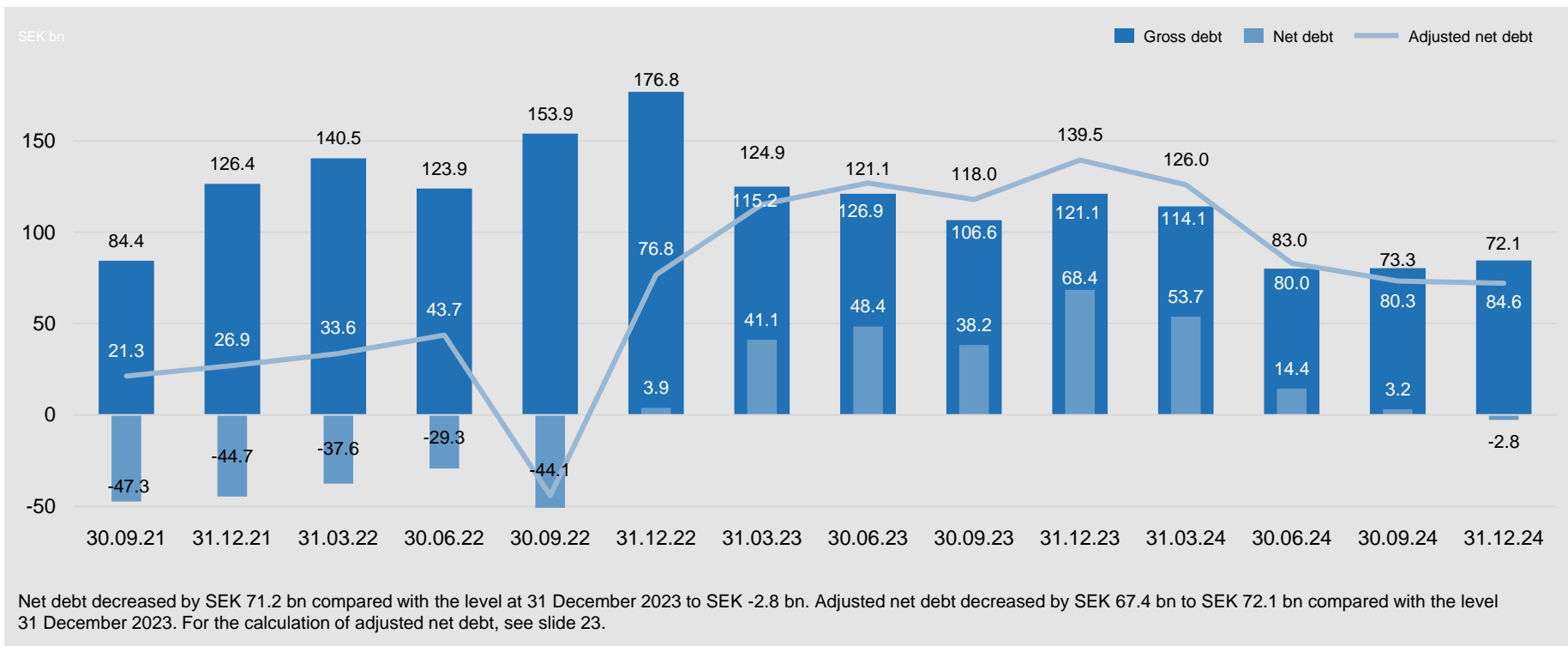
# Liquidity position

<b>Group liquidity</b>	<b>SEK bn</b>	<b>Committed credit facilities</b>	<b>Facility size, EUR bn</b>	<b>SEK bn</b>
Cash and cash equivalents	35.1	RCF (2027)	2.0	22.9
Short term investments	52.0	<b>Total undrawn</b>		<b>22.9</b>
<b>Reported cash, cash equivalents &amp; short-term investments</b>	<b>87.1</b>			
		<b>Debt maturities<sup>2</sup></b>		<b>SEK bn</b>
Unavailable liquidity <sup>1</sup>	-3.8	Within 90 days		0.2
<b>Available liquidity</b>	<b>83.3</b>	Within 180 days		0.2

<sup>1</sup> German nuclear "Solidarvereinbarung" 1.1 SEK bn, Margin calls paid (CSA) 1.9 SEK bn, Insurance "Provisions for claims outstanding" 0.8 SEK bn.

<sup>2</sup> Excluding loans from minority owners and associated companies.

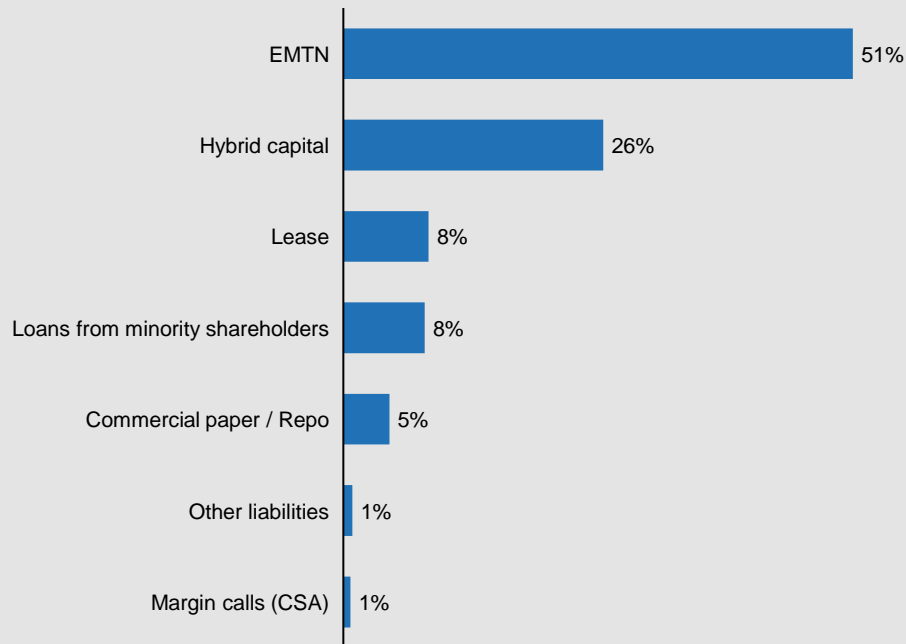
# Debt development



# Breakdown of gross debt

Total debt: SEK 84.6 bn (EUR 7.4 bn)

External market debt: SEK 77.4 bn (EUR 6.8 bn)



<sup>1</sup> EMTN= Euro Medium Term Notes

Debt issuing programmes	Size (EUR bn)	Utilization (EUR bn)
EUR 10bn Euro MTN	10.0	3.7
EUR 10bn Euro CP	10.0	0.1
Total	20.0	3.8

- All public debt is issued by Vattenfall AB.
- The main part of debt portfolio has no currency exposure that has an impact on the income statement. Debt in foreign currency is either swapped to SEK or booked as hedge against net foreign investments.
- No structural subordination.

# Reported and adjusted net debt

Reported net debt (SEK bn)	31 Dec. 2024	31 Dec. 2023	Adjusted net debt (SEK bn)	31 Dec. 2024	31 Dec. 2023
Hybrid capital	21.9	21.0	Total interest-bearing liabilities	84.6	121.1
Bond issues and liabilities to credit institutions	43.0	62.0	50% of Hybrid capital	-10.9	-10.5
Commercial papers and Repos	3.9	20.1	Present value of pension obligations	27.9	28.1
Liabilities to associated companies	0.4	0.7	Wind & other environmental provisions	16.5	15.4
Liabilities to minority shareholders	6.8	10.1	Provisions for nuclear power (net)	44.8	46.0
Lease liabilities	7.2	6.3	Margin calls received	-0.6	-0.3
Other liabilities	1.4	1.0	Liabilities to minority owners due to consortium agreements	-6.8	-10.1
<b>Total interest-bearing liabilities</b>	<b>84.6</b>	<b>121.1</b>	Adjustment related to assets/liabilities held for sale	0.0	-3.4
Reported cash, cash equivalents & short-term investments	87.1	52.3	<b>= Adjusted gross debt</b>	<b>155.4</b>	<b>186.3</b>
Loans to minority owners of foreign subsidiaries	0.2	0.4	Reported cash, cash equivalents & short-term investments	87.1	52.3
<b>Net debt</b>	<b>-2.8</b>	<b>68.4</b>	Unavailable liquidity	-3.8	-5.4
			<b>= Adjusted cash, cash equivalents &amp; short-term investments</b>	<b>83.3</b>	<b>46.8</b>
			<b>= Adjusted net debt</b>	<b>72.1</b>	<b>139.5</b>



# Nuclear provisions

Reactor <sup>1</sup>	Net capacity (MW)	Start (year)	Vattenfall share (%)	Vattenfall provisions, SEK bn (IFRS accounting)	Vattenfall provisions, SEK bn (pro rata)	Sw nuclear waste fund SEK bn (Vattenfall pro rata share)
Ringhals 1	879	1976	70.4			
Ringhals 2	809	1975	70.4			
Ringhals 3	1,070	1981	70.4			
Ringhals 4	942	1983	70.4	<b>Total Ringhals: 44.1</b>	<b>Total Ringhals: 44.1<sup>2</sup></b>	
Forsmark 1	984	1980	66.0			
Forsmark 2	1,120	1981	66.0			
Forsmark 3	1,170	1985	66.0	<b>Total Forsmark: 39.1</b>	<b>Total Forsmark: 25.8</b>	
<b>Total Sweden</b>	<b>6,974</b>	<b>-</b>		<b>87.8<sup>3</sup></b>	<b>72.3<sup>3</sup></b>	<b>46.3<sup>4</sup></b>
Brunsbüttel	771	1977	66.7	11.8	7.9	
Brokdorf	1,410	1986	20.0	-	2.9	
Krümmel	1,346	1984	50.0	8.1	8.1	
Stade	640	1972	33.3	-	0.3	
<b>Total Germany</b>	<b>4,167</b>	<b>-</b>	<b>-</b>	<b>19.9</b>	<b>19.2</b>	
<b>Total SE &amp; DE</b>	<b>11,141</b>			<b>107.8</b>	<b>91.5</b>	

<sup>1</sup> Five reactors are in commercial operation in Sweden; Ringhals 3 & 4 and Forsmark 1, 2 & 3. Ringhals 1 & 2 and all reactors in Germany are taken out of commercial operation. Stade is being dismantled.

<sup>2</sup> Vattenfall is 100% liability of Ringhals decommissioning, while owning only 70.4%

<sup>3</sup> Total provisions in Sweden (IFRS accounting) include provisions of SEK 0.3 bn (pro rata SEK 0.3 bn) related to Ägesta, SEK 3.9 bn (pro rata SEK 2.1 bn) related to SVAFO and SEK 0.4 bn (pro rata SEK 0.0 bn) related to SKB.

<sup>4</sup> Vattenfall's share of the Nuclear Waste Fund. IFRS consolidated value is SEK 56.7 bn.

# Items affecting comparability

Amounts in SEK million	Full year	Full year	Oct-Dec	Oct-Dec
	2024	2023	2024	2023
<b>Items affecting comparability</b>	19 023	- 3 014	4 492	2 603
- of which, capital gains	9 852	240	80	33
- of which, capital losses	- 1 765	- 184	- 31	- 152
- of which, impairment losses	- 1 335	- 6 520	- 2	- 1 755
- of which, reversed impairment losses	15	4 161	15	4 161
- of which, provisions	643	1 243	327	3 301
- of which, changes in the fair value of energy derivatives	9 899	- 1 594	3 239	- 2 979
- of which, changes in the fair value of inventories	1 528	- 662	673	- 317
- of which, other non-recurring items affecting comparability	186	302	191	311

## Major items FY 2024

- Capital gain from the sale of 49% of the Nordlicht I & II offshore wind farms (SEK 5.1 bn)
- Capital gain (SEK 4.6 bn) from the sale of Norfolk Offshore Wind Zone in the United Kingdom
- Capital loss from the divestment of Heat Berlin (SEK -1.7bn). The positive operational result of the heating business in Berlin during the period January 1 to May 2 2024 explains the capital loss
- Unrealised changes in the fair value of energy derivatives and inventories, SEK 11.4 bn

## Impairment losses and reversed impairment losses

- Discussions with the State of Berlin during the first quarter 2024 led to an adjustment of the expected purchase price which resulted in an impairment of Assets held for sale related to Heat Berlin amounting to SEK 958 million.
- An impairment of SEK 345 million related to the offshore wind project Swedish Kriegers Flak was recognized in the third quarter 2024. The future profitability of the project has been negatively impacted by cost increases in supply chain and cost for grid connection which together with the decision to pause the project triggered an impairment assessment of the capitalized project costs.

# Wind & Solar - Installed capacity (MW<sup>1</sup>) Q4 2024

	Solar	Onshore	Offshore	Batteries	Total
United Kingdom	-	623	685	77	1,385
Denmark	-	196	1,514	-	1,710
The Netherlands	65	515	1,509	15.00	2,104
Sweden	-	638	110	25.00	773
Germany	17	7	636	-	660
<b>Total (MW)</b>	<b>82</b>	<b>1,978</b>	<b>4,454</b>	<b>117</b>	<b>6,631</b>

21%  
26%  
32%  
12%  
10%  
100%

■ Batteries  
■ Solar  
■ Onshore  
■ Offshore

## United Kingdom

Thanet	300
Ormonde (51%)	150
Aberdeen	96
Kentish Flats	90
Kentish Flats Extension	50
South Kyle (0%, AMA <sup>2</sup> )	240
Pen Y Cymoedd	228
Ray	54
Edinbane	41
Clashindarroch	37
Swinford	22
Battery@Ray	55
Battery@PyC	22
<b>Installed capacity (MW)</b>	<b>1,385</b>

## Sweden

Lillgrund	110
Blakliden + Fåbodberget (30%)	353
Stor-Rotliden	78
Grönhult (0%, AMA <sup>2</sup> )	67
Högabjär-Kårsås (50%)	38
Höge Våg (50%)	37
Hjuleberg (50%)	36
Juktan (50%)	29
Toledo	25
<b>Installed capacity (MW)</b>	<b>2,180</b>

## Denmark

Kriegers Flak	605
Horns Rev 3	407
Horns Rev 1 (60%)	158
Vesterhav	344
Klim (98%)	67
Nørrekær Enge 1 (99%)	30
Rejsby Hede	23
Hagesholm	23
Tjæreborg Enge	17
Bajlum (89%)	15
DræbyFed	9
Ejsing (97%)	7
Lyngmose	5
<b>Installed capacity (MW)</b>	<b>1,710</b>

## Germany

DanTysk (51%)	288
Sandbank (51%)	288
Alpha Ventus (26%)	60
Westküste (20%)	7
Decentral Solar installations	2
Geesthacht (0% <sup>3</sup> )	2
Geesthacht	2
Markersbach Damm	4
Assets DE cluster <750kWp	1
Service DE <750kWp	1
Markersbach Damm (0% <sup>3</sup> )	4
Ingredion	1
<b>Installed capacity (MW)</b>	<b>660</b>

## The Netherlands

Hollandskust Zuid (51%)	1,509
Princess Ariane	184
Princess Alexia	122
Windplan Blauw	77
A16 / Klaverspoor	34
Slufterdam	29
Moerdijk	27
Haringvliet	22
Echteld	8
Oom Kees (12%)	6
Oudendijk	5
Haringvliet	38
Kooypunt	12
Velsen	2
Hemweg	2
Diemen	1
Symbizon	1
Decentral Solar installations	8
Alexia	3
Haringvliet	12
<b>Installed capacity (MW)</b>	<b>2,089</b>

<sup>1</sup> Capacity in operation: total capacity of the wind farms that Vattenfall has an ownership or is responsible for the operation. Minority shares included as 100%

<sup>2</sup> Asset divested but in operation by Vattenfall under Asset Management Agreement (AMA)

<sup>3</sup> Assets on VF Hydro' sites, but operated by BA Wind

# Main projects BA Wind in our 5 core countries

Offshore
Onshore
Solar
Batteries

Country	Name	Capacity (MW)	Support scheme	Awarded	Duration of support	Ownership (%)	Commissioning	Current status
SE	Bruzaholm	139				100	2025/2026	Under construction, cPPA* signed
SE	Velinga	60				100	2026	Under construction, cPPA* signed
SE	Battery@Bruzaholm	38				100	2025/2026	Under construction
SE	Battery@Toledo	25				100	2024	Under construction
DE	Tützpatz	76				100	2024	Develop2Sell project; under construction, cPPA* signed
DE	Silberstedt	23				100	2025	Develop2Sell project; under construction, cPPA* signed
DE	Neubrandenburg	84				100	2026	Develop2Sell project; under construction, cPPA* signed
DE	Nauen	46				100	2025	Develop2Sell project; under construction, cPPA* signed
<b>In construction</b>		<b>491</b>						
NL	Zeevonk (Ijmuiden Ver Beta)	2,000				50	2030	Bid awarded in June 2024, partnering with CIP
UK	Muir Mhor (Scotwind)	750	CfD			50	2030	Under development with consenting and permitting progressing to ensure participation in the CfD bid, JV with Fred Olsen
DE	Nordlicht I	980	-		-	50	2028	FID planned for 2025, partnering with BASF
DE	Nordlicht II	630	-		-	50	2028	FID planned for 2025, partnering with BASF
DE	Wolfsberg	17	EEG			100	2026	Develop2Sell project. FID planned for 2024.
GB	Clashindarroch II	77	CfD			100	2028	Develop2Sell project. FID planned for 2025.
GB	Stormyberget	250				55	2028	FID planned for 2025
DE	Battery @ Tützpatz	50	-		-	100	2025	FID planned for 2024
<b>In development (in mature stage)</b>		<b>4,754</b>						

\* cPPA stands for Commercial Power Purchase Agreement. For these projects, BA Wind has signed a contract with a partner for the sale of contractually agreed amount of MW per year, for a fixed period of time (usually ranging between 10-15 years)