

Vattenfall FY and Q4 Results 2022

8 February 2023



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Vattenfall FY Results 2022

In brief

- Higher electricity prices but Vattenfall's achieved prices at a lower level compared to 2021
 - Inauguration of Vattenfall's largest onshore wind farm, Blakliden Fäbodberget, in Sweden
 - Inauguration of the biofuel-fired heat plant, Carpe Futurum, in Uppsala, Sweden
 - Strategic review of the Berlin district heating business
 - Feasibility study on construction of small modular reactors at Ringhals
 - Foundation installation completed and first electricity delivered from offshore wind farm Hollandse Kust Zuid in the Netherlands
 - Vattenfall to build Finland's first major offshore wind farm
 - Inauguration of HYBRIT's pilot facility for fossil-free hydrogen gas storage with LKAB and SSAB
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- Underlying EBIT increased by SEK 6.1 bn to SEK 37.3 bn:
 - Strong contribution from the Wind business due to higher electricity prices and new capacity
 - Temporary sourcing effects for electricity and gas and increased number of customers
 - Lower achieved electricity prices in the Nordic countries, lower realised earnings from the trading operations and lower clean spark spreads
-
- Profit for the period decreased by SEK 48.0 bn to SEK 0.0 bn. Changes in market value for energy derivatives and inventories as well as a lower return from the Swedish Nuclear Waste fund had a negative impact. Profit for the period in 2021 was positively affected by the compensation for closure of nuclear power in Germany (SEK 12.5 bn), changes in market value for energy derivatives and inventories (SEK 10.0 bn) and the capital gain from the sale of Stromnetz Berlin (SEK 8.4 bn)
 - The Board of Directors proposes a dividend of SEK 4.0 bn



Vattenfall FY Results 2022

Overview

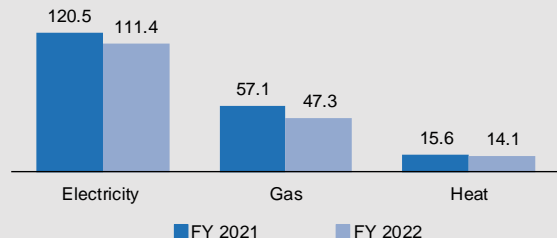
Result development

SEK BN	FY 2022	FY 2021	Δ
Net Sales	239.6	180.1	33%
EBITDA	30.5	75.8	-60%
Underlying operating profit (EBIT)	37.3	31.2	20%
EBIT	12.6	60.3	-79%
Profit for the period	0.0	48.0	-100%

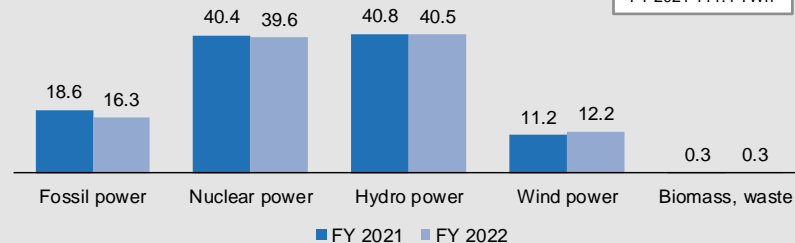
Financial targets

	FY 2022	FY 2021
Return on capital employed (≥8%)	4.2%	22.2%
FFO/adjusted net debt (22-27%)	55.0%	171.2%







Customer sales (TWh)



Electricity production (TWh)



Strategic targets 2025

Strategic focus area	Strategic targets to 2025	Actual 2022	Actual 2021	Progress	Comments
Driving decarbonisation with our customers & partners	Net Promoter Score ¹ (Absolute): +18	+16	+10		Higher NPS mainly owing to the Customers & Solutions operating segment with strong performance especially in Germany
Securing a fossil-free energy supply	CO ₂ Emissions Intensity ³ : ≤86 gCO₂e/kWh	78	82		Improvement due to lower fossil-based generation
Empowering our people	Lost Time Injury Frequency (LTIF): ≤1.0	1.1	1.7		Improved results after initiatives to improve safety, including common H&S strategy and framework for follow-up throughout the organisation
	Employee Engagement Index: ≥75%	80 ³	75		Outcome above target level after continued improved performance with more engaged employees
Delivering high-performing operations	FFO/Adjusted Net Debt: 22-27%	55.0%	171.2%		Above target interval as a result of continued strong underlying EBITDA
	ROCE: ≥8%	4.2%	22.2%		Outcome below target, mainly due to changes in market value of energy derivatives and inventories

¹ NPS absolute target is calculated with a weighting of 80% from Customers & Solutions and 20% from Heat resembling size of customer basis

² Targeting 86 gCO₂/kWh by 2025 puts us on a “1.5°C” trajectory by 2030 according to Science Based Target levels

Customers & Solutions

Strong earnings development as more customers choose Vattenfall

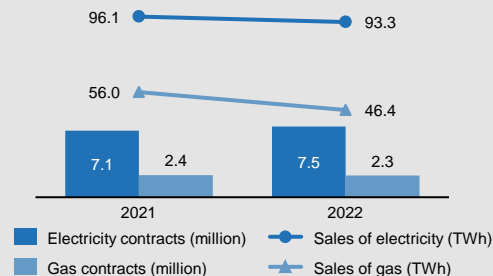
Highlights

SEK million	FY 2022	FY 2021
Net Sales	183,151	106,560
Underlying operating profit	7,413	2,349

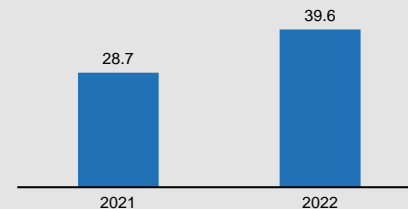
- Net sales increased by 72%. The underlying operating profit increased mainly owing to temporary effects from sourcing of electricity and gas and a growing customer base in Germany and the Nordics
- The customer base increased by 4% to 10.9 million contracts compared to year-end 2021
- In 2022, Vattenfall delivered 100% fossil-free electricity from wind, solar and hydro for the first time to its retail customers in the Netherlands
- Continued expansion of Vattenfall's public charging network and a recent agreement with Bunting Group to install fast chargers at 200 customer car parks.
- Improved customer satisfaction as measured by the Net Promoter Score

Key data

Retail sales development



Charging points for electric vehicles (thousand)



Power Generation

Full-year earnings negatively affected by lower achieved prices

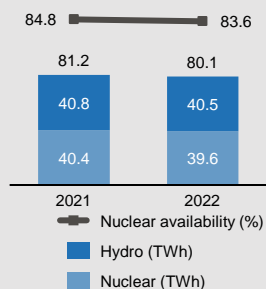
Highlights

SEK million	FY 2022	FY 2021
Net Sales	205,788	126,318
Underlying operating profit	16,570	19,334

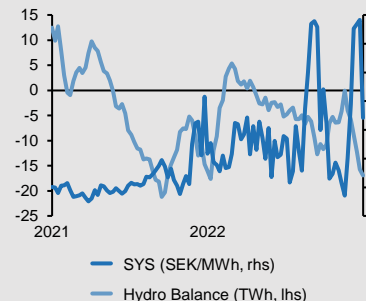
- Net sales increased by 63%. Underlying operating profit decreased by 14% mainly due to lower achieved prices in the Nordics and a lower realised trading result. The lower achieved price was mainly due to price differences between electricity price areas in Sweden and the fact that the hedge is linked to the system price
- Acquisition of an early pumped storage hydro power project in Germany with the possibility to build a 400 MW power plant
- Generation record at Forsmark nuclear power plant with 25.5 TWh delivered volume
- Repair works at Ringhals 4 ongoing at high pace with planned restart at 19 March 2023

Key data

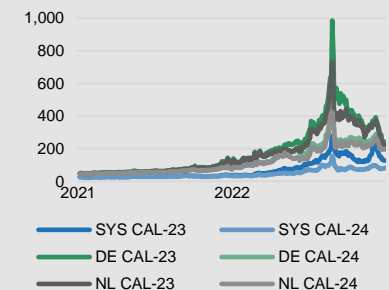
Production and availability



Nordic hydro balance and system price



Electricity futures prices (EUR/MWh)



Wind

Higher electricity prices and new capacity had a positive impact on earnings

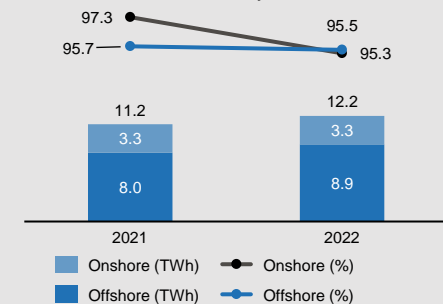
Highlights

SEK million	FY 2022	FY 2021
Net Sales	29,109	20,872
Underlying operating profit	16,479	7,866

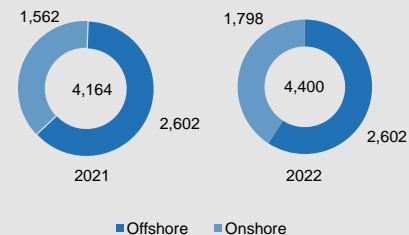
- Net sales increased by 39% compared to 2021. Underlying operating profit increased by 109% due to higher electricity prices and new capacity¹
- Electricity generation increased by 9% as a result of new capacity and higher wind speeds, especially in Germany and Denmark
- Joint venture with Metsähallitus to build and operate Finland's first major offshore wind farm with a total capacity of 1.3 GW. The wind farm is planned to be operational in the early 2030s
- Investment decision for three new solar farms in the Netherlands with a total capacity of 47 MW
- Investment decision for two battery projects in Sweden with a total capacity of 55 MW

Key data

Production² and availability



Total installed wind capacity (MW)



¹ Added capacity during the last 12 months where Vattenfall has an ownership or is responsible for the operation includes Blakliden Fäbodberget (214 MW of 353 MW), South Kyle (67 MW of 240 MW), Grönhult 67 MW, A16 34 MW, Nij Hiddum Houw 19 MW. Divestments includes part of Princess Ariane (Wieringermeer Extension 114 MW) and other onshore 51 MW



² Including electricity generation from solar power

Heat

Lower clean spark spreads affected results negatively

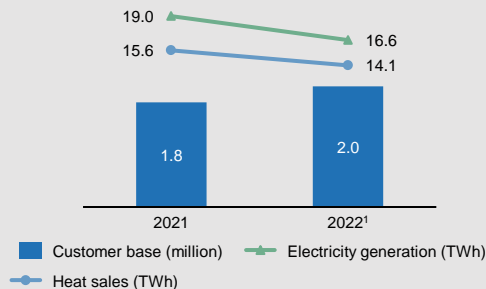
Highlights

SEK million	FY 2022	FY 2021
Net Sales	60,505	34,759
Underlying operating profit	-3,578	-343

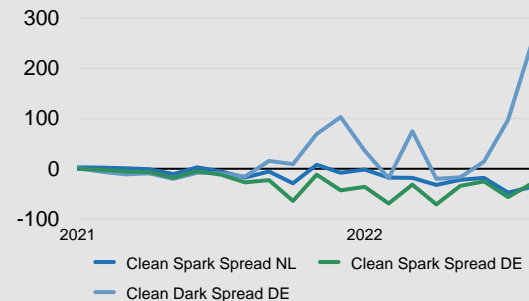
- Net sales increased by 74%. Underlying operating profit decreased as higher gas prices could not be covered by higher electricity and heat revenues, leading to lower clean spark spreads largely affecting the heat operations. Higher expenses for ongoing projects and scheduled plant overhauls also had a negative impact on earnings
- Sales of heat decreased due to higher temperatures and electricity generation decreased as a result of the lower spreads
- Compared to year-end 2021, the number of customers increased by 2.2% to the equivalent of 2.0 million households¹
- Investment decision for a 150 MW Power-to-Heat boiler in Diemen in the Netherlands
- Concession contract with the municipality of Rotterdam for heat supply to the Heindijk area

Key data

Sales and production



Spreads² (EUR/MWh)



¹ Customer base including decentralised energy solutions that have previously been reported separately

Distribution

Roll-out of smart electricity meters and high demand for connections to the electricity grid

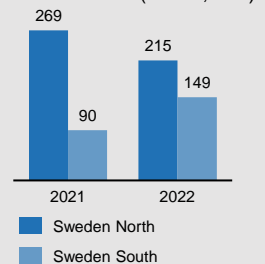
Highlights

SEK million	FY 2022	FY 2021
Net Sales	12,497	17,262
Underlying operating profit	2,070	3,152

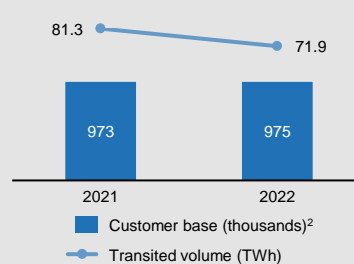
- Net sales decreased by 28%. Underlying operating profit decreased by 34%. The sale of Stromnetz Berlin on 1 July 2021 negatively affected the net sales comparison by SEK 5.3 billion and underlying operating profit by SEK 0.7 billion. The underlying operating profit in the Swedish operation was affected by higher operating expenses, mainly owing to growth activities, as well as higher costs for the transmission network
- Inauguration of a new regional grid station in Luleå, Sweden, together with Luleå Energi
- Reduced grid tariff by on average 9% for customers connected to the local grid in northern Sweden from 1 January 2023

Key data

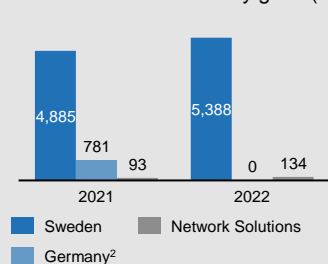
Service level (SAIDI, min)¹



Customers and volumes



Investments in electricity grids (SEK mn)



¹ 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.

² Reduction in customer base and investments due to divestment of Stromnetz Berlin on 1 July 2021

Financials



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Vattenfall FY Results 2022

Financial highlights

Key data

SEK bn	FY 2022	FY 2021
Net Sales	239.6	180.1
EBITDA	30.5	75.8
Underlying operating profit (EBIT)	37.3	31.2
EBIT	12.6	60.3
Profit for the period	0.0	48.0
Funds from Operations (FFO)	42.2	46.1
Cash flow operating activities	1.2	101.8
Net debt	3.9	-44.7
Adjusted net debt	76.8	26.9
Adjusted net debt/EBITDA (times)	2.5	0.4
Financial targets		
ROCE (≥8%)	4.2	22.2
FFO/adjusted net debt (22-27%)	55.0	171.2

Key developments

- Net sales increased by SEK 59.5 bn to SEK 239.6 bn due to higher electricity prices in the Netherlands, the Nordics, and Germany.
- Underlying EBIT increased by SEK 6.1 bn mainly as a result of increased earnings in segment Wind due to higher electricity prices and new capacity as well as increased earnings in segment Customers & Solutions due to temporary sourcing effects as well as an increased customer base.
- Profit for the period decreased to SEK 0.0 bn and was negatively affected by changes in market value for energy derivatives and inventories. Profit for the period in 2021 was positively impacted by the compensation for closure of nuclear power in Germany, changes in market value for energy derivatives and inventories and capital gain from sale of Stromnetz Berlin.
- ROCE decreased to 4.2%, affected by changes in market value for energy derivatives and inventories. Based on underlying operating profit, ROCE was 12.5%.
- FFO/Adjusted net debt decreased to 55.0% and remained above the target interval due to strong development in underlying EBITDA. Excluding effects from received and paid margin calls FFO/adjusted net debt was 46.6%

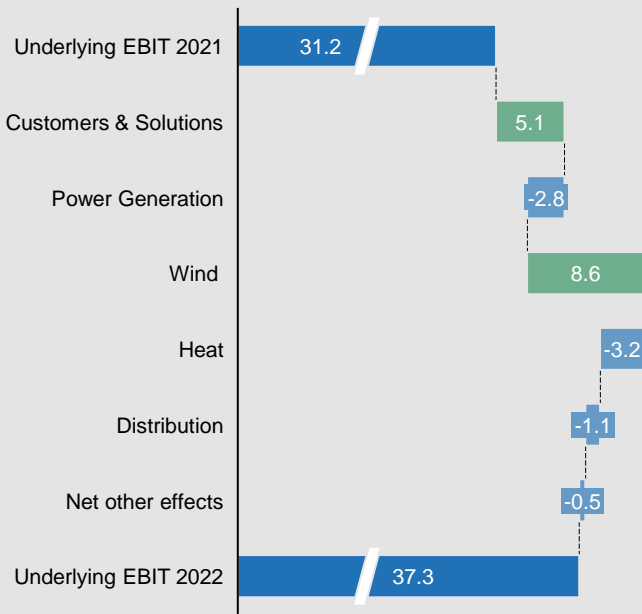


Development of underlying EBIT FY 2022

Increase from Wind and Customers & Solutions partly offset by lower earnings in Heat, Power Generation and Distribution

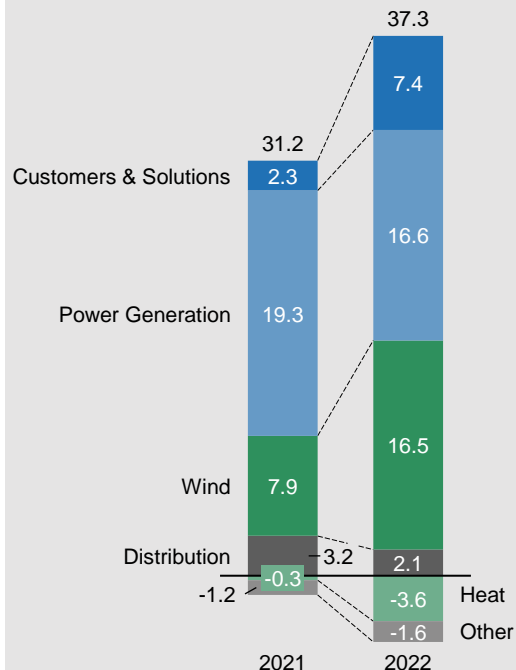
Change in FY 2022 vs. FY 2021

SEK bn



Breakdown per operating segment

SEK bn

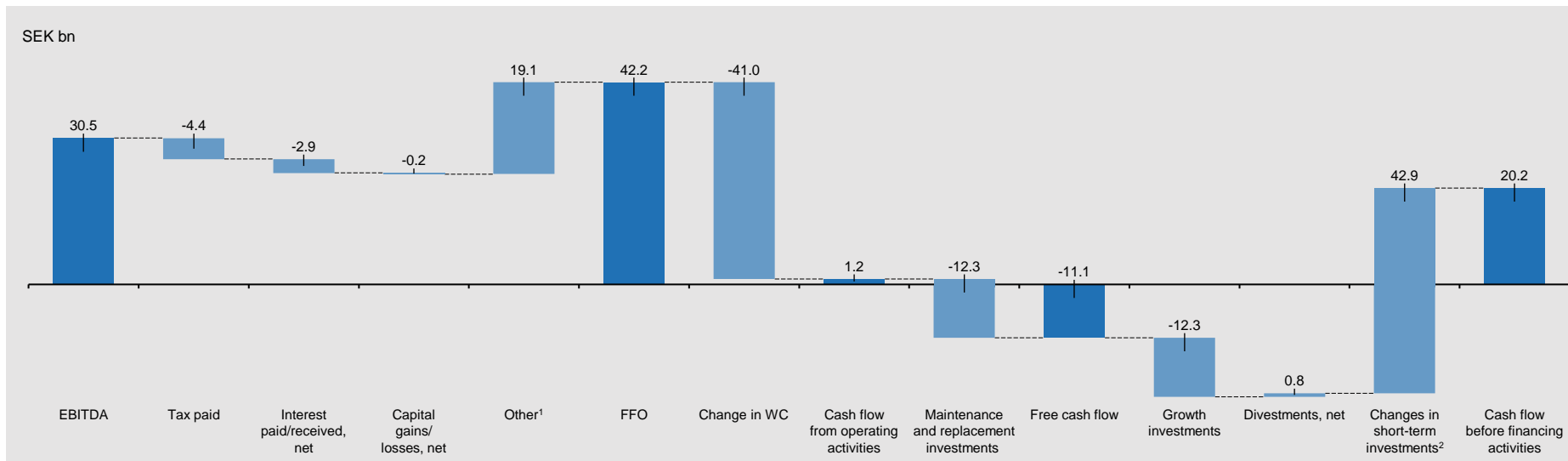


Highlights

- Customers & Solutions: temporary effects from sourcing of gas and electricity and increased customer base in Germany and the Nordics
- Power Generation: lower achieved prices in the Nordic countries affected by large price differences between electricity price areas in Sweden as well as lower realised trading result
- Wind: higher electricity prices, especially in Continental Europe, and new capacity
- Heat: higher gas prices led to lower clean spark spreads largely affecting the heat operations and higher operating expenses mainly driven by ongoing projects and scheduled plant overhauls
- Distribution: higher operating expenses, mainly owing to growth and higher costs for the transmission network. Earnings comparison also negatively affected by sale of Stromnetz Berlin in 2021 (SEK 0.7 bn)

Cash flow development FY 2022

Negative working capital development mainly related to changes in margin calls



Main effects

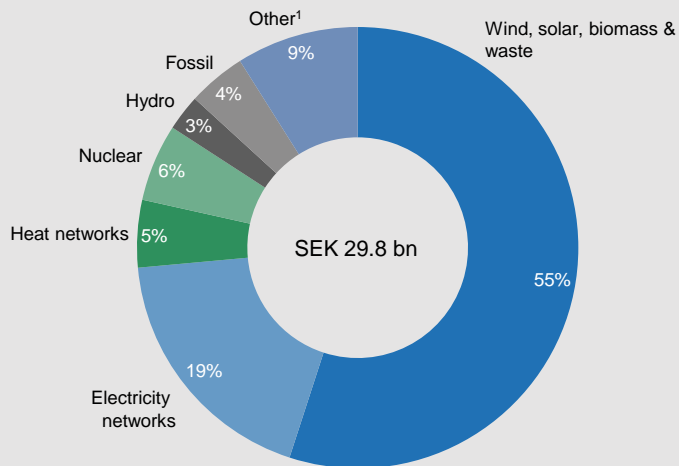
- Change in working capital mainly driven by changes related to net change in margin calls for commodity hedging activities (SEK -63.1 bn) and increase in operating receivables in the Customers & Solutions operating segment (SEK -8.5 bn). Changed in inventories (SEK 20.1 bn), mainly related to CO₂ emission allowances, had an offsetting impact
- Changes in short-term investments are mainly related to outflows from margin calls and other operating activities

¹ "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 2022



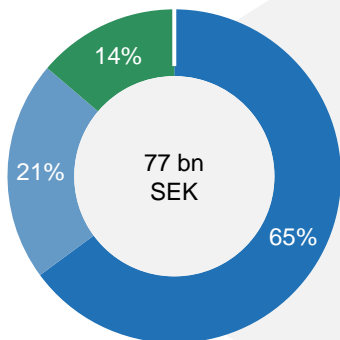
Detailed overview of investments, FY & Q4 2022

SEK bn	FY 2022	FY 2021	Δ	Q4 2022	Q4 2021	Δ
Hydro	0.8	0.8	-1%	0.3	0.3	6%
Nuclear	1.7	1.3	34%	0.5	0.4	25%
Fossil	1.3	1.1	14%	0.5	0.6	-10%
Wind, solar, biomass & waste	16.4	11.2	46%	5.8	2.0	194%
Electricity networks	5.5	5.8	-4%	2.4	1.9	24%
Heat networks	1.5	1.5	-3%	0.6	0.6	5%
Other	2.7	2.4	9%	1.0	1.1	-5%
Total	29.8	24.1	24%	11.2	6.9	63%

¹ Mainly pretains to investments in immaterial assets

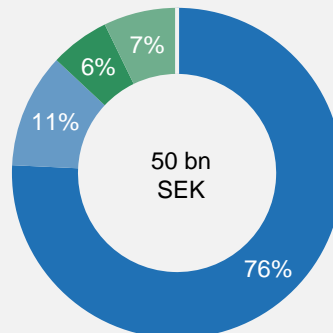
Investment plan 2023-2024

**Total capex
2023-2024**



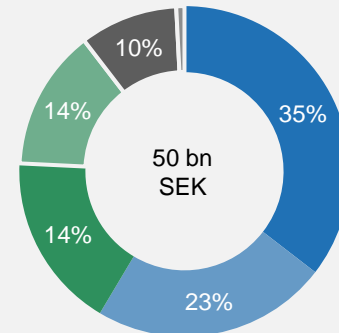
- Growth, 50 bn SEK
- Maintenance, 16 bn SEK
- Replacement, 11 bn SEK

**Growth capex per
technology 2023-2024**



- Wind power, 38 bn SEK
- Heat supply, 6 bn SEK
- Electricity distribution, 3 bn SEK
- Other¹, 4 bn SEK

**Growth capex per country
2023-2024**

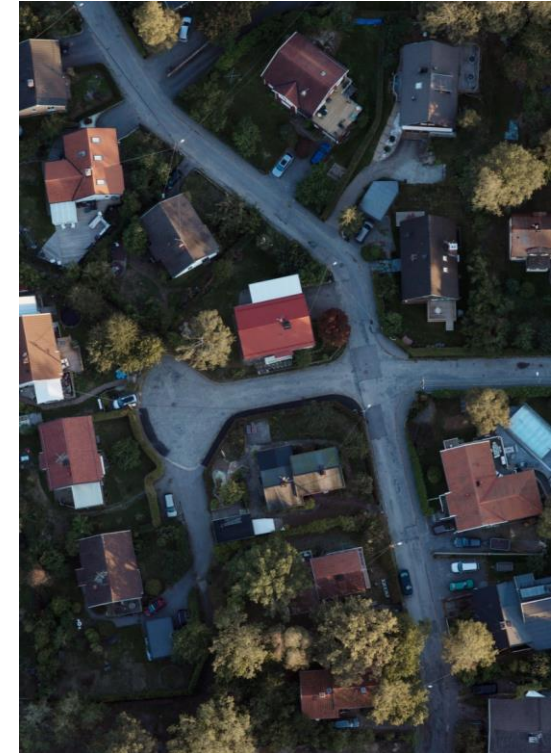


- The Netherlands, 18 bn SEK
- United Kingdom, 12 bn SEK
- Sweden, 9 bn SEK
- Denmark, 7 bn SEK
- Germany, 5 bn SEK
- France, 0 bn SEK

¹ Mainly charging solutions, solar and battery projects as well as heat and energy solutions

Overview of key figures FY and Q4 2022

Amounts in SEK bn unless indicated otherwise	FY 2022	FY 2021	Q4 2022	Q4 2021
Net sales	239.6	180.1	78.8	63.5
EBITDA	30.5	75.8	-18.5	10.2
EBIT	12.6	60.3	-24.1	7.8
Underlying operating profit (EBIT)	37.3	31.2	13.5	9.1
Profit for the period	0.0	48.0	-17.0	6.1
Electricity generation (TWh)	108.9	111.4	28.3	30.5
Sales of electricity (TWh)	165.3	168.9	43.4	45.6
- of which, customer sales (TWh)	111.4	120.5	29.8	32.1
Sales of heat (TWh)	14.1	15.6	4.7	5.1
Sales of gas (TWh)	47.3	57.1	14.1	17.3
Return on capital employed (≥8%)	4.2	22.2	4.2	22.2
FFO/adjusted net debt (22-27%)	55.0	171.2	55.0	171.2



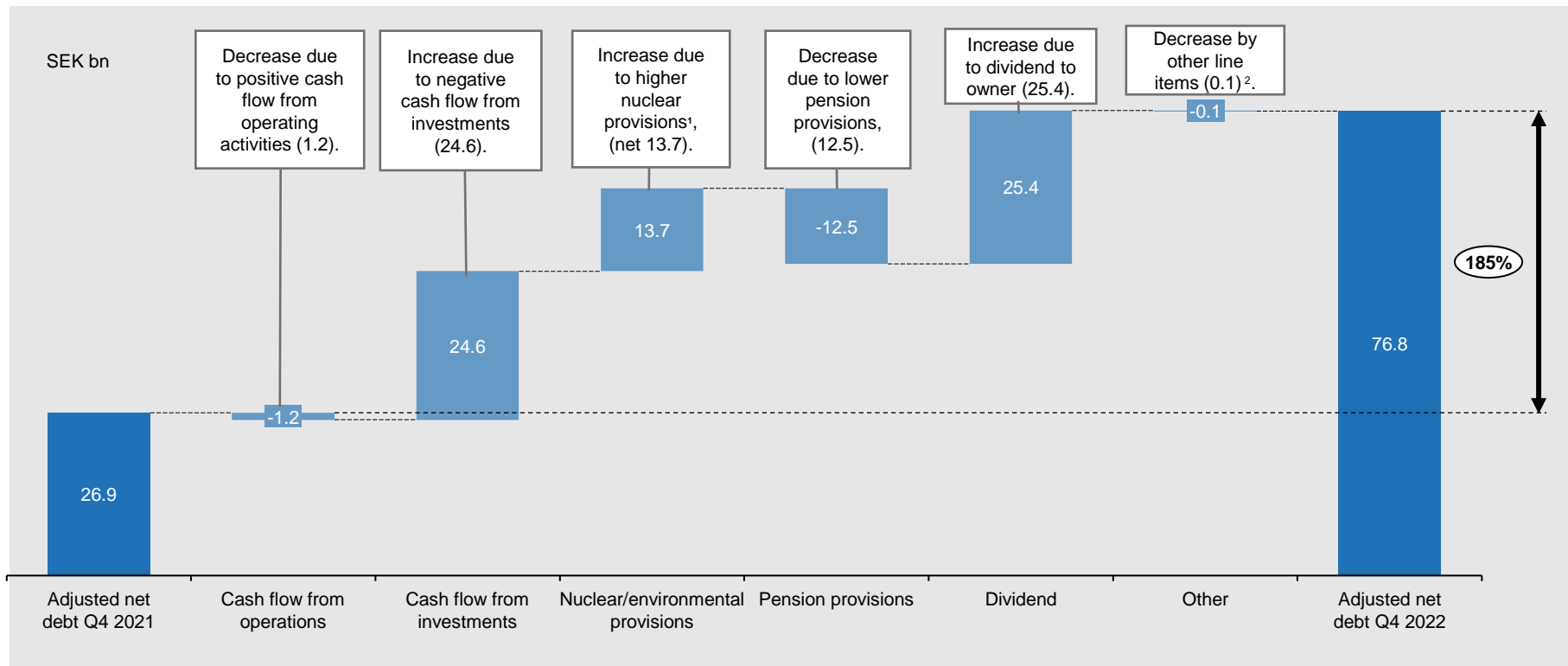
Appendix



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Development of adjusted net debt 2022

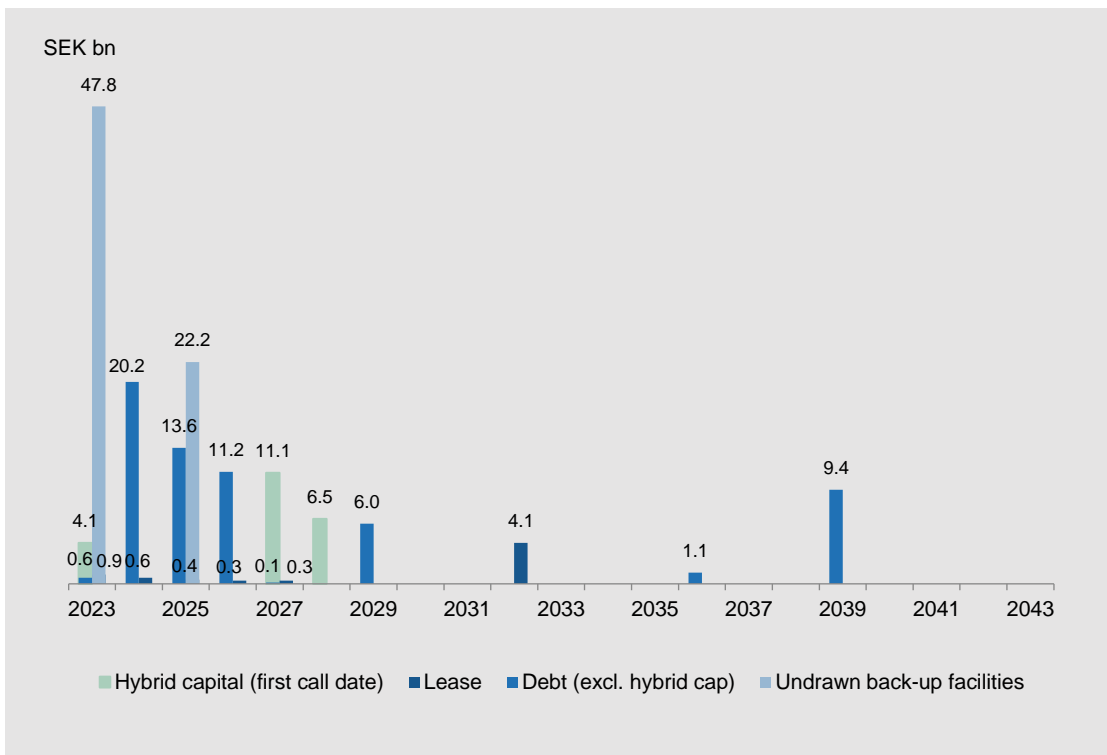
Adjusted net debt increased mainly due to negative cashflow from investments and paid dividend.



¹ Nuclear provision increased net by SEK 13.7 bn, whereof in Sweden by SEK 12.5 bn, mainly due to increased provisions and lower return from nuclear waste fund, and in Germany by SEK 1.2 bn

² SEK weakened against EUR (from 10.25 to 11.12); translation of EUR/SEK denominated net debt leads to increase in adjusted net debt.

Debt maturity profile¹



	31 Dec. 2022	31 Dec. 2021
Duration (years)	3.2	4.7
Average time to maturity (years)	5.0	6.8
Average interest rate (%)	3.5	2.9
Net debt (SEK bn)	- 3.9	-44.7
Available group liquidity (SEK bn)	169.4	167.4
Undrawn committed credit facilities (SEK bn)	70.1	20.5

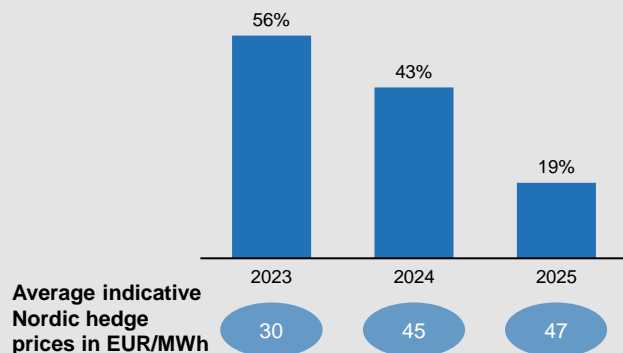
Cumulative maturities excl. undrawn back-up facilities

	2023-2025	2026-2028	From 2029
Debt incl. hybrid capital	40.6	29.5	20.6
<i>% of total</i>	45%	32%	23%

¹ Short term debt (Repo's and Commercial paper: 72.3), 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 Nordic¹ hedge ratio (%) and indicative prices



Achieved prices² - Nordic portfolio, EUR/MWh

FY 2022	FY 2021	Q4 2022	Q4 2021
27	31	55	35

Vattenfall's hedging strategy has the objective to stabilize profits over time by selling parts of the planned production in the forward markets. The main exposure 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 main part of Vattenfall's hydro power generation is located in price area SE1 and SE2, where prices were at a lower level compared to SYS, which has therefore resulted in a lower achieved price for 2022. The achieved price in the fourth quarter increased due to higher prices in northern Sweden as a result of low wind power generation and increased transmission capacity.

¹ Nordic: SE, DK, FI

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

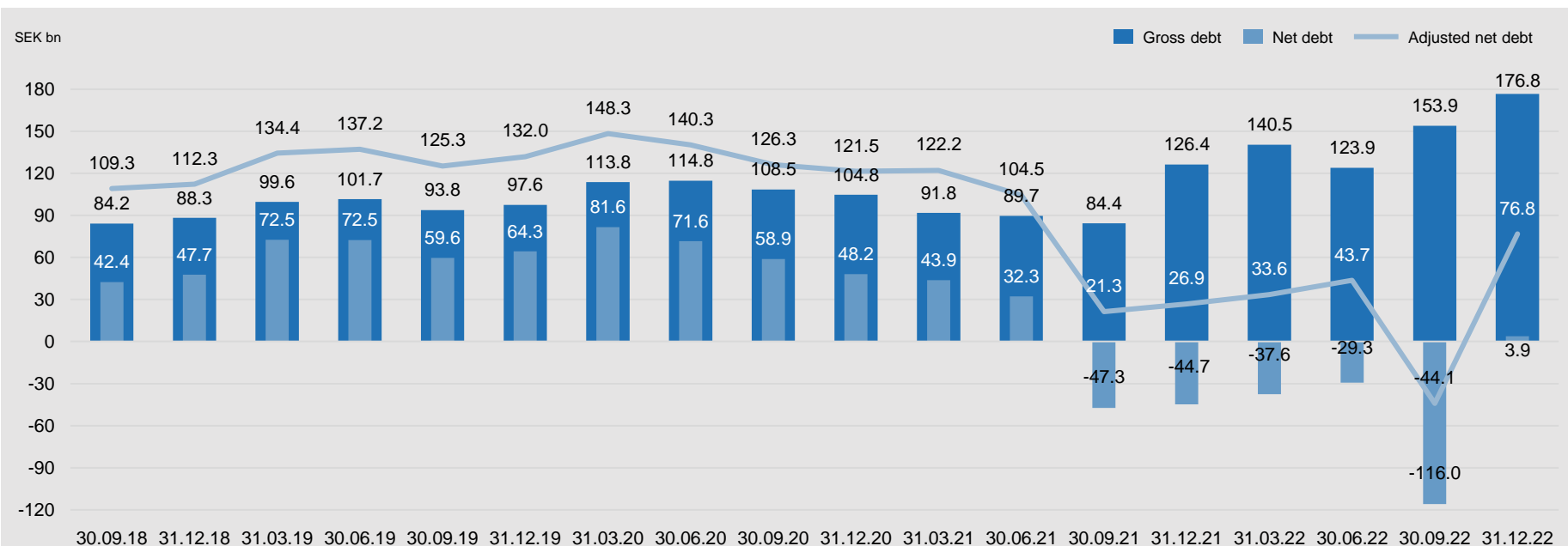
Liquidity position

Group liquidity	SEK bn	Committed credit facilities	Facility size, EUR bn	SEK bn
Cash and cash equivalents	106.5	Committed credit lines (2023)	4.3	47.8
Short term investments	65.8	RCF (2025)	2.0	22.2
Reported cash, cash equivalents & short term investments	172.4	Total undrawn		70.1
		Debt maturities²		SEK bn
Unavailable liquidity ¹	-3.0	Within 90 days		0.1
Available liquidity	169.4	Within 180 days		0.4

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

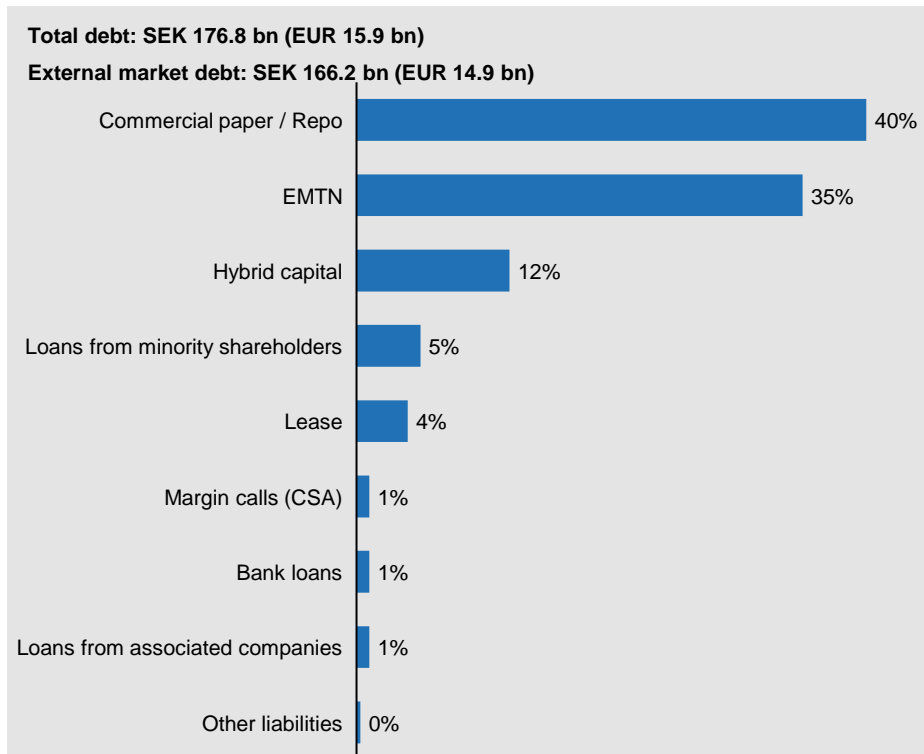
² Excluding loans from minority owners and associated companies.

Debt development



Net debt increased by SEK 48.6 bn to SEK 3.9 bn compared with the level at 31 December 2021. Adjusted net debt increased by SEK 49.8 bn to SEK 76.8 bn compared with the level at 31 December 2021. For the calculation of adjusted net debt, see slide 24.

Breakdown of gross debt



Debt issuing programmes	Size (EUR bn)	Utilization (EUR bn)
EUR 10bn Euro MTN	10.0	5.6
EUR 10bn Euro CP	10.0	4.6
Total	20.0	10.2

- 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.

¹ EMTN= Euro Medium Term Notes

Reported and adjusted net debt

Reported net debt (SEK bn)	31 Dec. 2022	31 Dec. 2021	Adjusted net debt (SEK bn)	31 Dec. 2022	31 Dec. 2021
Hybrid capital	21.9	20.4	Total interest-bearing liabilities	176.8	126.4
Bond issues and liabilities to credit institutions	63.9	37.7	50% of Hybrid capital	-11.0	-10.2
Commercial papers and Repos	71.0	46.2	Present value of pension obligations	27.8	40.3
Liabilities to associated companies	0.9	1.5	Wind & other environmental provisions	11.5	11.7
Liabilities to minority shareholders	9.7	10.7	Provisions for nuclear power (net)	53.9	40.2
Lease liabilities	6.7	6.2	Margin calls received	-2.1	-3.3
Other liabilities	2.5	3.7	Liabilities to minority owners due to consortium agreements	-9.7	-10.7
Total interest-bearing liabilities	176.8	126.4	Adjustment related to assets/liabilities held for sale	1.0	0.0
Reported cash, cash equivalents & short-term investments	172.4	170.9	= Adjusted gross debt	246.2	194.4
Loans to minority owners of foreign subsidiaries	0.5	0.2	Reported cash, cash equivalents & short-term investments	172.4	170.9
Net debt	-3.9	44.7	Unavailable liquidity	-3.0	-3.4
			= Adjusted cash, cash equivalents & short-term investments	169.4	167.4
			= Adjusted net debt	-76.8	-26.9

Nuclear provisions

Reactor ¹	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	Total Ringhals: 45.1	Total Ringhals: 45.1²	
Forsmark 1	984	1980	66.0			
Forsmark 2	1,120	1981	66.0			
Forsmark 3	1,170	1985	66.0	Total Forsmark: 41.7	Total Forsmark: 27.5	
Total Sweden	6,974	-		91.4³	75.0³	39.8⁴
Brunsbüttel	771	1977	66.7	12.0	8.0	
Brokdorf	1,410	1986	20.0	0	3.7	
Krümmel	1,346	1984	50.0	7.6	7.6	
Stade ⁵	640	1972	33.3	0	0.3	
Total Germany	4,167	-	-	19.6	19.7	
Total SE & DE	11,141			111.0	94.7	

¹ Five reactors are in commercial operation in Sweden; Ringhals 3 & 4 and Forsmark 1, 2 & 3.

² Vattenfall has 100% liability of Ringhals decommissioning, while owning only 70.4%

³ Total provisions in Sweden (IFRS accounting) include provisions of SEK 0.5 bn (pro rata SEK 0.5 bn) related to Ägesta, SEK 3.6 bn (pro rata SEK 2.0 bn) related to SVAFO and SEK 0.5 bn (pro rata SEK 0.0 bn) related to SKB.

⁴ Vattenfall's share of the Nuclear Waste Fund. IFRS consolidated value is SEK 47.5 bn.

⁵ Stade is being dismantled

Items affecting comparability

Amounts in SEK million	Full year 2022	Full year 2021	Oct-Dec 2022	Oct-Dec 2021
Items affecting comparability	-24,668	29,090	- 37,531	- 1,342
- of which, capital gains	312	8,960	108	156
- of which, capital losses	- 122	- 199	- 28	- 32
- of which, impairment losses	- 90	- 38	- 89	- 38
- of which, reversed impairment losses	668	1,922	- 624	1,922
- of which, provisions	- 5,206	- 3,785	- 1,882	- 1,332
- of which, changes in the fair value of energy derivatives	-17,709	8,715	- 30,914	- 1,822
- of which, changes in the fair value of inventories	-2,406	1,313	- 3,988	- 488
- of which, other non-recurring items affecting comparability	-115	12,202	- 114	292

Major items FY 2022

- Changes in market value for energy derivatives and inventories (SEK -20.1 billion)
- Increase in provisions (SEK -5.2 billion) mainly pertains to the nuclear operations

Calculation of EBITDA, underlying EBITDA and underlying EBIT

Amounts in SEK million	Full year 2022	Fyll year 2021	Oct-Dec 2022	Oct-Dec 2021
Operating profit (EBIT)	12,645	60,271	-24,062	7,750
Depreciation, amortisation and impairment losses	-17,868	- 15,519	-5,553	- 2,476
EBITDA	30,513	75,790	-18,509	10,226
Items affecting comparability excl. impairment losses and reversed impairment losses	25,246	- 27,206	36,818	3,226
Underlying EBITDA	55,759	48,584	18,309	13,452
Operating profit (EBIT)	12,645	60,271	-24,062	7,750
Items affecting comparability	24,668	- 29,090	37,531	1,342
Underlying EBIT	37,313	31,181	13,469	9,092

Impairment history 2009 – 2022




SEK bn		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
The Netherlands	Thermal assets		4.3 ¹	0.4 ²	8.6 ²	14.7	2.6		2.8			0.7				34.1
	Trading					6.5 ¹	10.0 ¹		0.7							17.2
	Other	1.2	1.2			1.5 ²	1.9				0.1	0.2				6.1
Germany	Thermal assets			0.3		4.3	5.7	19.2	26.1			0.1	11.3			67.0
	Nuclear assets			10.5												10.5
	Transmission		5.1													5.1
	Other					0.1	1.1	0.3	2.3	0.4			1.2			5.4
The Nordic Countries	Renewable assets						1.4		0.1			0.2	1.6		0.1	3.4
	Thermal assets	4.1				3.0		0.1								7.2
	Nuclear assets							17.0	0.4							17.4
	Other								0.3							0.3
UK	Renewable assets						1.1	0.2				0.1				1.4
	Other											0.1				0.1
Not allocated		0.2	0.5	0.1												0.8
Impairment Liberia					1.3											1.3
Impairments; shares in Enea S.A. Poland					2.4											2.4
Impairments; shares in Brokdorf and Stade									1.1							1.1
Impairments		5.5	11.1	11.3	12.3	30.1	23.8	36.8	33.8	0.4	0.1	1.5	14.1	0.0	0.0	180.9
Reversed impairment losses		-1.3	-1.3	-0.4	0.0	0.0	0.0	-0.5	-0.9	0.0	0.0	0.0	0.0	-1.9	-0.7	-7.0
Impairments (net)		4.2	9.8	10.9	12.3	30.1	23.8	36.3	32.9	0.4	0.1	1.5	14.1	-1.9	-0.6	173.9

¹ Impairment of goodwill












² Impairment of assets and goodwill

Wind & Solar - Installed capacity (MW¹) Q4 2022

	Solar	Onshore	Offshore	Total
United Kingdom	0	450	686	1,136
Denmark	0	213	1,170	1,383
The Netherlands	74	490	0	564
Sweden	0	638	110	748
Germany	2	7	636	645
Total (MW)	77	1,798	2,602	4,477

 Solar
 Onshore
 Offshore

United Kingdom – ROC scheme

 Thanet	300
 Ormonde (51%)	150
 Aberdeen	97
 Kentish Flats	90
 Kentish Flats Extension	50
 Pen Y Cymoedd	228
 South Kyle	67
 Ray	54
 Edinbane	41
 Clashindarroch	37
 Swinford	22














Installed capacity (MW) 1,136

Sweden – certificate scheme

 Blakliden + Fäbodberget	353
 Grönhult	67
 Lillgrund	110
 Stor-Rottiden	78
 Högabjär-Kärsås (50%)	38
 Höge Väg (50%)	37
 Hjuleberg (50%)	36
 Juktan (50%)	29






Installed capacity (MW) 748

Denmark – FIT scheme

 Kriegers Flak	605
 Horns Rev 3	407
 Horns Rev 1 (60%)	158
 Klim (98%)	67
 Nørrekær Enge 1 (99%)	30
 Rejsby Hede	23
 Hagesholm	23
 Nørre Økse Sø	17
 Tjæreborg Enge	17
 Bajlum (89%)	15
 DræbyFed	9
 Ejsing (97%)	7
 Lyngmose	5



















Installed capacity (MW) 1,383

Germany – EEG scheme

 DanTysk (51%)	288
 Sandbank (51%)	288
 alpha ventus (26%)	60
 Westküste (20%)	7
 Decentral Solar installations	2

Installed capacity (MW) 645

The Netherlands – MEP/SDE(+)

 Princess Ariane	184
 Princess Alexia	122
 Haringvliet	38
 Slufterdam	29
 Moerdijk	27
 Haringvliet	22
 Nij Hiddum Houw	19
 A16 / Klaverspoor	34
 Eemmeerdijk	17
 Irene Vorrink	17
 Echteld	8
 Oom Kees (12%)	6
 Oudendijk	5
 Eemshaven	6
 Velsen	2
 Hemweg	2
 Diemen	1
 Decentral Solar installations	25

Installed capacity (MW) 564

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

Main renewables projects in our 5 core countries

Country	Name	Capacity (MW)	Support scheme	Awarded	Duration of support	Ownership (%)	Commissioning	Current status
NL	Hollandse Kust Zuid 1-4	1,520	-	X	-	51	2023	Under construction, Partnering with BASF
DK	Vesterhav	344	FIT	X	50.000hrs	100	2023/2024	Under construction
UK	South Kyle	240	-	N/A	-	100	2023	Under construction
NL	Windplan Blauw	77	SDE+	X	15 yrs	100	2023	Under construction
UK	Battery@Ray	20	-	-	-	100	2023	Under construction
In construction		2,201						
UK	Norfolk projects	3,600	CfD		15 yrs	100	2027-2029	Norfolk Boreas received CfD in AR4, Norfolk Vanguard is preparing for CfD bid in AR5
UK	Scotwind	750	CfD			50	2030	Under development with consenting and permitting progressing to ensure participation in the CfD bid, JV with Fred Olsen
GE	N-7.2 (Global Tech II)	980	-		-	100	2027	Development rights received in September 2022, FID planned for 2023
In development (in mature stage)		5,330						

■ Offshore
 ■ Onshore
 ■ Solar
 ■ Batteries

¹ The project has been sold but Vattenfall will build and operate the wind farm

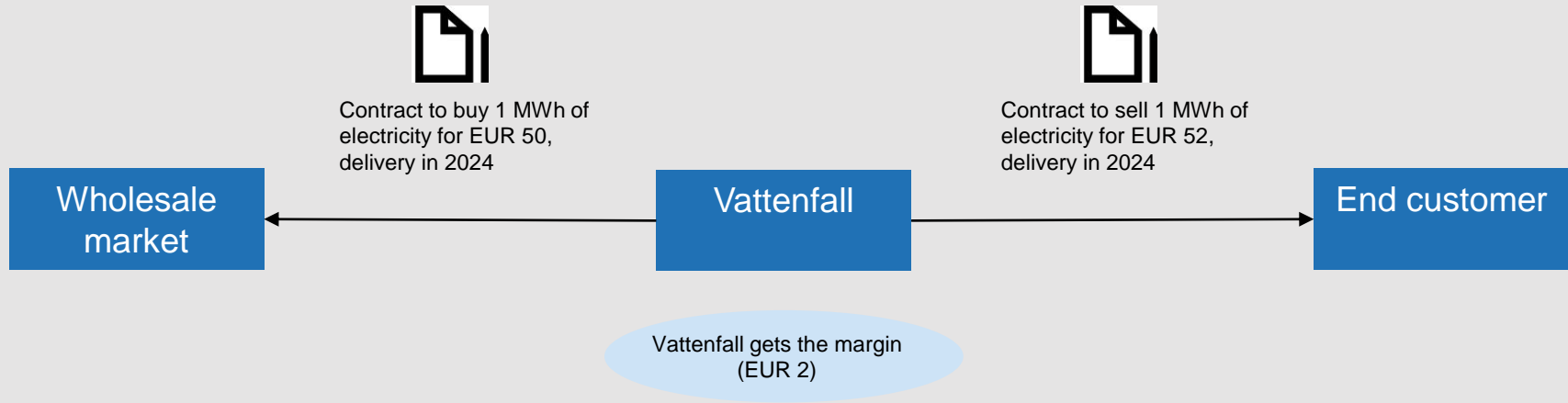
Additional webinar slides



VATTENFALL

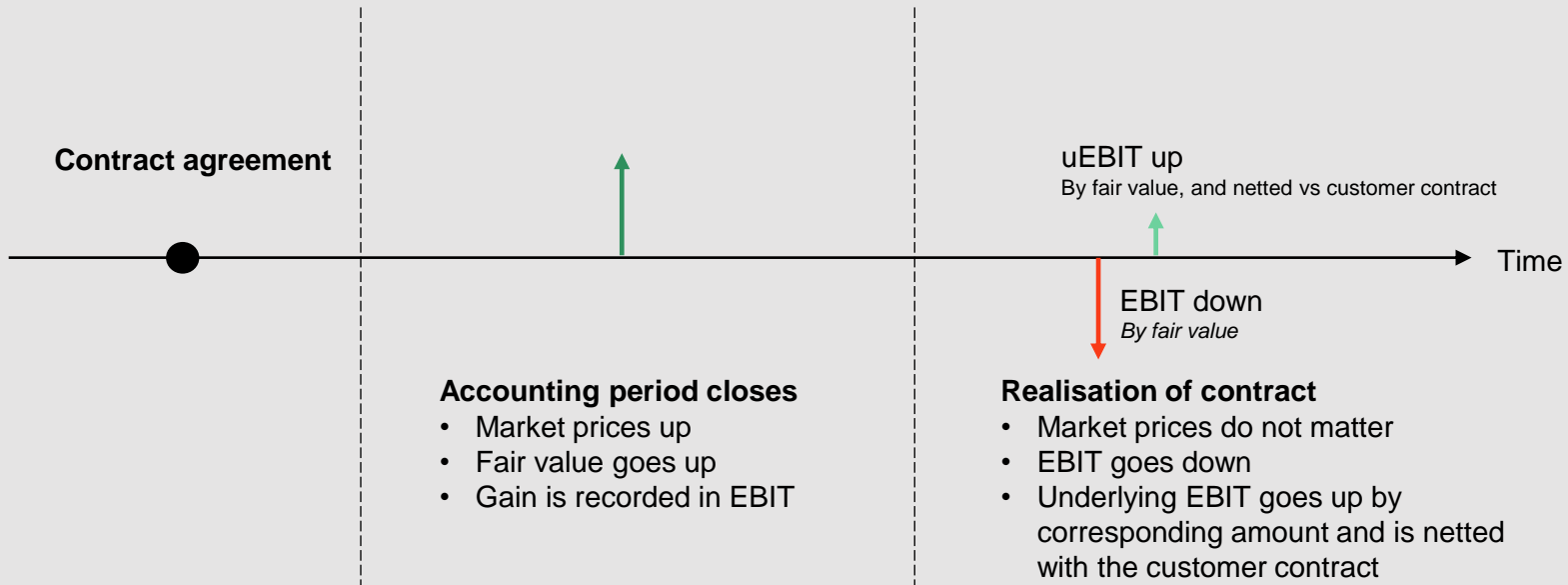
Fair values - simplified example

Business model – hedging of customer sales



Fair values - simplified example

Futures contracts in the accounts in the case of no hedge accounting



Electricity futures price development

Electricity futures price development (SYS, DE, NL), Jan 2021 - Dec 2022

EUR/MWh

