

# Vattenfall H1 and Q2 Results 2023

20 July 2023

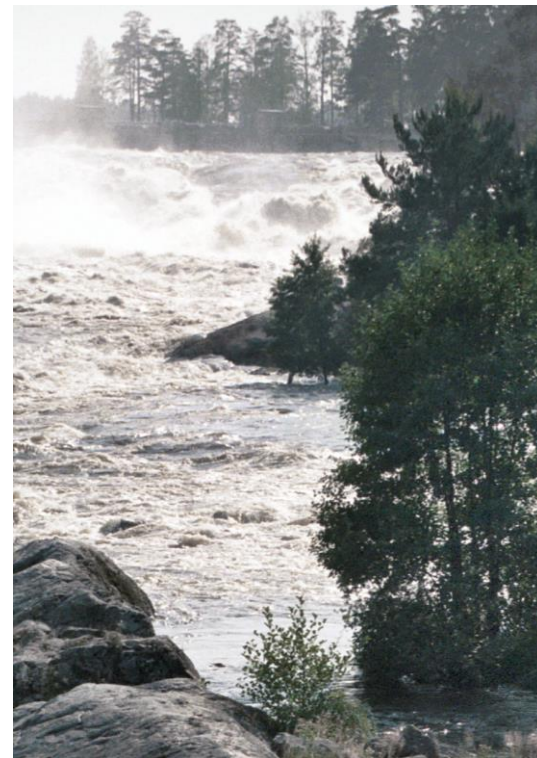


VATTENFALL

# Vattenfall H1 Results 2023

## In brief

- Lower electricity prices and reduced price area differences
  - Vattenfall stops the development of the offshore wind power project Norfolk Boreas in the UK which gave rise to a negative impact on earnings of SEK 5.5 billion
  - Vattenfall's goal of net-zero emissions by 2040 approved by the Science Based Targets initiative
  - Work started on increasing capacity at four existing sites for hydro power generation in Sweden
  - Inauguration of the South Kyle onshore wind farm in the UK and completed construction of the Hollandse Kust Zuid offshore wind farm in the Netherlands
  - Vattenfall has been allocated more capacity by the Swedish TSO Svenska kraftnät, which will enable continued expansion of the electricity grid
- 
- Underlying EBIT decreased by SEK 1.7 bn to SEK 14.6 bn:
    - Lower earnings from the Power Generation segment, mainly owing to a negative effect from Continental hedges which have not been as effective as in the Nordics
    - Lower earnings from the Wind business due to lower electricity prices
    - Strong contribution from the Heat business due to higher heat prices which were adjusted after the increase in fuel prices last year
- 
- Profit for the period decreased by SEK 3.4 bn to SEK 6.9 bn. Impairments and provisions for offshore wind power in Norfolk in the UK had a negative impact. A higher return from the Swedish Nuclear Waste fund had an offsetting effect.



# Vattenfall H1 Results 2023

## Overview

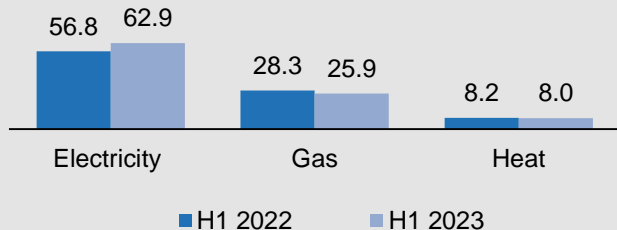
### Result development

SEK BN	H1 2023	H1 2022	Δ
Net Sales	158.5	107.7	47%
EBITDA	27.1	32.6	-17%
Underlying operating profit (EBIT)	14.6	16.3	-10%
EBIT	13.5	24.5	-45%
Profit for the period	6.9	10.3	-33%

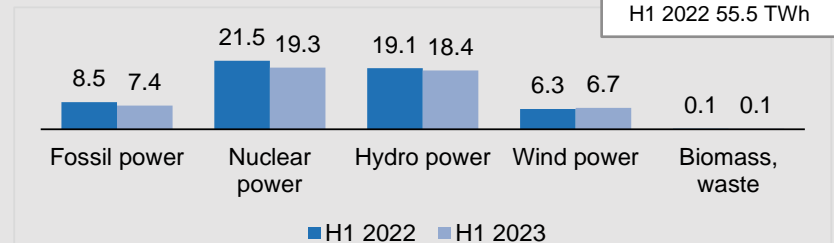
### Financial targets

	H1 2023	H1 2022
Return on capital employed (≥8%)	0.5%	19.3%
FFO/adjusted net debt (22-27%)	30.6%	103.0%

### Customer sales (TWh)



### Electricity generation (TWh)





# Customers & Solutions

More customers choose Vattenfall

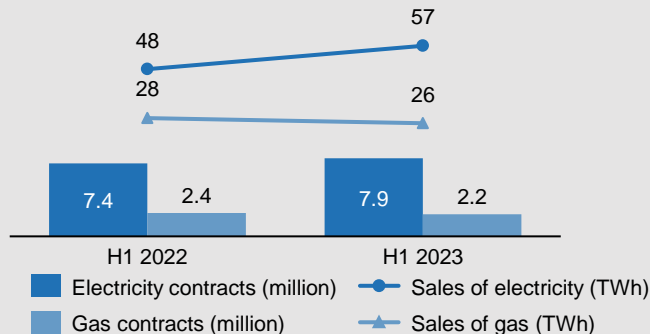
## Highlights

SEK million	H1 2023	H1 2022
Net Sales	123,508	79,418
Underlying operating profit	3,638	3,350

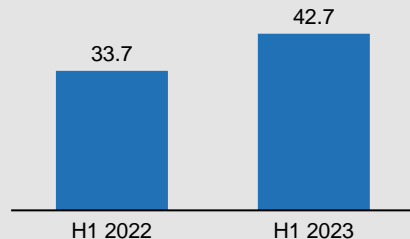
- Net sales increased by 56%. Underlying operating profit increased by 9% and was affected by positive currency effects. The growing customer base in Germany impacted the result positively, which was offset by lower gross margin in the B2C Nordic segment
- The customer base increased by 3% to 11.1 million customers compared to year-end 2022
- The customer base in Germany exceeded over five million customers, placing Vattenfall among the three largest suppliers on the private customer market
- Continued expansion of charging station infrastructure for electric cars, including new partnerships with Lufthansa Group, Lindab, Svenska Hus and Storebrand.

## Key data

Retail sales development



Charging points for electric vehicles (thousand)



# Power Generation

Ongoing pre-studies to increase hydro power capacity

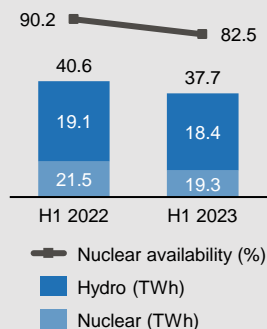
## Highlights

SEK million	H1 2023	H1 2022
Net Sales	119,175	89,264
Underlying operating profit	3,902	7,264

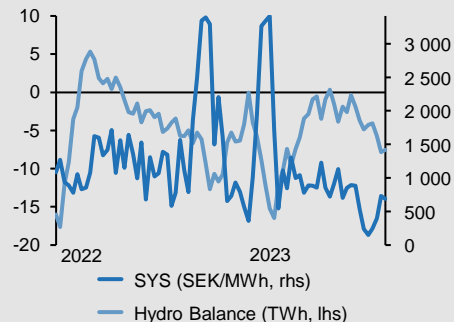
- Net sales increased by 34%. Underlying operating profit decreased by 46% mainly owing to a negative effect from continental price hedges which have not been as effective as in the Nordics. A higher realised trading result and higher achieved price had an offsetting effect
- Lower generation from nuclear and hydro power generation during the first half year
- Work started on increasing capacity by up to 720 MW at four existing sites for hydro power generation
- Agreement with Volvo Group on the supply of renewable electricity from the Bruzaholm wind farm

## Key data

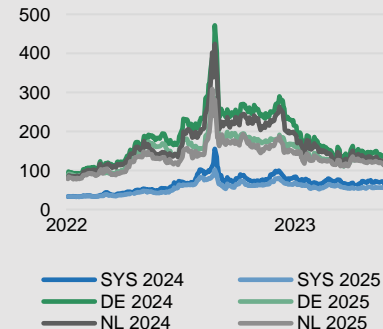
Production and availability



Nordic hydro balance and system price



Electricity futures prices (EUR/MWh)



# Wind

Underlying profit decreased due to lower electricity prices, Impairment of wind power project in the UK

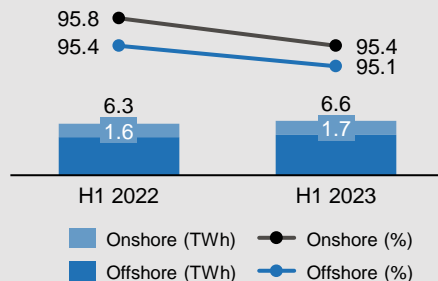
## Highlights

SEK million	H1 2023	H1 2022
Net Sales	11,193	12,966
Underlying operating profit	3,443	6,729

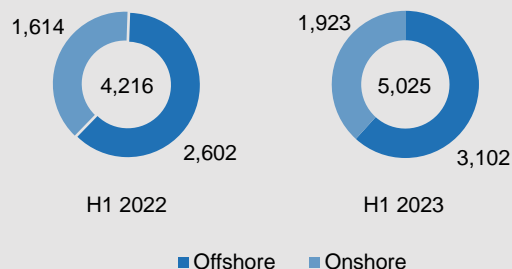
- Net sales decreased by 14% compared to 2022. Underlying operating profit decreased by 49% due to lower electricity prices, partly compensated by new capacity from Hollandse Kust Zuid offshore wind farm in the Netherlands
- Electricity generation increased by 5% mainly as a result of new capacity from Hollandse Kust Zuid offshore wind farm
- Vattenfall has decided to stop the development of the offshore wind power project Norfolk Boreas in the UK
- Inauguration of Vattenfall's largest onshore wind farm in the UK, South Kyle
- Completed construction of the Hollandse Kust Zuid offshore wind farm in the Netherlands

## Key data

Production and availability



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



<sup>1</sup> Added capacity during the last 12 months amounted to 809 MW and mainly included Hollandse Kust Zuid (499 MW of 1,520 MW), South Kyle (192 MW of 240 MW), Grönhult (67 MW), Nij Hiddum Houw (15 MW) and A16/Klaverspooor (34 MW)

# Heat

Improved result due to price adjustments for heat sales

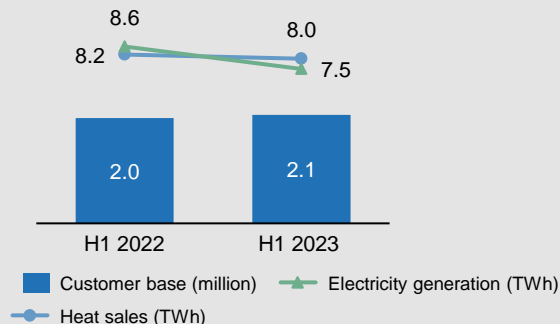
## Highlights

SEK million	H1 2023	H1 2022
Net Sales	25,828	27,964
Underlying operating profit	3,135	-1,400

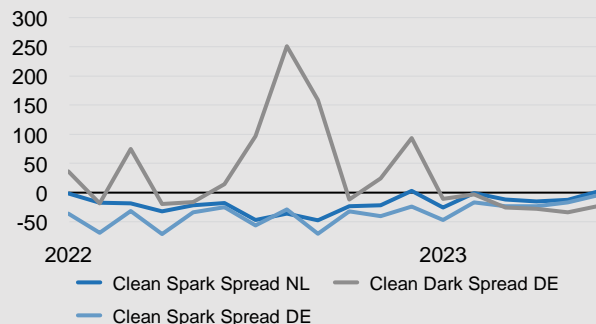
- Net sales decreased by 8%. Underlying operating profit increased mainly due to price adjustments for heating, which compensates for higher fuel costs in 2022
- Plan for reducing carbon dioxide emissions presented to the city of Berlin
- Connection of new and existing buildings to district heating networks contribute to reduced CO<sub>2</sub> emissions
- Heat sales decreased somewhat as a result of customers' energy conservation measures

## Key data

Sales and production



Spreads<sup>1</sup> (EUR/MWh)



<sup>1</sup> CSS NL with 52% efficiency, CSS DE with 50% efficiency, CDS DE with 38% efficiency

# Distribution

Lower costs for the transmission network had a positive impact on results

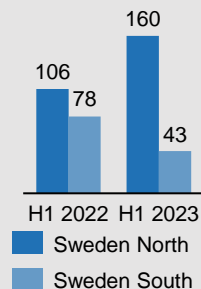
## Highlights

SEK million	H1 2023	H1 2022
Net Sales	6,539	6,523
Underlying operating profit	1,775	1,286

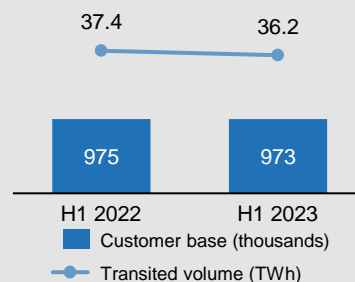
- Net sales was unchanged compared to 2022. Underlying operating profit increased by 38%, which is mainly driven by extraordinarily high costs for the transmission network in 2022. Higher personnel costs and maintenance costs due to growth had a countering effect.
- Temporary reduction of the electricity grid tariff for customers connected to the local grid from 1 July to 31 December 2023
- Vattenfall has been allocated more capacity by the Swedish TSO Svenska kraftnät, which will enable the continued expansion of the electricity grid
- The Energy Market Inspectorate has paused the change of method for determining electricity grid companies' revenue frames

## Key data

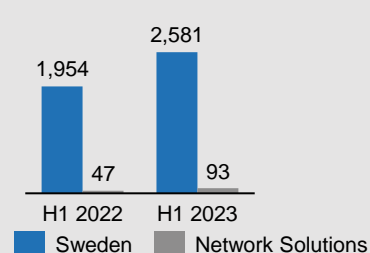
Service level (SAIDI, min)<sup>1</sup>



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 H1 Results 2023

## Financial highlights

### Key data

SEK bn	H1 2023	H1 2022
Net Sales	158.5	107.7
EBITDA	27.1	32.6
Underlying operating profit (EBIT)	14.6	16.3
EBIT	13.5	24.5
Profit for the period	6.9	10.3
Funds from Operations (FFO)	16.9	20.3
Cash flow operating activities	-25.1	18.6
Net debt	48.4	-29.3
Adjusted net debt	126.9	43.7
Adjusted net debt/EBITDA <sup>1</sup> (times)	5.1	0.6

### Financial targets

ROCE <sup>1</sup> (≥8%)	0.5	19.3
FFO/adjusted net debt <sup>1</sup> (22-27%)	30.6	103.0

<sup>1</sup> Last 12-month values

### Key developments

- Net sales increased by SEK 50.8 bn to SEK 158.5 bn due to higher prices in the customer business and partly higher volumes in the business segment in France
- Underlying EBIT decreased by SEK 1.7 bn to SEK 14.6 bn. Negative contribution from the Power Generation segment due to negative effect from hedges on the Continent and lower contribution from the Wind segment due to lower electricity prices. Positive contribution from the Heat segment due to higher heat prices
- Profit for the period decreased to SEK 6.9 bn, affected by impairment and provision for offshore wind power projects in Norfolk in the UK. A higher return from the Swedish Nuclear Waste Fund had an offsetting impact
- ROCE based on rolling 12-month figures decreased to 0.5%, mainly due to negative changes in market value for energy derivatives and inventories in Q4 last year and impairment and provision for offshore wind power projects in Norfolk in the UK. Based on underlying operating profit, ROCE was 10.7%
- FFO/Adjusted net debt based on rolling 12-month figures decreased to 30.6%. The ratio is coming down from last year's temporary high levels, caused by the positive effects from the margin calls for commodity hedging activities

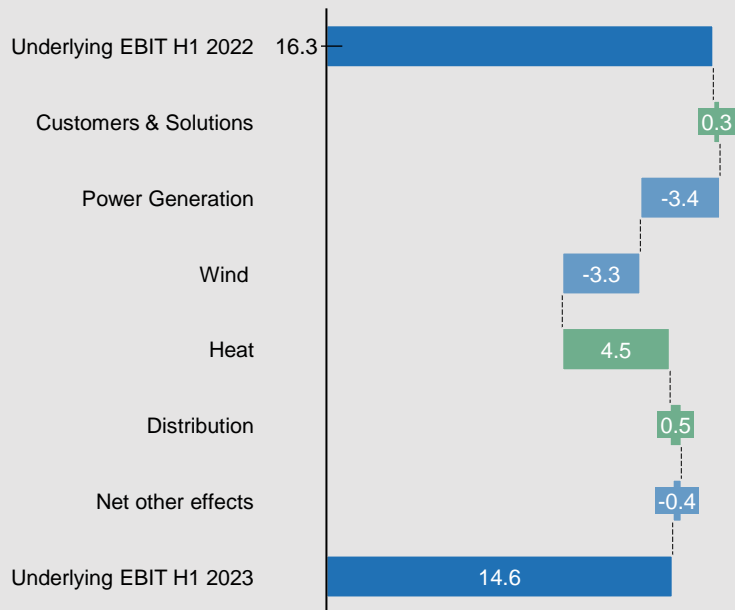


# Development of underlying EBIT H1 2023

Decrease from Power Generation and Wind partly offset by higher earnings in Heat

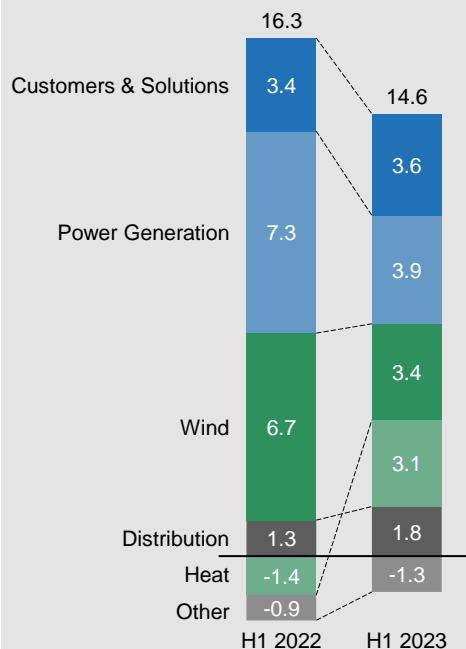
## Change in H1 2023 vs. H1 2022

SEK bn



## Breakdown per operating segment

SEK bn

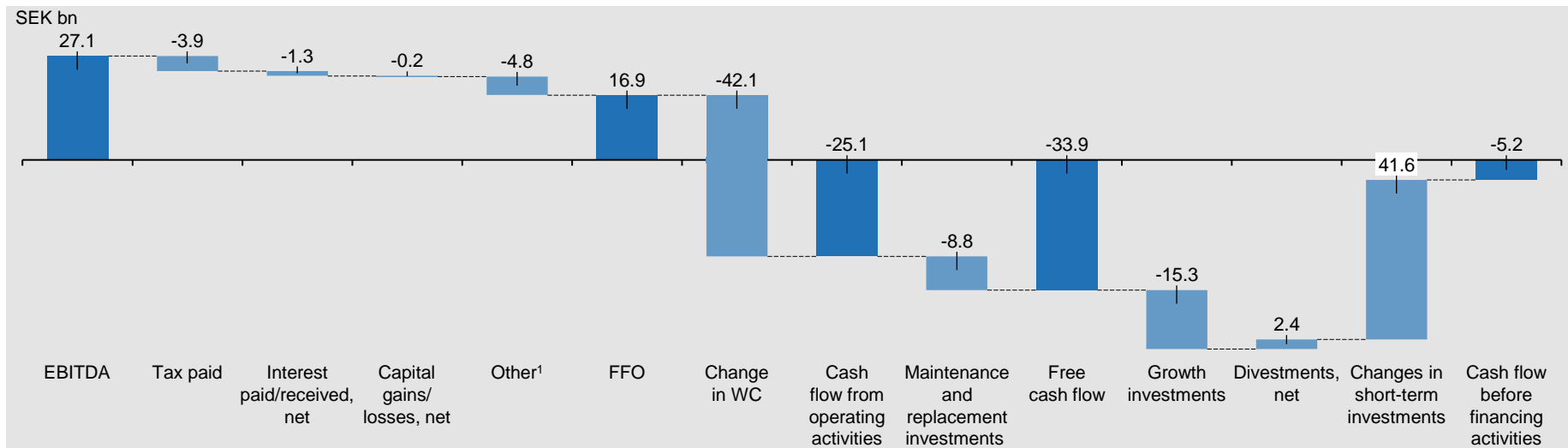


## Highlights

- Customers & Solutions: positive currency effects and increased customer base in Germany
- Power Generation: negative effect from hedges on the Continent as these have not been as efficient as in the Nordics
- Wind: lower electricity prices, partially offset by new installed capacity
- Heat: higher heat prices mainly due to price adjustments for heating, which compensates for higher fuel costs in 2022
- Distribution: extraordinary high costs for the transmission network during 2022. Higher personnel costs and higher maintenance costs due to growth had an offsetting impact

# Cash flow development H1 2023

Positive 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 -51.6 bn). Lower operating receivables in operating segments Power Generation (SEK +10.9 bn) and Customers & Solutions (SEK +2.1 bn), partially offset by higher operating receivable in operating segment Heat (SEK -8.5 bn)
- Changes in short-term investments are related to sales of short-term papers in order to offset the negative impact from the net change in margin calls paid

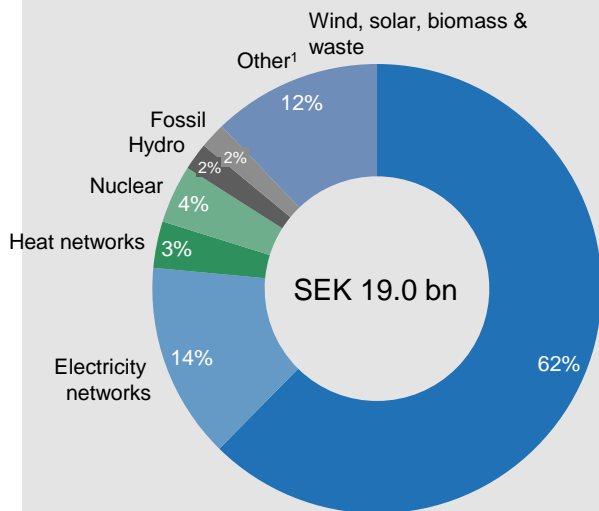
<sup>1</sup> "Other" includes non-cash items included in EBITDA, mainly changes in fair value of commodity derivatives



# Capital expenditures

Majority of investments directed to renewables and electricity grids

Investments per category, H1 2023



Detailed overview of investments, H1 & Q2 2023

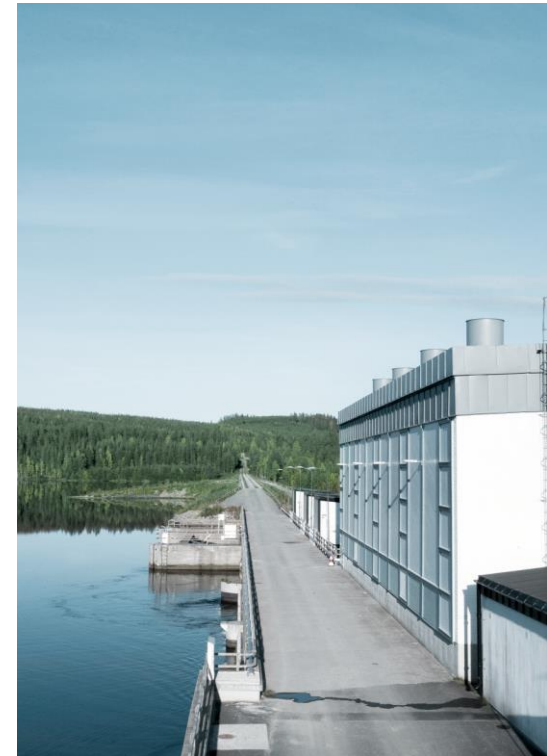
SEK bn	H1 2023	H1 2022		Q2 2023	Q2 2022	
Hydro	0.4	0.2	49%	0.2	0.1	60%
Nuclear	0.8	0.7	7%	0.4	0.3	28%
Fossil	0.4	0.4	-11%	0.2	0.2	50%
Wind, solar, biomass & waste	11.8	5.6	110%	5.8	3.5	64%
Electricity networks	2.7	2.0	33%	1.6	1.2	32%
Heat networks	0.6	0.5	25%	0.4	0.3	11%
Other	2.3	1.0	122%	1.4	0.7	99%
<b>Total</b>	<b>19.0</b>	<b>10.6</b>	<b>79%</b>	<b>10.0</b>	<b>6.4</b>	<b>56%</b>

¹ Mainly pertains to investments in immaterial assets

# Overview of key figures H1 and Q2 2023

Amounts in SEK bn unless indicated otherwise	H1 2023	H1 2022	Q2 2023	Q2 2022
Net sales	158.5	107.7	61.8	48.2
EBITDA	27.1	32.6	5.8	15.4
EBIT	13.5	24.5	-2.8	11.7
Underlying operating profit (EBIT)	14.6	16.3	5.1	6.8
Profit for the period	6.9	10.3	-4.9	4.2
Electricity generation (TWh)	51.9	55.5	23.7	24.6
Sales of electricity (TWh)	85.1	83.3	39.4	38.7
- of which, customer sales (TWh)	62.9	56.8	28.4	26
Sales of heat (TWh)	8	8.2	2.3	2.4
Sales of gas (TWh)	25.9	28.3	7.6	8.2
Return on capital employed (≥8%)	0.5 <sup>1</sup>	19.3 <sup>1</sup>	0.5	19.3
FFO/adjusted net debt (22-27%)	30.6 <sup>1</sup>	103.0 <sup>1</sup>	30.6	103.0

<sup>1</sup> Last 12-month values

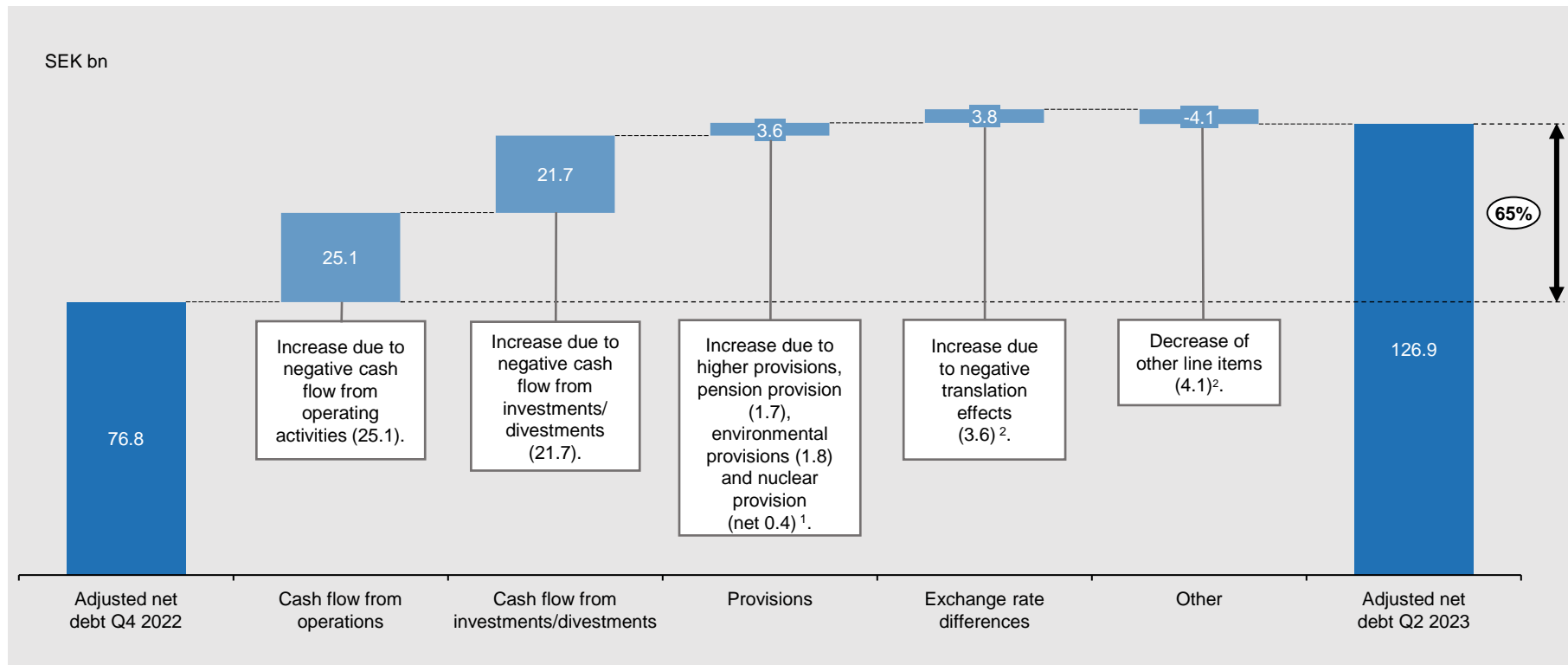


# Appendix



# Development of adjusted net debt YTD 2023

Adjusted net debt increased mainly due to negative cashflow from operating activities and investments.



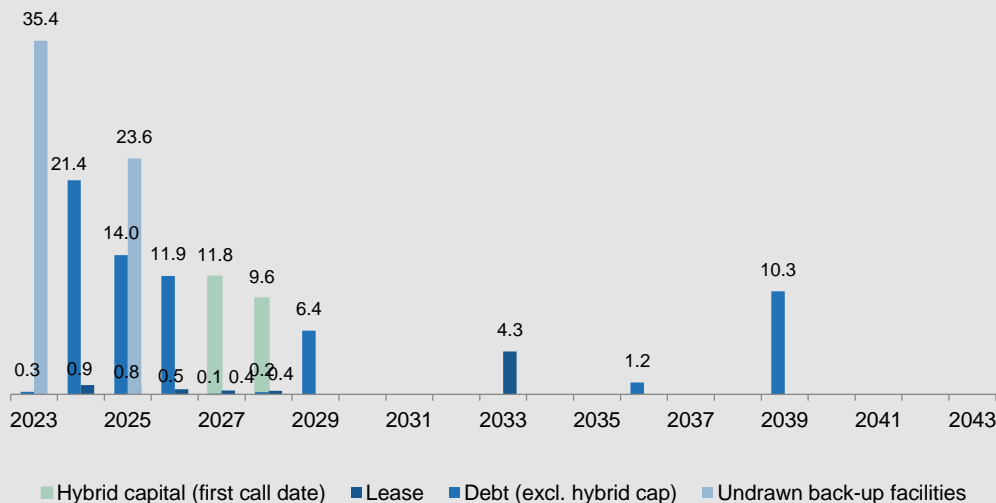
<sup>1</sup> Nuclear provision increased net by SEK 0.4 bn, whereof in Germany by 1.6 whereof negative translation effects (1.0) and inflation driven cost increase partly was offset by discount rate increase (net effect 0.6), in Sweden nuclear provision decrease by 1.3 mainly due higher return from nuclear waste fund.

<sup>2</sup> SEK weakened against EUR (from 11.12 to 11.81); translation of EUR denominated net debt into SEK leads to increase in Adjusted net debt.



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

SEK bn



<sup>1</sup> Short term debt (Repo's and Commercial paper: 11.7), 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.

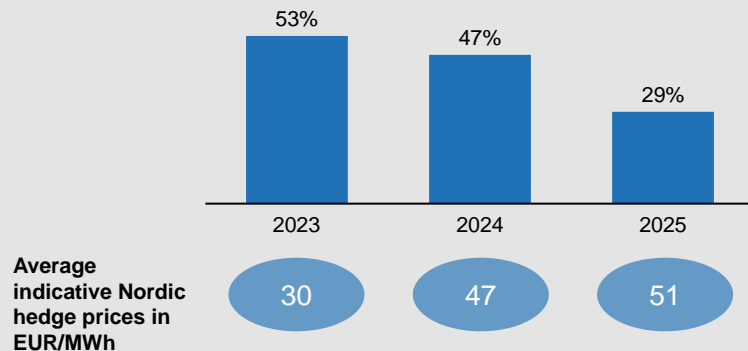
	30 Jun. 2023	31 Dec. 2022
Duration (years)	3.1	3.2
Average time to maturity (years)	4.7	5.0
Average interest rate (%)	4.0	3.5
Net debt (SEK bn)	- 48.4	- 3.9
Available group liquidity (SEK bn)	67.7	169.4
Undrawn committed credit facilities (SEK bn)	59.0	70.1

## Cumulative maturities excl. undrawn back-up facilities

	2023- 2025	2026- 2028	From 2029
Debt incl. hybrid capital	37.9	34.4	22.2
% of total	40%	36%	24%

# Price hedging

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



Achieved prices<sup>2</sup> - Nordic portfolio

YTD 2023	YTD 2022	Q2 2023	Q2 2022	FY 2022
38	18	35	15	27

Vattenfall's price hedging strategy is primarily focused on the Nordic generation assets because the primary risk exposure is linked to base production of nuclear power and hydro power. The degree of hedging is highest for the next few years and decreases thereafter. 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 in the first half of 2023 increased due to lower price area differentials

<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

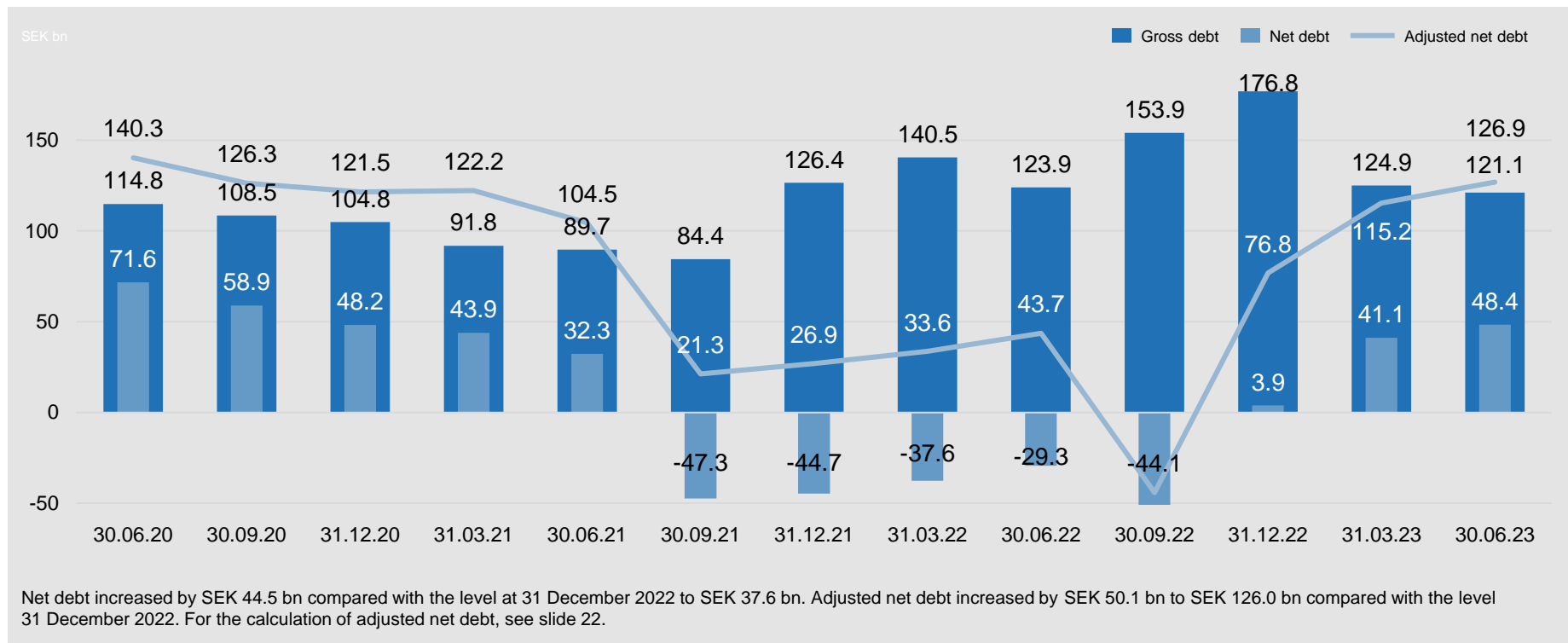
# Liquidity position

<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	45.1	Committed credit lines (2023)	3.0	35.4
Short term investments	27.0	RCF (2025)	2.0	23.6
<b>Reported cash, cash equivalents &amp; short term investments</b>	<b>72.1</b>	<b>Total undrawn</b>		<b>59.0</b>
		<b>Debt maturities<sup>2</sup></b>		<b>SEK bn</b>
Unavailable liquidity <sup>1</sup>	-4.3	Within 90 days		0.0
<b>Available liquidity</b>	<b>67.7</b>	Within 180 days		1.2

<sup>1</sup> German nuclear "Solidarvereinbarung" 1.0 SEK bn, Margin calls paid (CSA) 2.3 SEK bn, Insurance "Provisions for claims outstanding" 1.0 SEK bn.

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

# Debt development

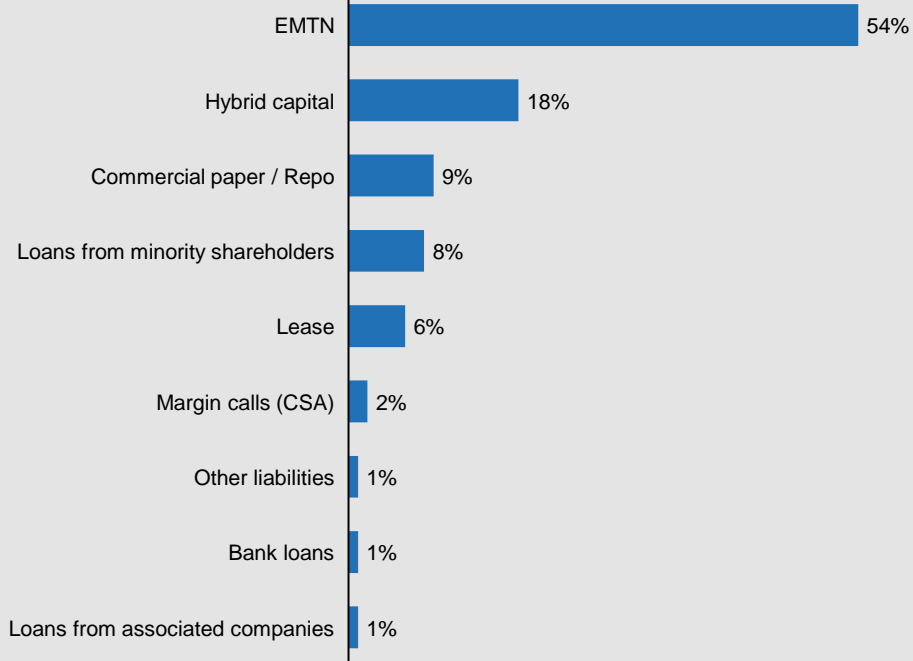




# Breakdown of gross debt

**Total debt: SEK 121.1 bn (EUR 10.3 bn)**

**External market debt: SEK 110.3 bn (EUR 9.3 bn)**



Debt issuing programmes	Size (EUR bn)	Utilization (EUR bn)
EUR 10bn Euro MTN	10.0	5.5
EUR 10bn Euro CP	10.0	0.6
Total	20.0	6.2

- 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.

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

# Reported and adjusted net debt

Reported net debt (SEK bn)	30 Jun. 2023	31 Dec. 2022	Adjusted net debt (SEK bn)	30 Jun. 2023	31 Dec. 2022
Hybrid capital	22.2	21.9	Total interest-bearing liabilities	121.1	176.8
Bond issues and liabilities to credit institutions	66.9	63.9	50% of Hybrid capital	-11.1	-11.0
Commercial papers and Repos	10.5	71.0	Present value of pension obligations	29.5	27.8
Liabilities to associated companies	0.9	0.9	Wind & other environmental provisions	13.2	11.5
Liabilities to minority shareholders	9.9	9.7	Provisions for nuclear power (net)	54.3	53.9
Lease liabilities	7.3	6.7	Margin calls received	-2.5	-2.1
Other liabilities	3.3	2.6	Liabilities to minority owners due to consortium agreements	-9.9	-9.7
<b>Total interest-bearing liabilities</b>	<b>121.1</b>	<b>176.8</b>	Adjustment related to assets/liabilities held for sale	0	1.0
Reported cash, cash equivalents & short-term investments	72.1	172.4	<b>= Adjusted gross debt</b>	<b>194.6</b>	<b>246.2</b>
Loans to minority owners of foreign subsidiaries	0.6	0.5	Reported cash, cash equivalents & short-term investments	72.1	172.4
<b>Net debt</b>	<b>48.4</b>	<b>3.9</b>	Unavailable liquidity	-4.4	-3.0
			<b>= Adjusted cash, cash equivalents &amp; short-term investments</b>	<b>67.7</b>	<b>169.4</b>
			<b>= Adjusted net debt</b>	<b>126.9</b>	<b>76.8</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: 45.0</b>	<b>Total Ringhals: 45.0<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: 41.8</b>	<b>Total Forsmark: 27.6</b>	
<b>Total Sweden</b>	<b>6,974</b>	<b>-</b>		<b>91.4<sup>3</sup></b>	<b>75.0<sup>3</sup></b>	<b>41.1<sup>4</sup></b>
Brunsbüttel	771	1977	66.7	13.1	8.7	
Brokdorf	1,410	1986	20.0	-	3.8	
Krümmel	1,346	1984	50.0	8.5	8.5	
Stade	640	1972	33.3	-	0.3	
<b>Total Germany</b>	<b>4,167</b>	<b>-</b>	<b>-</b>	<b>21.6</b>	<b>21.3</b>	
<b>Total SE &amp; DE</b>	<b>11,141</b>			<b>113.0</b>	<b>96.3</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 0.4 bn (pro rata SEK 0.4 bn) related to Ågesta, SEK 3.6 bn (pro rata SEK 1.9 bn) related to SVAFO and SEK 0.5 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 49.1 bn.

# Items affecting comparability

Amounts in SEK million	Jan-Jun 2023	Jan-Jun 2022	Apr-Jun 2023	Apr-Jun 2022	Full year 2022	Last 12 months
<b>Items affecting comparability</b>	<b>-1,063</b>	<b>8,199<sup>1</sup></b>	<b>-7,848</b>	<b>4,919<sup>1</sup></b>	<b>-22,430<sup>1</sup></b>	<b>-31,692</b>
- of which, capital gains	191	204	-107	187	312	299
- of which, capital losses	-26	-66	-22	-63	-122	-82
- of which, impairment losses	-3,721	-1	-3,705	-1	-90	-3,810
- of which, reversed impairment losses	1	898	1	898	668	-229
- of which, provisions	-1,704	-1,255 <sup>1</sup>	-2,649	-1,255 <sup>1</sup>	-2,968 <sup>1</sup>	-3,417
- of which, changes in the fair value of energy derivatives	4,852	5,210	-1,368	400	-17,709	18,067
- of which, changes in the fair value of inventories	-655	3,209	2	4,750	-2,406	-6,270
- of which, other non-recurring items affecting comparability	-1	—	—	3	-115	-116

## Major items H1 2022

- Impairment losses (SEK -3.7 bn) and a large part of provisions (SEK -1.7 bn) relate to offshore wind power in Norfolk, in the UK
- Unrealised changes in the fair value of energy derivatives and inventories, SEK 4.2 bn

## Calculation of EBITDA, underlying EBITDA and underlying EBIT

Amounts in SEK million	Jan-Jun 2023	Jan-Jun 2022	Apr-Jun 2023	Apr-Jun 2022	Full year 2022	Last 12 months
Operating profit (EBIT)	13,541	24,513	-2,791	11,730	12,645	1,673
Depreciation, amortisation and impairment losses	-13,591	-8,122	-8,624	-3,656	-17,868	-23,337
<b>EBITDA</b>	<b>27,132</b>	<b>32,635</b>	<b>5,833</b>	<b>15,386</b>	<b>30,513</b>	<b>25,010</b>
Items affecting comparability excl. impairment losses and reversed impairment losses	-2,657	-7,302 <sup>1</sup>	4,144	-4,022 <sup>1</sup>	23,008 <sup>1</sup>	27,653
<b>Underlying EBITDA</b>	<b>24,475</b>	<b>25,333</b>	<b>9,977</b>	<b>11,364</b>	<b>53,521</b>	<b>52,663</b>
Operating profit (EBIT)	13,541	24,513	-2,791	11,730	12,645	1,673
Items affecting comparability	1,063	-8,199 <sup>1</sup>	7,848	-4,919 <sup>1</sup>	22,430 <sup>1</sup>	31,692
<b>Underlying EBIT</b>	<b>14,604</b>	<b>16,314</b>	<b>5,057</b>	<b>6,811</b>	<b>35,075</b>	<b>33,365</b>

1) The value has been adjusted compared with information previously published in Vattenfall's financial reports

# Impairment history 2009 – YTD 2023

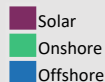
SEK bn		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
The Netherlands	Thermal assets		4.3 <sup>1</sup>	0.4 <sup>2</sup>	8.6 <sup>2</sup>	14.7	2.6		2.8			0.7					34.1
	Trading					6.5 <sup>1</sup>	10.0 <sup>1</sup>		0.7								17.2
	Other	1.2	1.2			1.5 <sup>2</sup>	1.9				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				3.7	5.1
	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
<b>Impairments</b>		<b>5.5</b>	<b>11.1</b>	<b>11.3</b>	<b>12.3</b>	<b>30.1</b>	<b>23.8</b>	<b>36.8</b>	<b>33.8</b>	<b>0.4</b>	<b>0.1</b>	<b>1.5</b>	<b>14.1</b>	<b>0.0</b>	<b>0.1</b>	<b>3.7</b>	<b>184.6</b>
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	0.0	-7.0
<b>Impairments (net)</b>			<b>9.8</b>	<b>10.9</b>	<b>12.3</b>	<b>30.1</b>	<b>23.8</b>	<b>36.3</b>	<b>32.9</b>	<b>0.4</b>	<b>0.1</b>	<b>1.5</b>	<b>14.1</b>	<b>-1.9</b>	<b>-0.6</b>	<b>3.7</b>	<b>177.6</b>

<sup>1</sup> Impairment of goodwill

<sup>2</sup> Impairment of assets and goodwill

# Wind & Solar - Installed capacity (MW<sup>1</sup>) Q2 2023

	Solar	Onshore	Offshore	Total
United Kingdom	0	575	686	1 261
Denmark	0	213	1 170	1 383
The Netherlands	75	490	499	1 064
Sweden	0	638	110	748
Germany	2	7	636	645
<b>Total (MW)</b>	<b>77</b>	<b>1 923</b>	<b>3 102</b>	<b>5 102</b>



## United Kingdom – ROC scheme

Thanet	300
Ormonde (51%)	150
Aberdeen	97
Kentish Flats	90
Kentish Flats Extension	50
Pen Y Cymoedd	228
South Kyle	192
Ray	54
Edinbane	41
Clashindarroch	37
Swinford	22

**Installed capacity (MW) 1 261**

## Sweden – certificate scheme

Blakliden + Fäbodberget	353
Lillgrund	110
Stor-Rotliden	78
Grönhult	67
Högbjör-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(+)

Hollandse Kust Zuid	499
Princess Ariane	184
Princess Alexia	122
Haringvliet	38
A16 / Klaverspoor	34
Slufterdam	29
Moerdijk	27
Haringvliet	22
Nij Hiddum Houw	19
Eemmeerdijk	17
Irene Vorrink	17
Echteld	8
Oom Kees (12%)	6
Oudendijk	5
Eemshaven	6
Velsen	2
Hemweg	2
Diemen	1
Symbizon	1
Decentral Solar installations	25

**Installed capacity (MW) 565**

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

# Main 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	Commissioning ongoing, Partnering with BASF
DK	Vesterhav	344	FIT	X	50.000hrs	100	2023/2024	Under construction
UK	South Kyle	240	-	N/A	-	100	2023	Commissioning completed but taking over process ongoing
NL	Windplan Blauw	77	SDE+	X	15 yrs	100	2023	Under construction
SE	Battery@Ray	55	-		-	100	2023	Under construction
UK	Battery@Toledo	20	-		-	100	2023	Under construction
<b>In construction</b>		<b>2,236</b>						
UK	Norfolk projects	4,200	CfD		15 yrs	100	n.a.	Vattenfall has stopped the current development of Norfolk Boreas
UK	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 1 (N 7.2)	980	-		-	100	2029	Development rights received in September 2022, FID planned for 2025
<b>In development (in mature stage)</b>		<b>5,930</b>						
	Offshore							
	Onshore							
	Solar							
	Batteries							

# **Additional webcast slides**





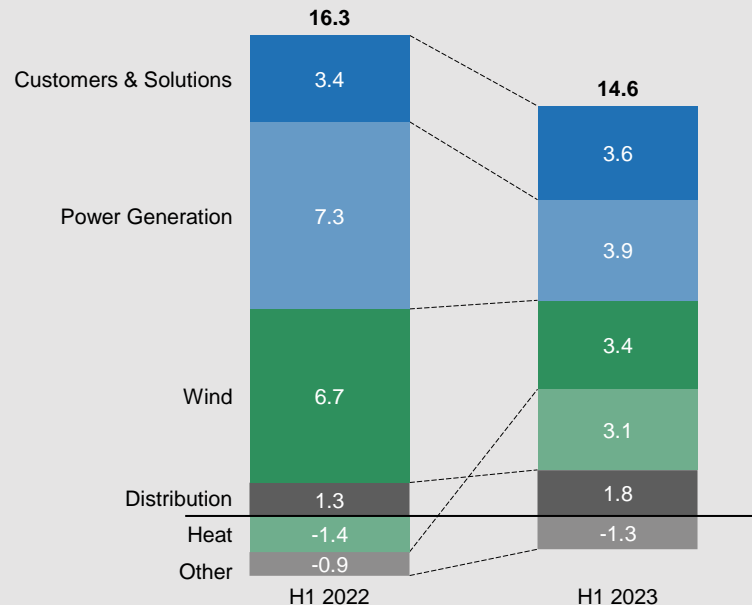
# Vattenfall H1 Results 2023

## Overview

### Key data

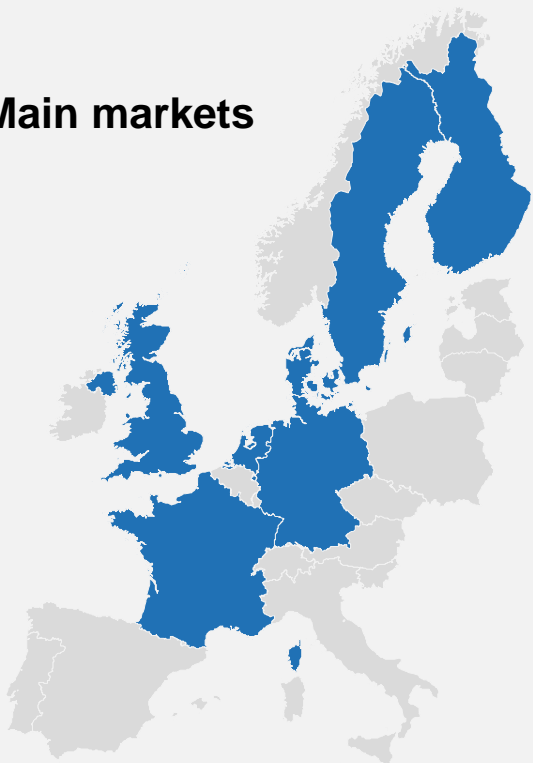
SEK bn unless indicated otherwise	H1 2023	H1 2022	Δ
Net sales	158.5	107.7	47%
EBITDA	27.1	32.6	-17%
Underlying operating profit (EBIT)	14.6	16.3	-10%
EBIT	13.5	24.5	-45%
Profit for the period	6.9	10.3	-33%
Electricity generation, TWh	51.9	55.5	-6%
Sales of electricity to customers, TWh	62.9	56.8	+11%
Sales of heat, TWh	8.0	8.2	-2%
Sales of gas, TWh	25.9	28.3	-8%
Return on capital employed (≥8%)	0.5%	19.3%	-18.8 pp.
Return on capital employed based on underlying operating profit	10.7%	10.4%	+0.3 pp.
FFO/adjusted net debt (22-27%)	30.6%	103.0%	-72.4 pp.

### Underlying EBIT development H1 2023 (SEK bn)

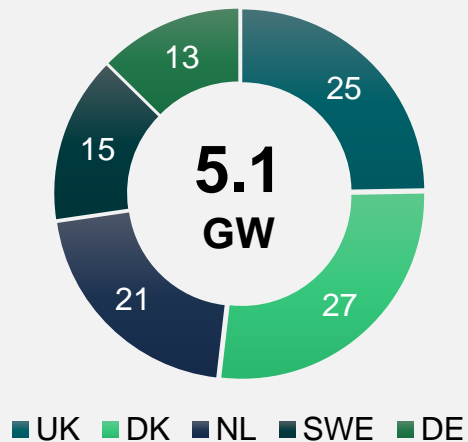


# Vattenfall Wind & Solar Power

## Main markets



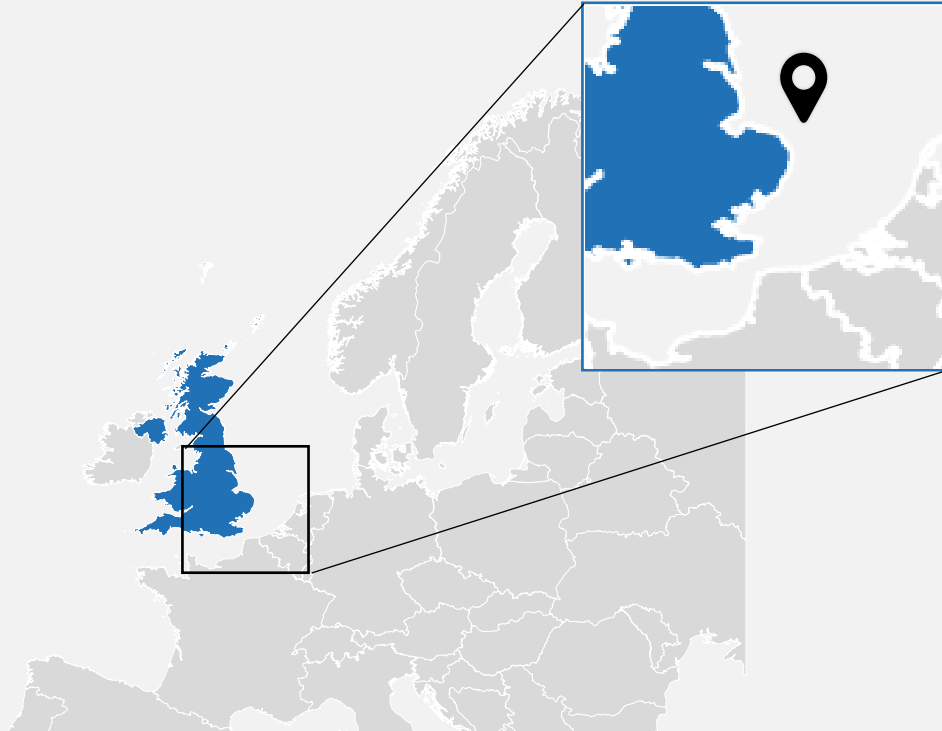
## Geographical split of installed capacity<sup>1</sup> (%)



<sup>1</sup> As of Q2 2023



# Norfolk Projects, UK



## Key data

<b>Capacity</b>	4.2 GW
<b>Technology type</b>	Offshore Wind
<b>Turbine model</b>	TBD
<b>Distance from shore</b>	47 km at closest point
<b>Water depth</b>	Up to 45 m
<b>Foundations</b>	Monopiles

# Vattenfall Wind & Solar Power – Selected Milestones

