

# Vattenfall Q1 Results 2021

29 April 2021



**VATTENFALL**

# Vattenfall Q1 Results 2021

- Agreement on compensation for nuclear phase-out in Germany
  - Parts of production from Hollandse Kust Zuid 1-4 sold through long-term PPA
  - Divestment of the onshore wind project Grönhult in Sweden
  - Favourable ruling by Administrative Court on Swedish electricity network companies' revenue frames for the period 2020-2023
  - Construction start for Vattenfall's first district heating network in the UK - Brent Cross South in London
- 
- Underlying EBIT increased by SEK 1.9 bn to SEK 12.1 bn:
    - Higher achieved prices, increased hydro power production and higher realised trading result
    - Lower operating costs and depreciation due to closure of Moorburg
    - Partly countered by low wind speeds and lower availability within offshore wind
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- Profit for the period increased to SEK 10.4 bn. The increase stems in addition to the increase in underlying operating profit, from higher returns from the Nuclear Waste Fund



# Vattenfall Q1 Results 2021

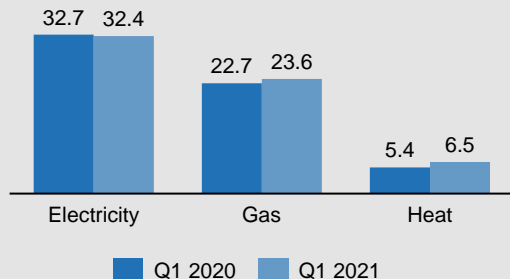
## Result development

SEK bn	Q1 2021	Q1 2020	Δ
Net Sales	45.9	48.2	-5%
EBITDA	17.7	16.9	+5%
Underlying operating profit (EBIT)	12.1	10.2	+18%
EBIT	13.4	12.3	+9%
Profit for the period	10.4	6.9	+51%

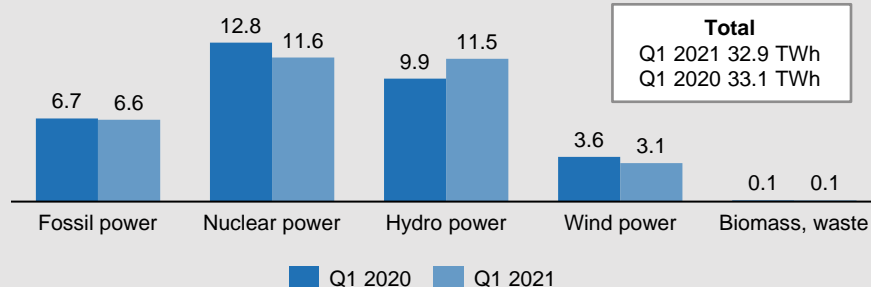
## Financial targets

	Q1 2021	Q1 2020
Return on capital employed (≥8%) <sup>1</sup>	5.9%	9.4%
FFO/adjusted net debt (22-27%) <sup>1</sup>	32.8%	25.2%

## Customer sales (TWh)



## Electricity production (TWh)



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

# Customers & Solutions

Colder weather contributed to higher volumes as customer base continues to grow

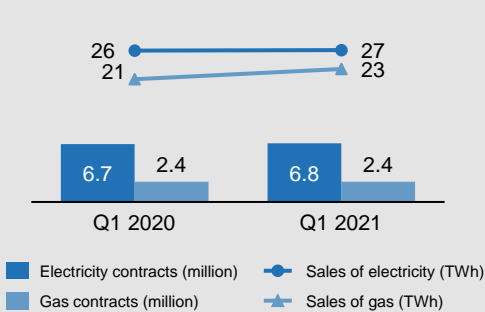
## Highlights

SEK million	Q1 2021	Q1 2020
Net Sales	27,251	26,280
Underlying operating profit	1,217	1,019

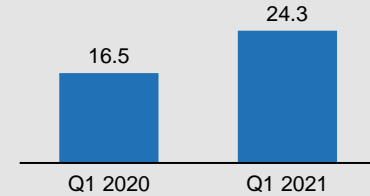
- Net sales increased by 4%. Underlying operating profit increased by 19% mainly as a result of a larger customer base in Germany and lower average temperatures in the Nordic region
- Retail contracts in Germany reach 4 million in number and the customer satisfaction on the market has reached the highest to date (measured by NPS)
- Charging solution business continues to grow – 47% increase in charging points compared to last year

## Key data

Retail sales development



Charging points for electric vehicles (thousands)





# Power Generation

## Agreement on compensation for nuclear phase-out in Germany

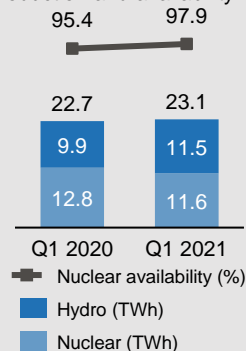
### Highlights

SEK million	Q1 2021	Q1 2020
Net Sales	28,281	26,244
Underlying operating profit	6,321	4,557

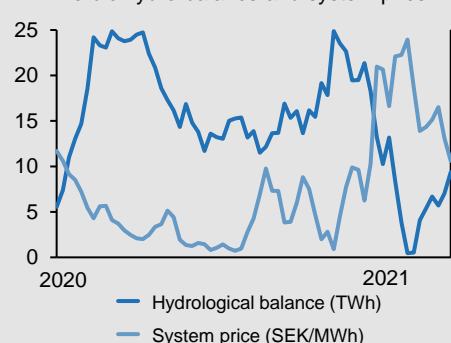
- Net sales increased by 8%. The underlying operating profit increased by 39% mainly as a result of higher achieved prices in the Nordic region, increased hydro power generation and higher realised trading result
- Agreement on compensation for early closure of German nuclear power. This will only come into force after a law authorising to conclude such agreement has been passed. Voting in the German Bundestag is expected in Q3 2021
- Corporate Power Purchase Agreement signed for parts of production from Hollandse Kust Zuid 1-4. Air Liquide to buy 100 GWh p.a. for 15 years starting 2023.

### Key data

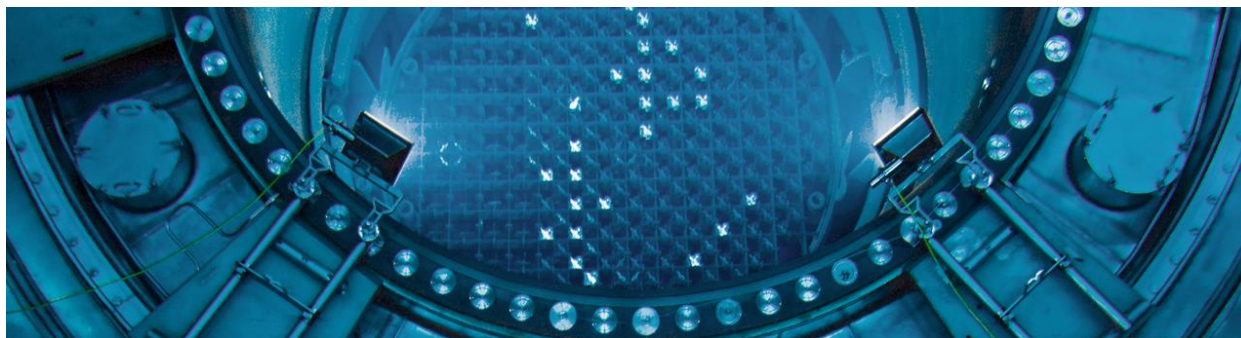
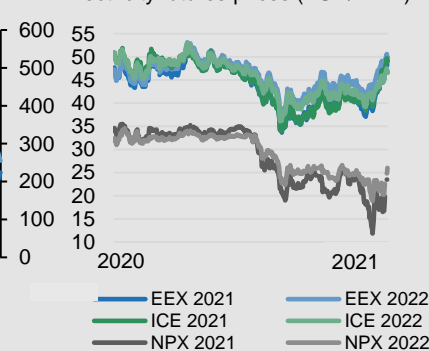
Production and availability



Nordic hydro balance and system price



Electricity futures prices (EUR/MWh)



# Wind

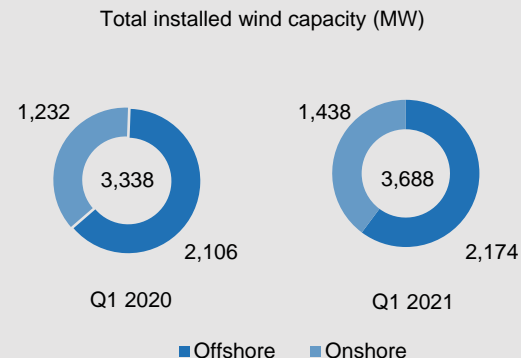
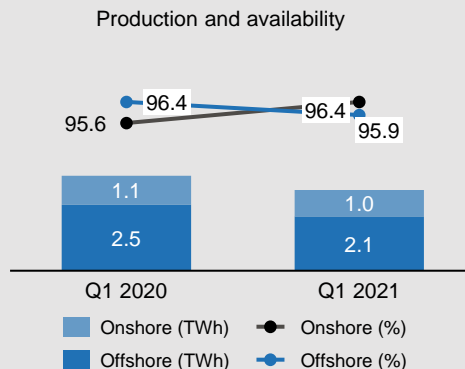
Low wind speeds and maintenance work weighed on the result in the quarter

## Highlights

SEK million	Q1 2021	Q1 2020
Net Sales	4,212	4,732
Underlying operating profit	1,767	2,146

- Net sales decreased by 11% compared to 2020. Underlying operating profit decreased by 18% due to lower wind speeds as well as more maintenance work. Partly offset by higher electricity prices and the sale of the Swedish onshore wind project Grönhult
- Half of the turbines in place at Kriegers Flak offshore wind farm (605 MW) – construction proceeding according to plan
- Development consent for offshore wind farm Norfolk Vanguard (1,800 MW) overturned – appeal in progress
- Divestment of Grönhult (67 MW) onshore wind project, Vattenfall to build and manage the wind farm

## Key data



<sup>1</sup> During the last 12 months two wind farms were commissioned, Princess Ariane (formerly: Wieringermeer) (301 MW, whereof 250 MW in 2020) and Kriegers Flak in Denmark (605 MW of which 8 MW commissioned)

# Heat

## Green light for the decommissioning of Moorburg

### Highlights

SEK million	Q1 2021	Q1 2020
Net Sales	8,583	7,052
Underlying operating profit	1,370	880

• Net sales increased by 22%. Underlying operating profit increased by 56%. The closure of Moorburg at year-end 2020 impacted positively by SEK 0.3 billion. Higher heat sales owing to lower temperatures and a growing customer base also contributed positively. The new Marzahn plant as well as the Lichterfelde plant being in full operation contributed to increased production volumes and higher CHP subsidies.

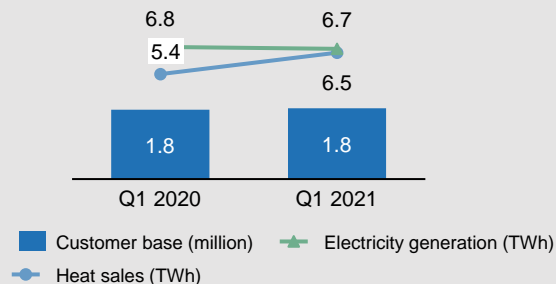
• Germany's transmission system operators announced that Moorburg is not system-critical for grid stability - decommissioning plans can therefore progress

• Production start for Amsterdam South Connection

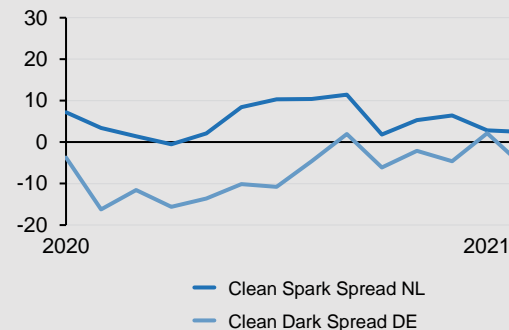
• Start of construction on Brent Cross South district heating network in London

### Key data

#### Sales and production



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



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

# Distribution

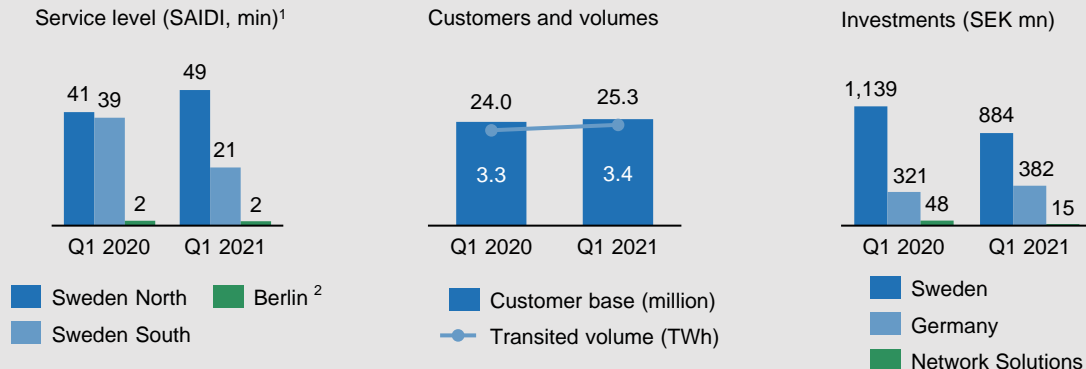
## Administrative Court sides with electricity network companies on the calculation of revenue frames in Sweden

### Highlights

SEK million	Q1 2021	Q1 2020
Net Sales	6,624	6,144
Underlying operating profit	1,795	2,074

- Net sales increased by 8%. Underlying operating profit decreased by 13% as a result of lower gross margin in the Swedish operations, mainly due to price reductions in local networks, higher costs for the transmission networks and network losses caused by higher electricity prices
- Administrative Court rules that Swedish revenue frame regulation contravenes with the Swedish Electricity Act and the EU's third electricity market directive – the ruling has been appealed by the Swedish Energy Markets Inspectorate (Ei)
- Contract awarded for Edinburgh Park South development project in the UK

### Key data



<sup>1</sup> All outages longer than 1 second in medium and low voltage networks are included

<sup>2</sup> City network in Berlin results in lower SAIDI. Vattenfall's Swedish network covers both urban areas and large rural areas.



# Financials



# Vattenfall Q1 Results 2021

## Financial highlights

### Key data

SEK bn	Q1 2021	Q1 2020
Net Sales	45.9	48.2
EBITDA	17.7	16.9
Underlying operating profit (EBIT)	12.1	10.2
EBIT	13.4	12.3
Profit for the period	10.4	6.9
Funds from Operations (FFO)	14.0	12.2
Cash flow operating activities	11.1	-8.5
Net debt	43.9	81.6
Adjusted net debt	112.2	148.3
Adjusted net debt/EBITDA <sup>1</sup> (times)	2.4	3.2
<b>Financial targets</b>		
ROCE <sup>1</sup> (≥8%)	5.9	9.4
FFO/adjusted net debt <sup>1</sup> (22-27%)	32.8	25.2

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

### Key developments

- Net sales decreased by SEK 2.2 bn to SEK 45.9 bn mainly due to negative currency effects (-1.8 bn). Lower sales volumes in the Netherlands and the B2B segment in France had an additional impact
- Underlying EBIT increased by SEK 1.9 bn mainly due to higher achieved prices, higher hydro power generation and higher realised trading result. Higher contribution from Heat also had a positive impact, mainly due to the closure of Moorburg
- Profit for the period increased to SEK 10.4 bn. The increase stems in addition to the increase in underlying operating profit, from higher returns from the Nuclear Waste Fund
- ROCE was 5.9% mainly due to impairments made in 2020
- FFO/Adjusted net debt (AND) increased to 32.8%, driven primarily by a decrease in AND. The decrease mainly stems from positive cash flow after investments which was supported by SEK 25 bn in positive working capital flows (mainly margin calls)

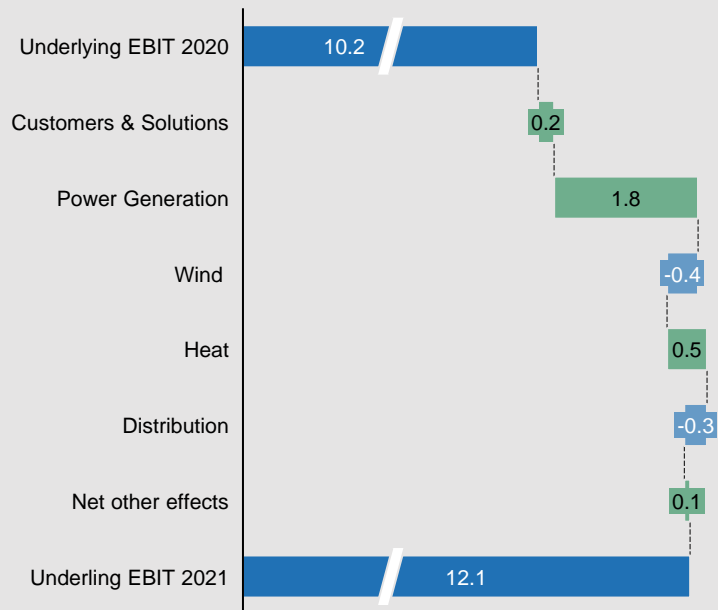


# Development of underlying EBIT Q1 2021

Increase from Power Generation, Heat and Customers & Solutions

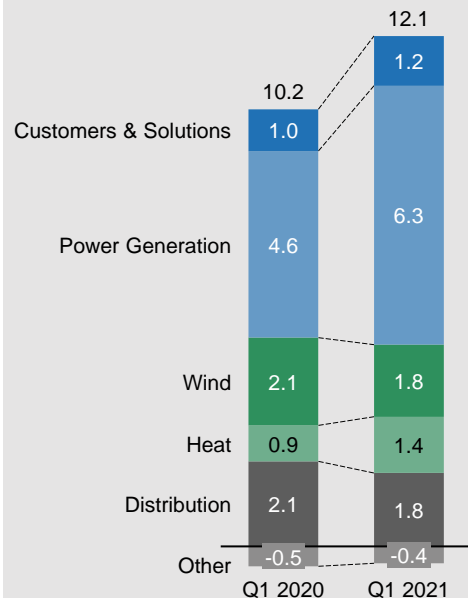
## Change in Q1 2021 vs. Q1 2020

SEK bn



## Breakdown per operating segment

SEK bn

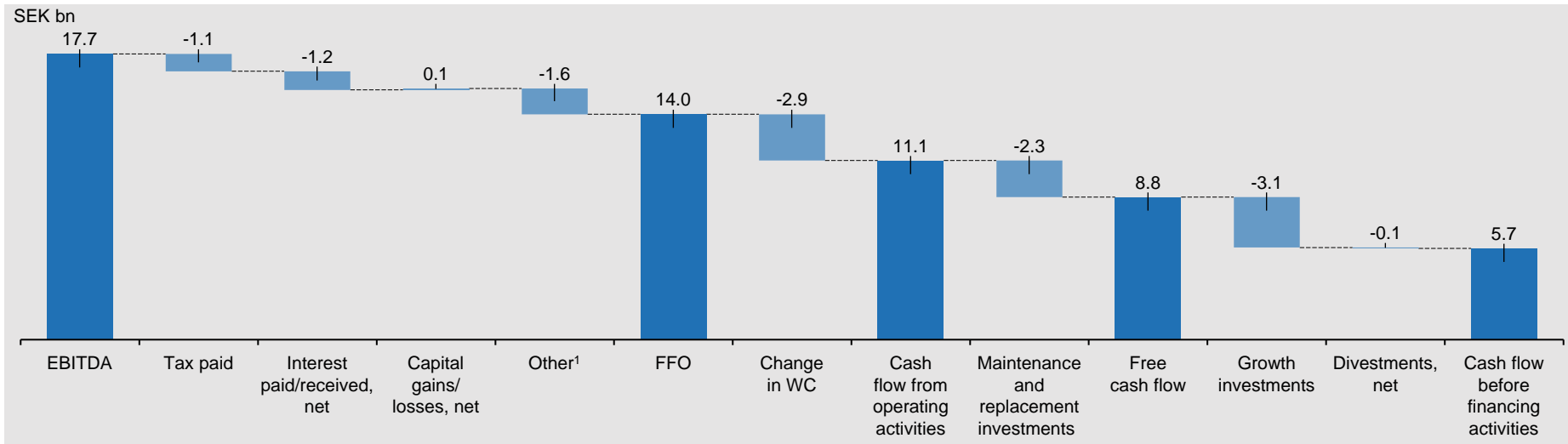


## Highlights

- Customers & Solutions: More customers in Germany and lower temperatures in the Nordics
- Power Generation: higher achieved prices, higher hydro generation and higher realised earnings from trading. Partly countered by lower nuclear power generation due to closure of Ringhals 1
- Wind: low wind speeds and more maintenance work
- Heat: lower opex and depreciation due to closure of Moorburg and higher heat sales because of lower temperatures and a growing customer base. New plant Marzahn and Lichterfelde fully in operation also contributed
- Distribution: lower margin in the Swedish operations due to lower prices in the local network

# Cash flow development Q1 2021

Higher working capital mainly due to seasonal effects within Customers & Solutions and Heat



## Main effects

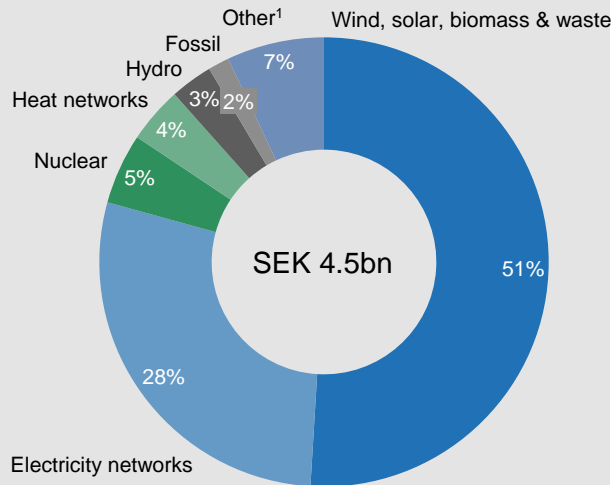
- Change in working capital mainly driven by change in operating receivables and operating liabilities attributable to seasonal effects in the Customers & Solutions and Heat operating segments (SEK -5.4 bn), changes related to CO2 emission allowances (SEK -2.6 bn) and an increase in inventories (SEK -0.4 bn). Partly countered by the net change in margin calls (SEK 4.9 billion)
- Growth investments mainly related to wind power

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, Q1 2021



Detailed overview of investments Q1 2021

SEK bn	Q1 2021	Q1 2020	Δ	FY 2020
Hydro	0.1	0.2	-13%	0.9
Nuclear	0.2	0.5	-51%	1.9
Fossil	0.1	0.3	-79%	1.5
Wind, solar, biomass & waste	2.3	0.6	265%	8.0
Electricity networks	1.3	1.5	-15%	7.4
Heat networks	0.2	0.1	63%	1.4
Other¹	0.3	0.6	-44%	2.5
<b>Total</b>	<b>4.5</b>	<b>3.8</b>	<b>20%</b>	<b>23.6</b>

¹ Mainly pretains to investments in immaterial assets



# Overview of key figures Q1 2021

Amounts in SEK bn unless indicated otherwise	Q1 2021	Q1 2020	FY 2020	Last 12 months
Net sales	45.9	48.2	158.8	156.6
EBITDA	17.7	16.9	46.5	47.3
EBIT	13.4	12.3	15.3	16.3
Underlying operating profit (EBIT)	12.1	10.2	25.8	27.7
Profit for the period	10.4	6.9	7.7	11.2
Electricity generation (TWh)	32.9	33.1	112.8	112.6
Sales of electricity (TWh)	45.4	45.4	164.1	164.0
- of which, customer sales (TWh)	32.4	32.7	118.2	117.9
Sales of heat (TWh)	6.5	5.4	13.8	14.9
Sales of gas (TWh)	23.6	22.7	56.8	57.7
Return on capital employed ( $\geq 8\%$ )	5.9 <sup>1</sup>	9.4 <sup>1</sup>	5.8	5.9
FFO/adjusted net debt (22-27%)	32.8 <sup>1</sup>	25.2 <sup>1</sup>	28.8	32.8



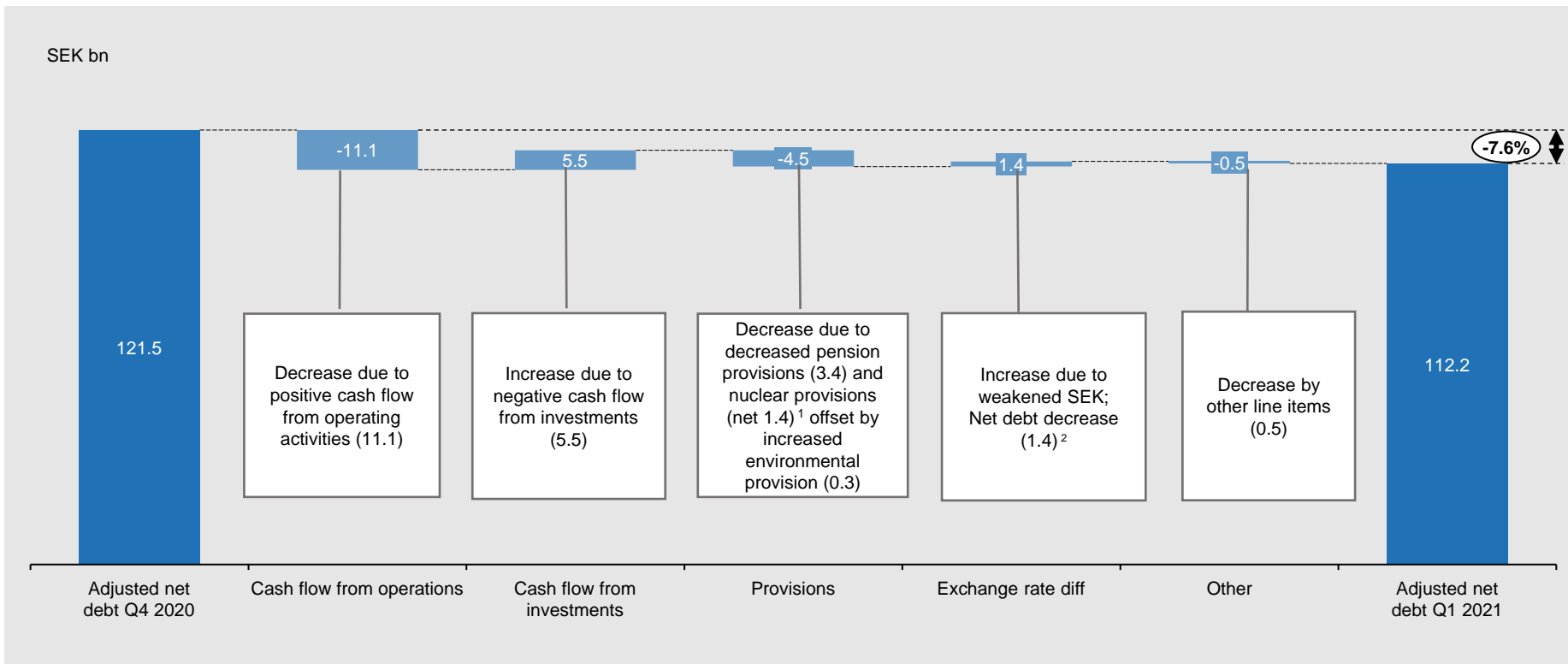
<sup>1</sup> Last 12-month values

# Appendix



# Development of adjusted net debt Q1 2021

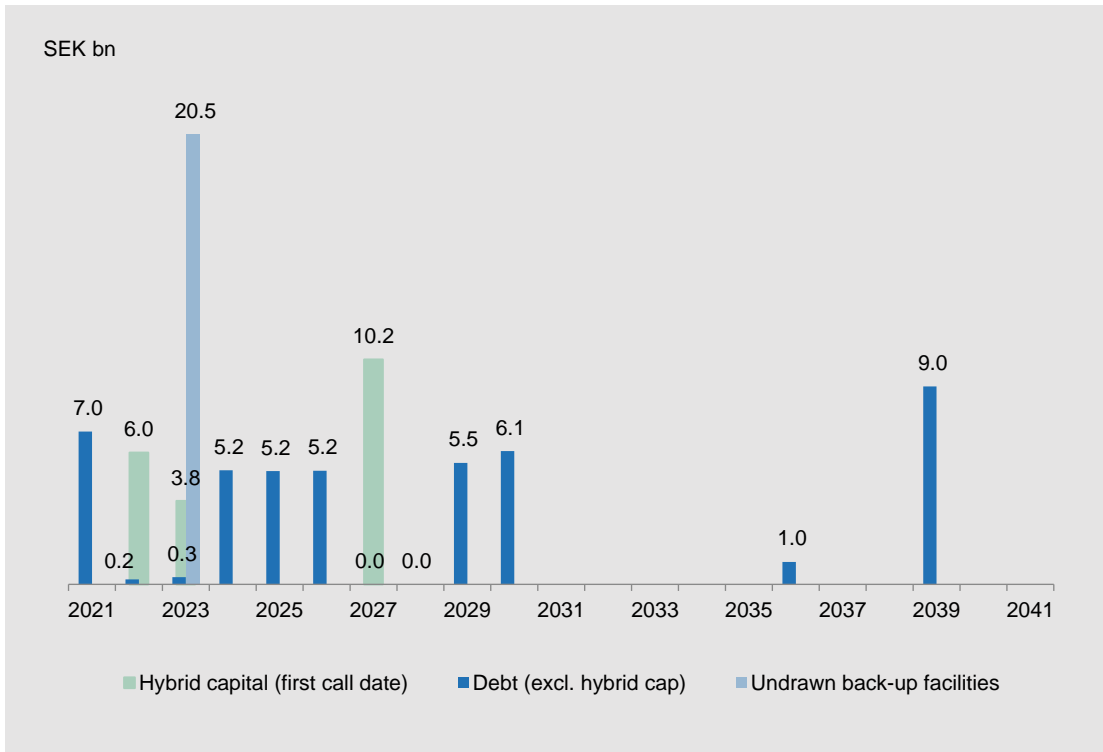
Adjusted net debt decrease mainly due to positive cashflow after investments and decrease in provisions



<sup>1</sup> Nuclear provision decreased net by SEK 1.4 bn, whereof in Sweden by SEK 1.3 bn and in Germany by SEK 0.2 bn

<sup>2</sup> SEK weakened against EUR (from 10.03 to 10.24); translation of EUR denominated net debt into SEK leads to increase in Adjusted net debt

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



	31 Mar. 2021	31 Dec. 2020
Duration (years)	4.7	3.8
Average time to maturity (years)	6.5	5.1
Average interest rate (%)	2.8	3.4
Net debt (SEK bn)	43.9	48.2
Available group liquidity (MSEK)	43.3	50.8
Undrawn committed credit facilities (MSEK)	20.5	23.1

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

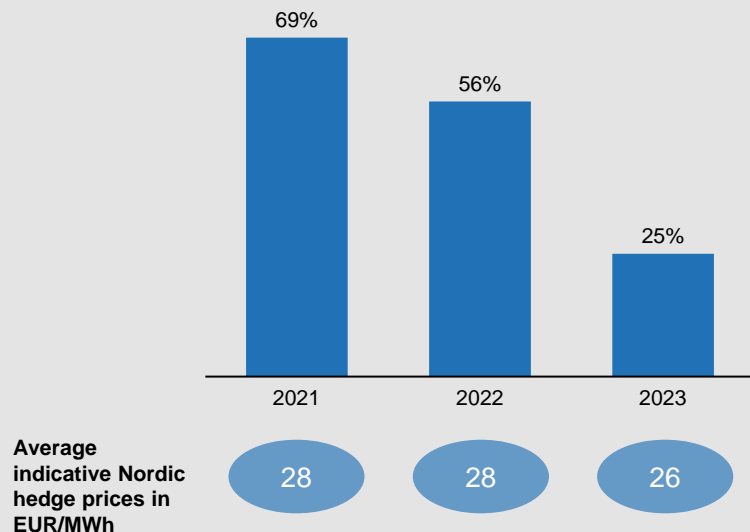
	2021-2023	2024-2026	From 2027
Debt incl. hybrid capital	17.3	15.5	31.9
<i>% of total</i>	27%	24%	49%

<sup>1</sup> Short term debt (Repo's and Commercial paper: 8.9), 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

Vattenfall continuously hedges its future electricity generation through sales in the forward and futures markets. Spot prices therefore have only a limited impact on Vattenfall's earnings in the near term

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



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

Q1 2021	Q1 2020	FY 2020
33	27	31

Sensitivity analysis – Continental<sup>3</sup> portfolio

Market quoted	+/- 10% price impact on future profit before tax, MSEK <sup>4</sup>			Observed yearly volatility
	2021	2022	2023	
Electricity	+/- 251	+/- 417	+/- 1,574	20% - 27%
Coal	-/+ 42	-/+ 30	-/+ 14	19% - 21%
Gas	-/+ 39	-/+ 106	-/+ 774	19% - 28%
CO <sub>2</sub>	-/+ 33	-/+ 55	-/+ 396	50% - 51%

<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

<sup>3</sup> Continental: DE, NL, UK.

<sup>4</sup> The denotation +/- entails that a higher price affects operating profit favorably, and -/+ vice versa



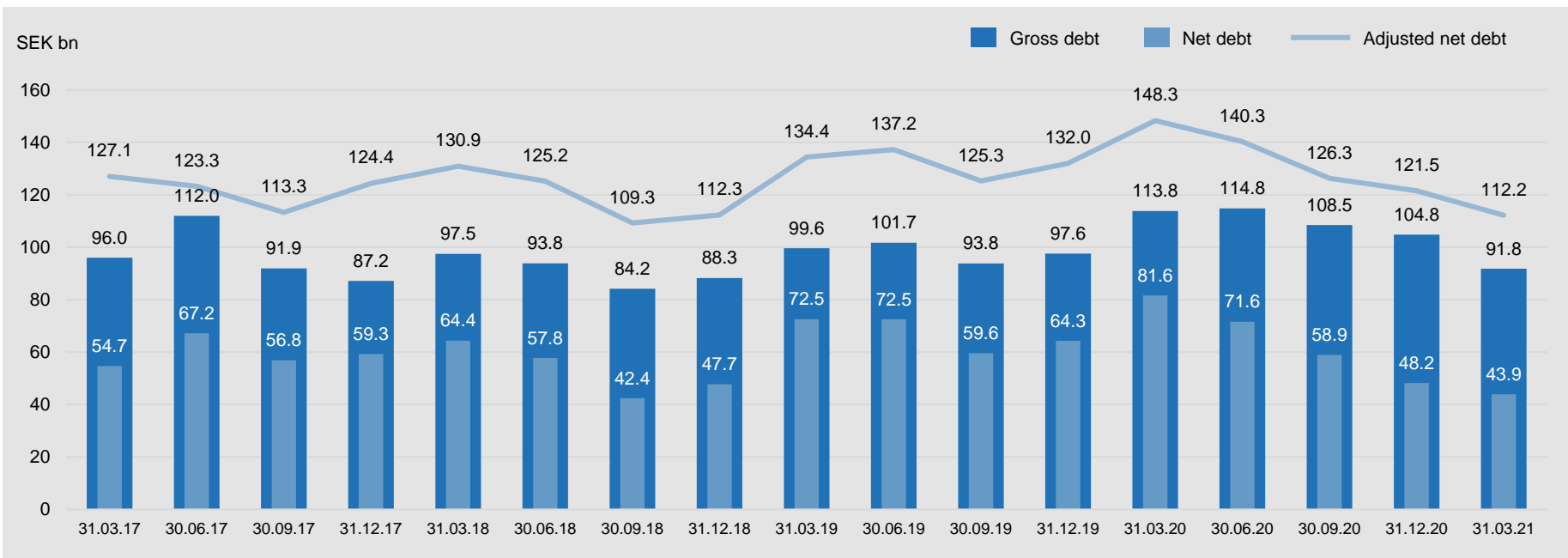
# Liquidity position

<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	18.2	RCF (maturity Nov 2023)	2.0	20.5
Short term investments	29.3	<b>Total undrawn</b>		<b>20.5</b>
<b>Reported cash, cash equivalents &amp; short term investments</b>	<b>47.5</b>			
		<b>Debt maturities<sup>2</sup></b>		<b>SEK bn</b>
Unavailable liquidity <sup>1</sup>	-4.2	Within 90 days		0
<b>Available liquidity</b>	<b>43.3</b>	Within 180 days		2.0

<sup>1</sup> German nuclear "Solidarvereinbarung" 1.2 SEK bn, Margin calls paid (CSA) 2.1 SEK bn, Insurance "Provisions for claims outstanding" 0.8 SEK bn

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

# Debt development

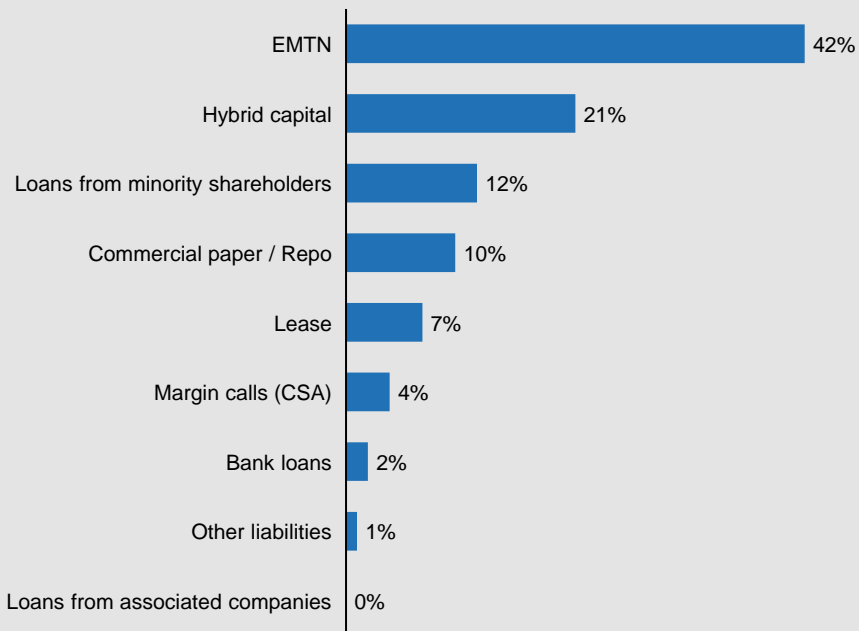


Net debt decreased by SEK 4.3 bn compared with the level at 31 December 2020. Adjusted net debt decreased to SEK 112.2 bn, SEK 9.3 bn lower compared with the level at 31 December 2020. For the calculation of adjusted net debt, see slide 23.

# Breakdown of gross debt

Total debt: SEK 91.8 bn (EUR 9.0 bn)

External market debt: SEK 80.1 bn (EUR 7.8 bn)



Debt issuing programmes	Size (EUR bn)	Utilization (EUR bn)
EUR 10bn Euro MTN	10.0	3.4
EUR 4bn Euro CP	4.0	1.0
Total	14.0	4.4

- 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)	31 Mar. 2021	31 Dec. 2020	Adjusted net debt (SEK bn)	31 Mar. 2021	31 Dec. 2020
Hybrid capital	-19.7	-19.3	Total interest-bearing liabilities	-91.8	-104.8
Bond issues and liabilities to credit institutions	-40.8	-49.6	50% of Hybrid capital	9.9	9.7
Commercial papers and Repos	-8.9	-13.3	Present value of pension obligations	-40.4	-43.8
Liabilities to associated companies	-1.0	-0.7	Wind & other environmental provisions	-10.9	-10.6
Liabilities to minority shareholders	-10.8	-10.9	Provisions for nuclear power (net)	-36.4	-37.8
Lease liabilities	-6.4	-6.0	Margin calls received	3.3	4.1
Other liabilities	-4.2	-4.9	Liabilities to minority owners due to consortium agreements	10.8	10.9
<b>Total interest-bearing liabilities</b>	<b>-91.8</b>	<b>-104.8</b>	<b>= Adjusted gross debt</b>	<b>-155.5</b>	<b>-172.3</b>
Reported cash, cash equivalents & short-term investments	47.5	56.2	Reported cash, cash equivalents & short-term investments	47.5	56.2
Loans to minority owners of foreign subsidiaries	0.4	0.4	Unavailable liquidity	-4.2	-5.4
<b>Net debt</b>	<b>-43.9</b>	<b>-48.2</b>	<b>= Adjusted cash, cash equivalents &amp; short-term investments</b>	<b>43.3</b>	<b>50.8</b>
			<b>= Adjusted net debt</b>	<b>-112.2</b>	<b>-121.5</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: 36.9</b>	<b>Total Ringhals: 36.9<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: 32.0</b>	<b>Total Forsmark: 21.1</b>	
<b>Total Sweden</b>	<b>6,974</b>	<b>-</b>		<b>72.1<sup>3</sup></b>	<b>59.7<sup>3</sup></b>	<b>41.4<sup>4</sup></b>
Brunsbüttel	771	1977	66.7	11.6	7.8	
Brokdorf	1,410	1986	20.0	0	3.6	
Krümmel	1,346	1984	50.0	7.1	7.1	
Stade <sup>5</sup>	640	1972	33.3	0	0.9	
<b>Total Germany</b>	<b>4,167</b>	<b>-</b>	<b>-</b>	<b>18.7</b>	<b>19.4</b>	
<b>Total SE &amp; DE</b>	<b>11,141</b>			<b>90.8</b>	<b>79.1</b>	

<sup>1</sup> Five reactors are in commercial operation in Sweden; Ringhals 3 & 4 and Forsmark 1, 2 & 3. Brokdorf is in commercial operation in Germany (to be closed by year-end 2021)

<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 0.6 bn (pro rata SEK 0.6 bn considering share in Studsviksfonden) related to Ågesta, and SEK 2.5 bn (pro rata SEK 1.1 bn considering share in Studsviksfonden) related to SVAFO

<sup>4</sup> Vattenfall's share of the Nuclear Waste Fund. IFRS consolidated value is SEK 49.6 bn.

<sup>5</sup> Stade is being dismantled



# Items affecting comparability

Amounts in SEK million	Jan-Mar 2021	Jan-Mar 2020	Full year 2020	Last 12 months
<b>Items affecting comparability</b>	<b>1,332</b>	<b>2,126</b>	<b>-10,514</b>	<b>-11,308</b>
- of which, capital gains	48	1	301	348
- of which, capital losses	- 139	- 6	- 241	- 374
- of which, impairment losses	-	- 1	-12,980	-12,979
- of which, provisions	-	428	-3,488	-3,916
- of which, unrealised changes in the fair value of energy derivatives	478	968	4,753	4,263
- of which, unrealised changes in the fair value of inventories	- 163	- 530	476	843
- of which, restructuring costs	-	- 18	- 854	- 836
- of which, other non-recurring items affecting comparability	1,108	1,284	1,519	1,343

## Major items Q1 2021

- Sale of nuclear production rights in Germany, SEK 1.4 bn
- Unrealised changes in the fair value of energy derivatives and inventories, SEK 0.3 bn
- Capital loss from disposal of a partially owned offshore wind farm in the Netherlands, SEK -1.0 bn

## Calculation of EDITDA, underlying EBITDA and underlying EBIT

Amounts in SEK million	Jan-Mar 2021	Jan-Mar 2020	Full year 2020	Last 12 months
Operating profit EBIT	13,385	12,313	15,276	16,348
Depreciation, amortisation and impairment losses	-4,355	-4,587	-31,231	-30,999
<b>EBITDA</b>	<b>17,740</b>	<b>16,900</b>	<b>46,507</b>	<b>47,347</b>
Items affecting comparability excl. impairment losses and reversed impairment losses	-1,332	-2,127	-2,466	-1,671
<b>Underlying EBITDA</b>	<b>16,408</b>	<b>14,773</b>	<b>44,041</b>	<b>45,676</b>
Operating profit (EBIT)	13,385	12,313	15,276	16,348
Items affecting comparability	-1,332	- 2,126	10,514	11,308
<b>Underlying EBIT</b>	<b>12,053</b>	<b>10,187</b>	<b>25,790</b>	<b>27,656</b>

# Impairment history 2009 – 2021

SEK bn		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	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		3.3
	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
<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>180.8</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	0.0	-4.4
<b>Impairments (net)</b>		<b>4.2</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>0.0</b>	<b>176.4</b>

<sup>1</sup> Impairment of goodwill

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

# Wind & Solar - Installed capacity (MW<sup>1</sup>) Q1 2021

	Solar	Onshore	Offshore	Total
United Kingdom	5	391	687	1 083
Denmark	0	237	741	978
The Netherlands	68	573	0	641
Sweden	0	218	110	328
Germany	3	19	636	658
<b>Total (MW)</b>	<b>76</b>	<b>1 438</b>	<b>2 174</b>	<b>3 688</b>



## United Kingdom – ROC scheme

■ Thanet	300
■ Ormonde (51%)	150
■ Aberdeen	97
■ Kentish Flats	90
■ Kentish Flats Extension	50
■ Pen Y Cymoedd	228
■ Ray	54
■ Edinbane	41
■ Clashindarroch	37
■ Swinford	22
■ Parc Cynog	4
■ PV@Cynog	5
■ Pendine	5

**Installed capacity (MW) 1 083**

## Sweden – certificate scheme

■ Lillgrund	110
■ Stor-Rotliden	78
■ Högabjär-Kärsås (50%)	38
■ Höge Väg (50%)	37
■ Hjuleberg (50%)	36
■ Juktan (50%)	29

**Installed capacity (MW) 328**

## Denmark – FIT scheme

■ Horns Rev 3	407
■ Kriegers Flak	176
■ Horns Rev 1 (60%)	158
■ Klim (98%)	67
■ Nørreøkse Enge 1 (99%)	30
■ Rejsby Hede	23
■ Hagesholm	23
■ Nørre Økse Sø	17
■ Tjæreborg Enge	17
■ Hollandsbjerg	17
■ Bajlum (89%)	15
■ DræbyFed	9
■ Ryå	8
■ Ejsing (97%)	7
■ Lyngmose	5

**Installed capacity (MW) 572**

## Germany – EEG scheme

■ DanTysk (51%)	288
■ Sandbank (51%)	288
■ alpha ventus (26%)	60
■ Jänschwalde	12
■ Westküste (20%)	7
■ Decentral Solar installations	3

**Installed capacity (MW) 658**

## The Netherlands – MEP/SDE(+)

■ Princess Ariane	294
■ Princess Alexia	122
■ Haringvliet	38
■ Slufterdam	29
■ Haringvliet	18
■ Eemmeerdiijk	17
■ Irene Vorrink	17
■ Nieuwe Hemweg	13
■ Hoofdplaatpolder (70%)	10
■ Reyndersweg (50%)	9
■ Echteld	8
■ Moerdijk	8
■ De Bjirmen	6
■ Oom Kees (12%)	6
■ Oudendijk	5
■ Mariapolder	5
■ Hiddum Houw	4
■ Eemshaven	6
■ Velsen	2
■ Enkhuizen	2
■ Hemweg	2
■ Diemen	1
■ Decentral Solar installations	19
<b>Installed capacity (MW)</b>	<b>641</b>

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

# Main projects BA Wind in our 5 core countries

Country	Name	Capacity (MW)	Support scheme	Awarded	Duration of support	Ownership (%)	Commissioning	Current status
DK	Kriegers Flak	605	FIT	X	50.000hrs	100	2021	Construction ongoing, 1st WTG's commissioned
NL	Hollandse Kust Zuid 1-4	1 520	-	X	-	100	2023	Onshore works ongoing
NL	Wieringermeer	185	SDE+	X	15 yrs	100	2019/2020	Completed construction
NL	Wieringermeer ext.	118	SDE+	X	15 yrs	100	2021	Commissioning ongoing
NL	Moerdijk	27	SDE+	X	15 yrs	100	2021	Commissioning ongoing
NL	Haringvliet	22	SDE+	X	15 yrs	100	2021	Commissioning ongoing
NL	Nieuwe Hemweg	13	SDE+	X	15 yrs	100	2021	Completed construction
NL	Ny Hiddum Houw	19	SDE+	X	15 yrs	100	2022	Under construction
UK	South Kyle	240	-	N/A	-	100	2022	Under construction
NL	Jaap Rodenburg	30	SDE+	X	15 yrs	100	2021	Under construction
NL	A16	20	SDE+	X	15 yrs	100	2022	Under construction
SE	Blakliden + Fäbodberget	353	Certs	N/A	-	30	2022	Under construction
NL	Haringvliet	38	SDE+	X	15 yrs	100	2020	Completed construction
DE	Kögel cluster	28	EEG	(X)	-	100	2021	Construction ongoing
NL	Haringvliet	12	FCR*	-	-	100	2021	Completed construction
<b>In construction</b>		<b>3 230</b>						
UK	Norfolk projects	3 600	CfD	-	15 yrs	100	2027-2029	Planning consent revoked, redetermination process in planning.
DK	Vesterhav	344	FIT	X	50.000hrs	100	2023/2024	Procurement preparations ongoing, preparing for FID Q4 2021
NL	Windplan Blauw	57	SDE+	X	15 yrs	100	2023	Preparing for FID
SE	Klevberget	126	Certs	N/A	-	100	2023	Preparing for FID
<b>In development (in mature stage)</b>		<b>&gt; 4 GW</b>						

	Offshore
	Onshore
	Solar
	Batteries

FCR - Frequency Response Regulation