

Vattenfall FY and Q4 Results 2020

4 February 2021



VATTENFALL

Vattenfall FY Results 2020

In brief

- Progress in investment projects for offshore wind, including final investment decision for Hollandse Kust Zuid 1-4 in the Netherlands.
 - Permanent closure of Ringhals 1 on 31 December
 - Vattenfall is offering the State of Berlin all shares in the electricity grid company Stromnetz Berlin GmbH
- Underlying EBIT increased by SEK 0.7 bn to SEK 25.8 bn:
 - Record low electricity prices compensated by hedging
 - Strong contribution from the trading operations
 - Lower electricity production from nuclear and coal-fired generation
- Profit for the period decreased to SEK 7.7 bn, mainly as a result of impairments in the operating segments Heat (Moorburg SEK 11.3 bn) and Wind (mainly Swedish and Danish onshore assets, SEK 1.6 bn)
 - The Board of Directors proposes a dividend of SEK 4.0 bn



Vattenfall FY Results 2020

Overview

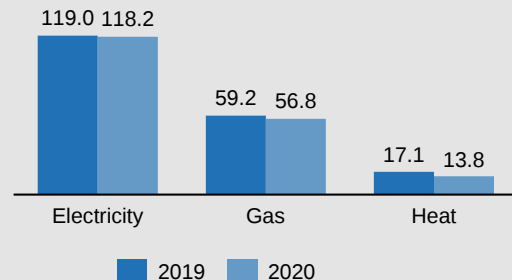
Result development

SEK bn	FY 2020	FY 2019	Δ
Net Sales	158.8	166.4	-5%
EBITDA	46.5	42.4	+10%
Underlying operating profit (EBIT)	25.8	25.1	+3%
EBIT	15.3	22.1	-31%
Profit for the period	7.7	14.9	-48%

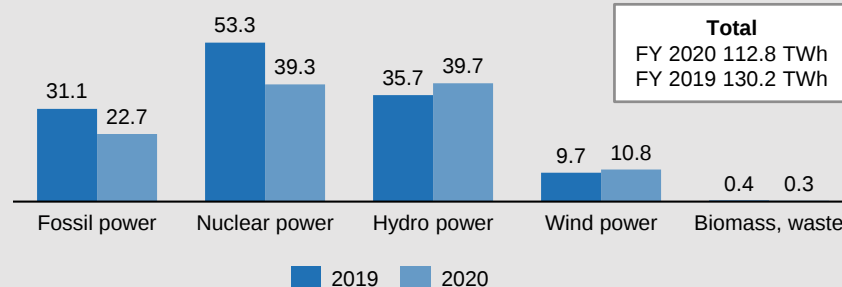
Financial targets

	FY 2020	FY 2019
Return on capital employed (≥8%)	5.8%	8.5%
FFO/adjusted net debt (22-27%)	28.8%	26.5%

Customer sales (TWh)



Electricity production (TWh)



Strategic targets 2020

Strategic targets to 2020	Outcome 2020	Outcome 2019	Comments
Customer engagement, Net Promoter Score relative (relative customer satisfaction): +2	+2	+1	Target achieved. Strong performance in Germany and the Nordics
Commissioned new renewables capacity 2016-2020: ≥2,300 MW	1,560 MW	1,226 MW	Target not achieved due to project delays, mainly Kriegers Flak offshore wind farm (605 MW) in Denmark which is expected to be commissioned in 2021
Absolute CO ₂ emissions, pro rata: ≤21 Mtonnes	12.1¹ Mt	19.3² Mt	Target achieved as a result of lower coal-fired generation
Return On Capital Employed (ROCE): ≥8%	5.8%	8.5%	Target not achieved, mainly due to impairments in the operating segment Heat related to Moorburg
Lost Time Injury Frequency (LTIF): ≤1.25	1.7	2.1	Target not achieved. Further actions required to enhance safety
Employee Engagement Index: ≥70%	72%	69%	Target achieved. Based on an annual employee survey

¹ Preliminary value. The final value will be presented in the Annual and Sustainability Report.

² Including the heat operations in Hamburg, which has been sold and where the production amounted to 1.1 Mt during the period January – September 2019.

Strategic targets 2025

Strategic focus area	Strategic targets to 2020	2025 Target	Actual 2020	Motivation
Driving decarbonisation with our customers & partners	Net Promoter Score ¹ (Absolute)	+18	+7 ²	Established and recognised as key to assess customer behaviours/attitudes
Securing a fossil-free energy supply	CO ₂ Emissions Intensity	≤86 gCO ₂ /kWh ³	97 gCO ₂ /kWh ⁴	Established in Science Based Targets. Industry standard
Empowering our people	LTIF	≤1.0	1.7	Safety first, best practise KPI
	Engagement Index	75	72	Engaged employees is a key factor for success
Delivering high-performing operations	FFO/Adjusted Net Debt	22-27 %	28.8%	Key metric in financial steering
	ROCE	8 %	5.8 %	Key metric in financial steering

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

² No outcome for business unit Heat Berlin in 2020, similar level as in 2019 assumed

³ Targeting 86 gCO₂/kWh by 2025 puts us on a “1.5°C” trajectory by 2030 according to Science Based Target levels

⁴ Preliminary value. The final value will be presented in the Annual and Sustainability Report.

Customers & Solutions

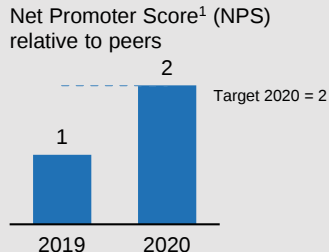
Strong sales development continues in Germany and France

Highlights

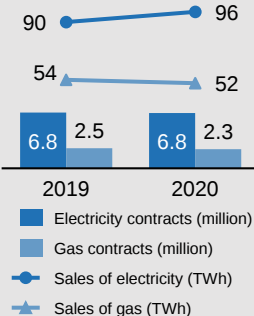
SEK million	FY 2020	FY 2019
Net Sales	86,298	89,859
Underlying operating profit	2,146	1,337

- Net sales decreased as a result of lower electricity prices in the Nordics and the Netherlands, as well as slightly lower volumes in the same markets
- Underlying operating profit increased mainly as a result of lower depreciation in the Netherlands
- Strategic target on relative NPS achieved with strong performance in Germany and the Nordics
- Agreement with Microsoft to deliver hydro and wind power to Microsoft's new data centres in Sweden, starting in 2021
- Increased customer base in Germany and more than 100,000 retail contracts in France - 2 years after market entry

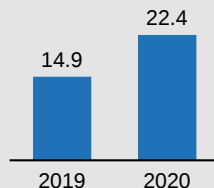
Key data



Retail sales development



Charging points for electric vehicles (thousand)



¹ The target is a positive NPS in absolute terms and +2 compared to Vattenfall's peer competitors and set for end of 2020

Power Generation

Earnings affected by record-low electricity prices and lower nuclear power generation

Highlights

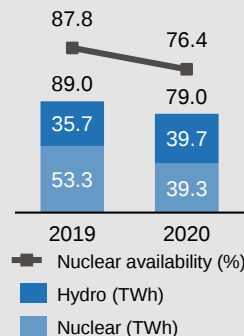
SEK million	FY 2020	FY 2019
Net Sales	90,133	102,378
Underlying operating profit	14,670	15,437

- Net sales decreased mainly due to lower spot prices in the Nordics following the strong hydro balance. This was partly countered by hedges
- Underlying operating profit decreased mainly due to lower achieved prices in the Nordics and lower nuclear power generation. A higher realised trading result and higher hydro power generation partly compensated
- Lower production mainly due to closure of Ringhals 2, prolonged annual outages and downregulation in nuclear power following low prices
- Ringhals 1 taken out of service on 31 December
- Swedish Radiation Safety Authority approved the independent core cooling systems at Ringhals and Forsmark
- New power balancing agreement for onshore wind farm in Sweden
- Over 600 MW of available capacity¹ added to Vattenfall's hydro power in 2016-2020

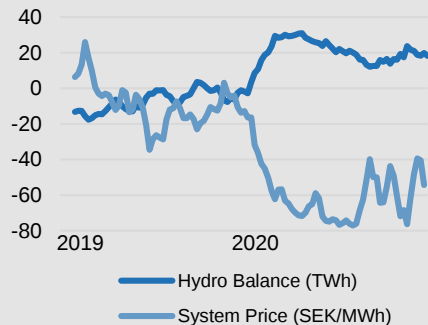
¹On average over the year

Key data

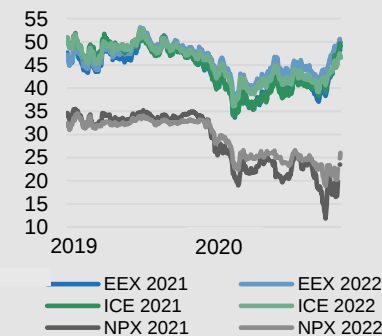
Production and availability



Nordic hydro balance and system price



Electricity futures prices (EUR/MWh)



Wind

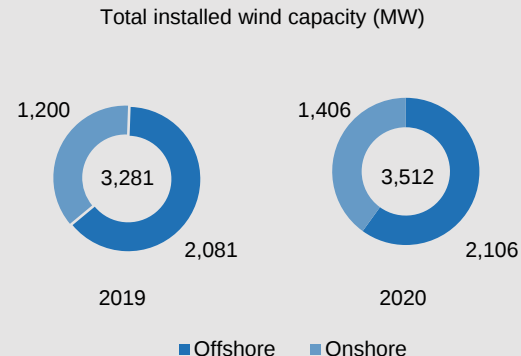
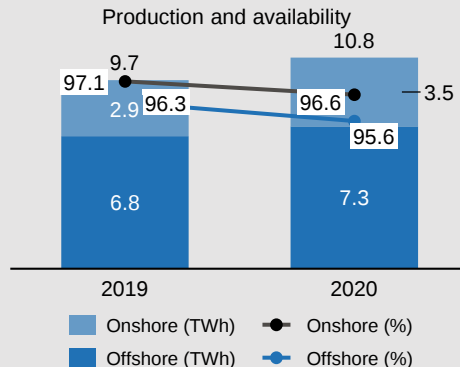
Progress for the expansion of renewables but results dampened by low prices and more maintenance

Highlights

SEK million	FY 2020	FY 2019
Net Sales	13,565	13,492
Underlying operating profit	3,970	4,155

- Net sales was unchanged compared to 2019. New capacity¹ contributed positively but lower electricity prices and lower availability due to more maintenance work in offshore wind had an offsetting effect
- Underlying operating profit decreased as a result of higher maintenance costs
- Over the year investment projects progressed within offshore wind, including FID for Hollandse Kust Zuid 1-4 in the Netherlands
- In Q4, permission was granted to start construction work on the Vesterhav Syd and Nord offshore wind farms (350 MW) off Denmark's west coast

Key data



¹ During the last 12 months two wind farms were commissioned, Horns Rev 3 (407 MW, whereof 25 MW in 2020) and Princess Ariane (formerly: Wieringermeer) (301 MW, whereof 250 MW in 2020)

Heat

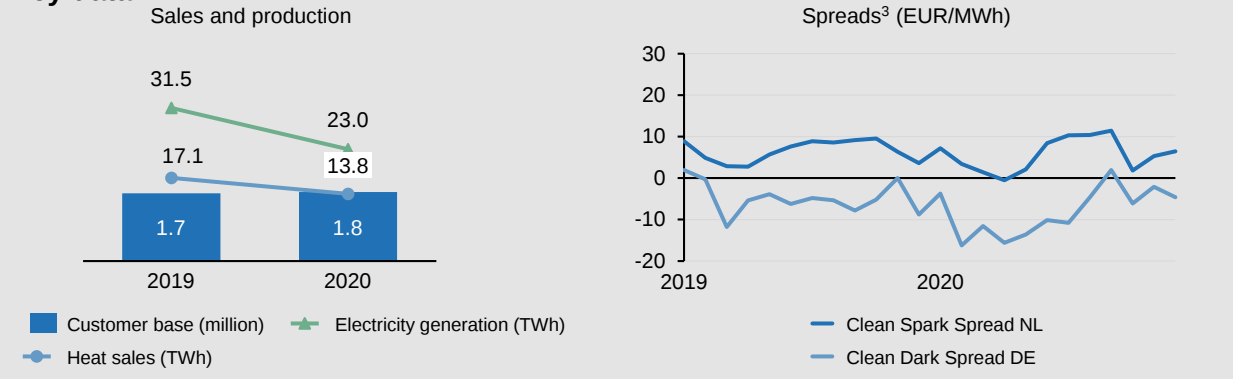
Improvement of underlying result but large impairments

Highlights

SEK million	FY 2020	FY 2019
Net Sales	23,328	31,403
Underlying operating profit	978	550

- Net sales and underlying operating profit impacted by the sale of district heating operations in Hamburg and the closure of Hemweg 8 (impact net sales SEK 4.1 bn, underlying operating profit SEK 0.3 bn)
- Unfavourable clean dark- and clean spark spreads also contributed negatively to net sales while underlying operating profit was positively impacted by lower maintenance costs and lower depreciation
- Bundesnetzagentur¹ accepted the bid for the closure of the coal-fired power plant Moorburg. The asset was written down by SEK 2.4 billion in Q4²
- Gas-fired boiler (120 MW) commissioned at Reuter West in Berlin

Key data



¹ The German Federal Network Agency
² Reported in items affecting comparability

Distribution

High demand for electricity grid connections in Sweden

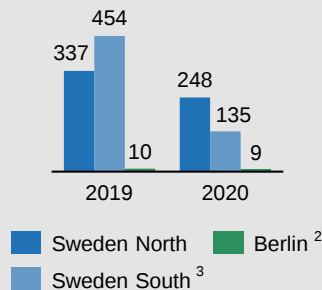
Highlights

SEK million	FY 2020	FY 2019
Net Sales	21,644	22,540
Underlying operating profit	5,325	4,998

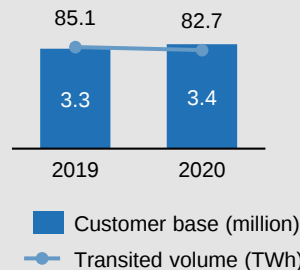
- Net sales decreased due to lower distributed volumes in the Swedish local grids and a lower contribution from Germany
- Underlying operating profit increased as a result of lower operating expenses, which were elevated significantly in 2019 by the major Storm Alfrida (~ SEK 800 million)
- Continued high inflow of new connections to both the regional and local grids. Investments up 6% compared to 2019 in order to accommodate for the high demand
- Commissioning of Sweden's largest battery storage facility in Uppsala (5 MW) by the unregulated operations Network Solutions
- Swedish government presented a new memorandum calling for special investment scope for electricity network companies

Key data

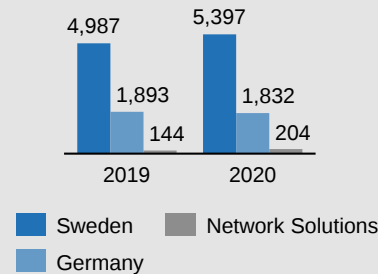
Service level (SAIDI, min)¹



Customers and volumes



Investments (SEK mn)



¹ All outages longer than 1 second in medium and low voltage networks are included

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

Financials



Vattenfall FY Results 2020

Financial highlights

Key data

SEK bn	FY 2020	FY 2019
Net Sales	158.8	166.4
EBITDA	46.5	42.4
Underlying operating profit (EBIT)	25.8	25.1
EBIT	15.3	22.1
Profit for the period	7.7	14.9
Funds from Operations (FFO)	35.0	34.9
Cash flow operating activities	41.7	16.7
Net debt	48.2	64.3
Adjusted net debt	121.5	132.0
Adjusted net debt/EBITDA ¹ (times)	2.6	3.1
Financial targets		
ROCE ¹ (≥8%)	5.8	8.5
FFO/adjusted net debt ¹ (22-27%)	28.8	26.5

¹ Last 12-month values

Key developments

- Net sales decreased by SEK 7.5 bn to SEK 158.8 bn due to lower spot prices and lower volumes in the Nordics, the Netherlands and Germany as well as lower income from the heat operations
- Underlying EBIT increased by SEK 0.7 bn mainly due to lower depreciation in the Netherlands for Customers & Solutions, lower maintenance costs and depreciation for Heat, higher realised trading result and higher hydro power generation. Partly offset by lower achieved prices and lower nuclear power generation
- Profit for the period decreased to SEK 7.7 bn, mainly as a result of impairments in the operating segments Heat (SEK 11.3 bn) and Wind (SEK 1.6 bn)
- ROCE was 5.8% mainly due to impairments
- FFO/Adjusted net debt increased to 28.8%, mainly as a result of a decrease in adjusted net debt due to increased cash flow from operations

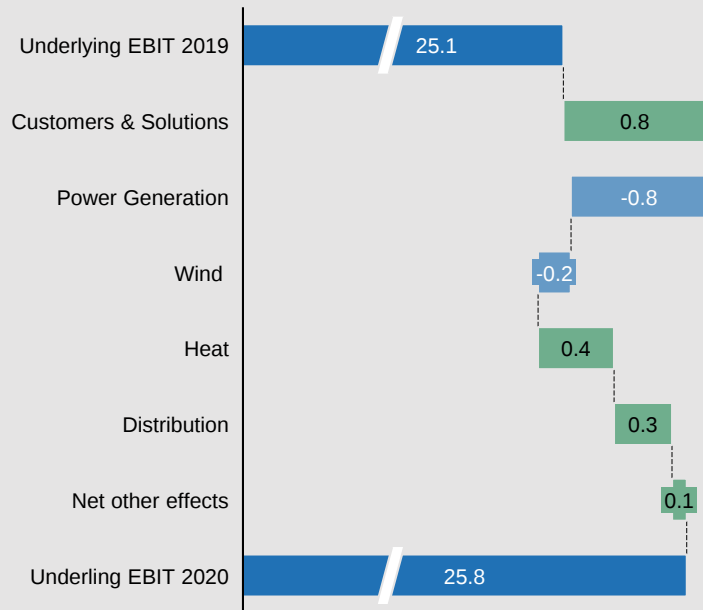


Development of underlying EBIT FY 2020

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

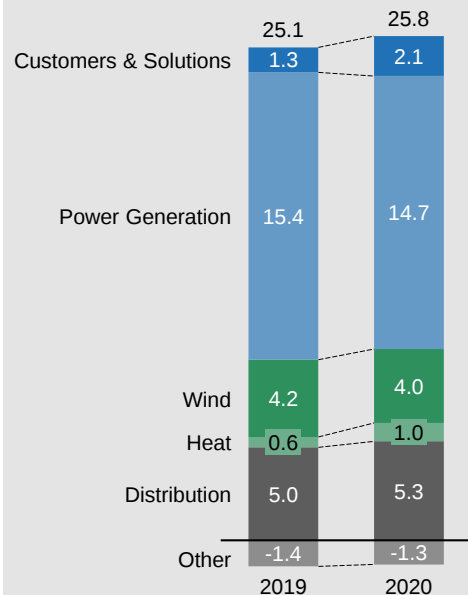
Change in FY 2020 vs. FY 2019

SEK bn



Breakdown per operating segment

SEK bn

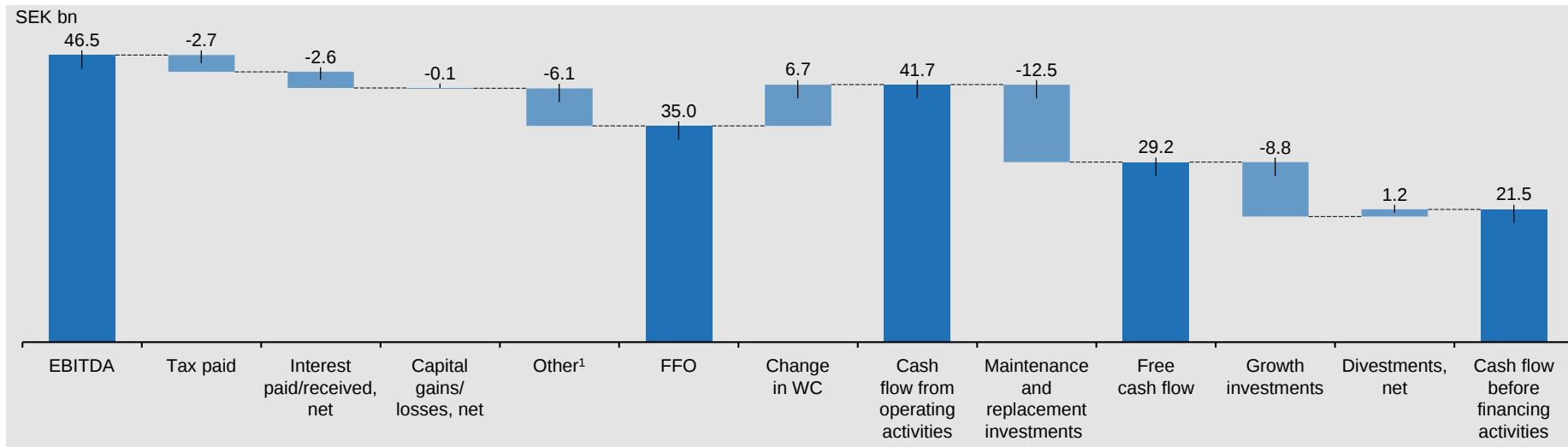


Highlights

- Customers & Solutions: lower depreciation in the Netherlands
- Power Generation: lower achieved prices and lower nuclear generation, partly countered by higher realised earnings from trading and higher hydro generation
- Wind: decrease as a result of higher maintenance costs
- Heat: lower maintenance costs and lower depreciation. Comparison affected by the sale of district heating operations in Hamburg and the closure of Hemweg 8
- Distribution: lower operating costs which were elevated in 2019 by the impact of Storm Alfrida

Cash flow development FY 2020

Positive working capital development mainly related to changes in margin calls



Main effects

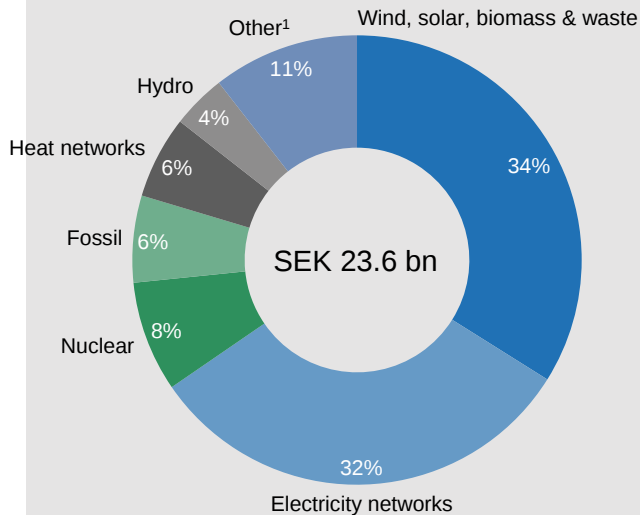
- Change in working capital mainly driven by changes related to net change in margin calls for commodity hedging activities (SEK 12.6 bn). Increase in inventories (SEK -1.6 bn) and changes related to CO₂ emission allowances (SEK -3.7 bn) had an offsetting impact
- Growth investments mainly related to 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, FY 2020



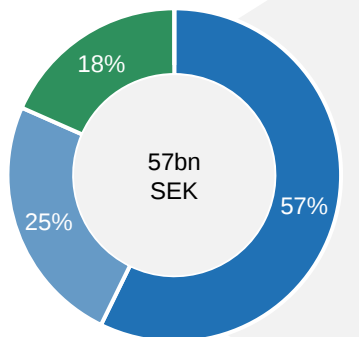
Detailed overview of investments, FY & Q4 2020

SEK bn	FY 2020	FY 2019	Δ	Q4 2020	Q4 2019	Δ
Hydro	0.9	0.9	0%	0.3	0.4	-1%
Nuclear	1.9	2.2	-15%	0.5	0.6	-14%
Fossil	1.5	2.6	-42%	0.4	0.8	-48%
Wind, solar, biomass & waste	8.0	7.7	5%	2.6	2.0	30%
Electricity networks	7.4	7.1	5%	2.5	2.9	-15%
Heat networks	1.4	1.5	-8%	0.6	0.6	-7%
Other¹	2.5	3.0	-17%	0.9	1.1	-19%
Total	23.6	24.9	-5%	7.9	8.5	-7%

¹ Investments mainly related to Carpe Futurum

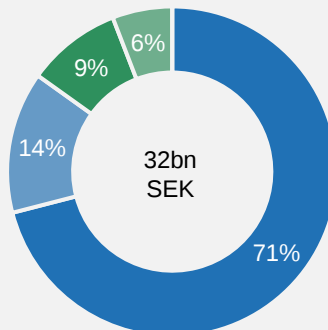
Investment plan 2021-2022

**Total capex
2021-2022**



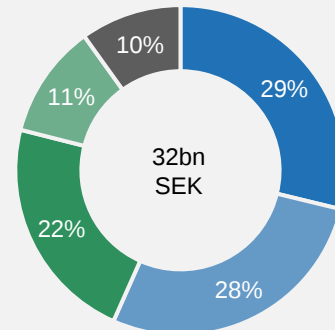
- Growth, 32 bn SEK
- Maintenance, 14 bn SEK
- Replacement, 10 bn SEK

**Growth capex per
technology 2021-2022**



- Wind power, 23 bn SEK
- Electricity distribution, 4bn SEK
- Heat supply, 3 bn SEK
- Other¹, 2 bn SEK

**Growth capex per country
2021-2022**



- Netherlands, 9 bn SEK
- Denmark, 9 bn SEK
- UK, 7 bn SEK
- Sweden, 4 bn SEK
- Germany, 3 bn SEK

¹ Mainly charging solutions, solar and battery projects, decentralised solutions and the Hybrit project

Overview of key figures FY and Q4 2020

Amounts in SEK bn unless indicated otherwise	FY 2020	FY 2019	Q4 2020	Q4 2019
Net sales	158.8	166.4	44.0	46.2
EBITDA	46.5	42.4	12.1	8.8
EBIT	15.3	22.1	5.2	2.4
Underlying operating profit (EBIT)	25.8	25.1	8.0	8.2
Profit for the period	7.7	14.9	5.7	0.5
Electricity generation (TWh)	112.8	130.2	30.5	34.7
Sales of electricity (TWh)	164.1	169.4	44.0	42.9
- of which, customer sales (TWh)	118.2	119.0	31.7	29.8
Sales of heat (TWh)	13.8	17.1	4.5	5.1
Sales of gas (TWh)	56.8	59.2	18.9	19.7
Return on capital employed ($\geq 8\%$)	5.8	8.5	5.8 ¹	8.5 ¹
FFO/adjusted net debt (22-27%)	28.8	26.5	28.8 ¹	26.5 ¹

¹ Last 12-month values



Appendix



Introduction of new EGM members



Kerstin Ahlfont
Chief Financial Officer

Previous positions:

Senior Vice President Human Resources (2015–2020)

Long-standing experience from various management positions within Vattenfall Finance in Business Unit Heat Nordic, Business Group Pan Europe, Business Division Production and Region Nordic



Anna-Karin Stenberg
Senior Vice President, Head of Business Area Markets

Previous positions:

Vice President Controlling BA Markets, Vattenfall

Head of Corporate Control, TeliaCompany (2015–2018), CFO Praktikertjänst (2011–2015)

CFO Business Group Nordic Vattenfall (2008–2011)



Ulrika Jardfelt
Senior Vice President, Head of Business Area Heat

Previous positions:

Vice President, Business Unit Heat Sweden, Vattenfall

Head of District heating distribution at E.ON Heat Sweden

Managing director of the Swedish district heating association



Christian Barthélémy
Senior Vice President, Head of Human Resources

Previous positions:

Vice President Special Projects (2020)

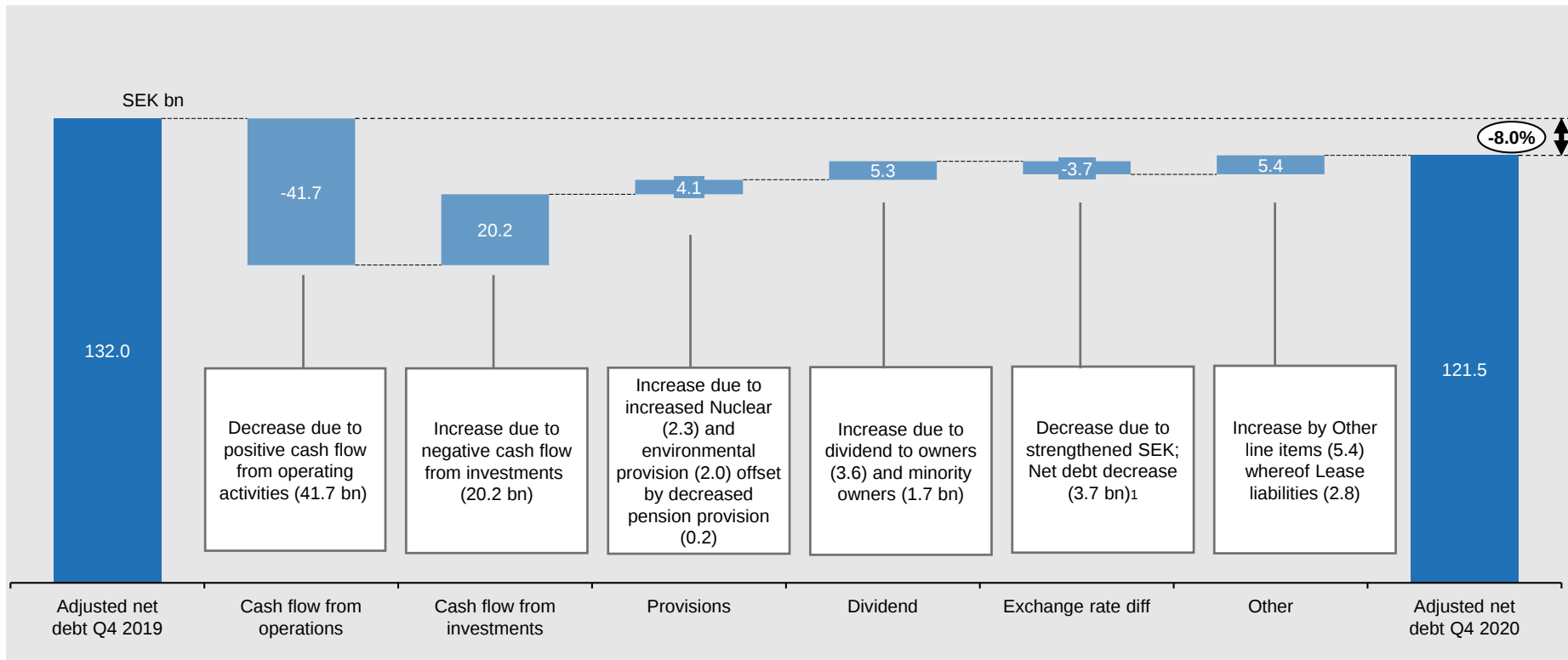
Program Director groupwide Outsourcing (2015–2020)

Vice President/Head of Real Estate and Facility Services

Head of Facility Services Continental/UK (2011–2015)

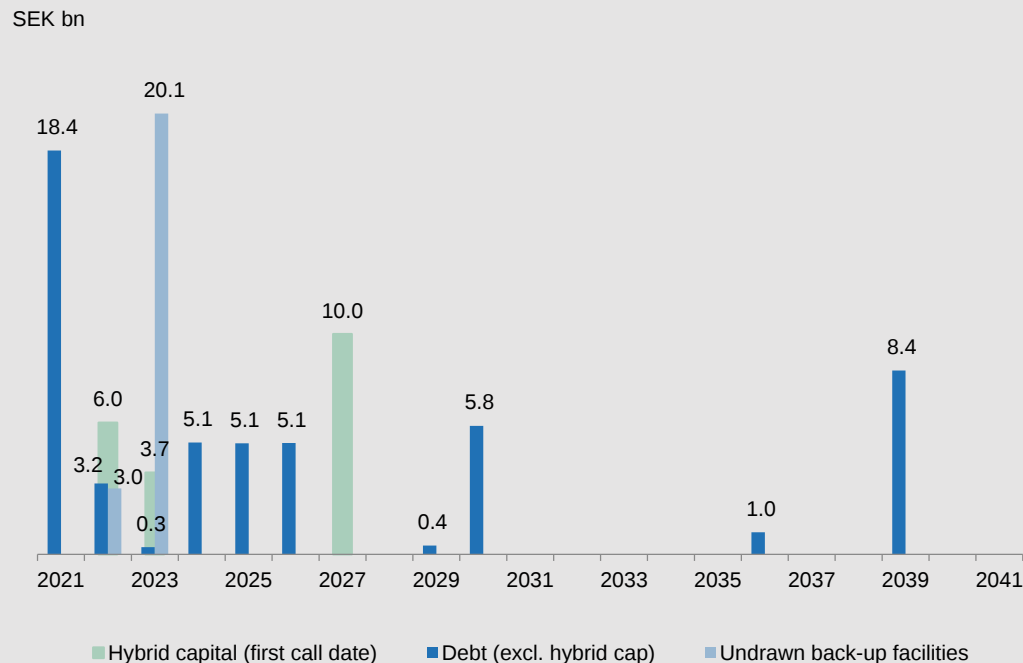
Development of adjusted net debt FY 2020

Adjusted net debt decrease mainly due to positive cashflow after investments and positive translation effects.



¹ SEK strengthened against EUR (from 10.57 to 10.03); translation of EUR denominated net debt into SEK leads to decrease in Adjusted net debt

Debt maturity profile¹



¹ Short term debt (Repo's and Commercial paper: SEK 12.4 bn), 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.

	31 Dec. 2020	31 Dec. 2019
Duration (years)	3.8	4.7
Average time to maturity (years)	5.1	6.8
Average interest rate (%)	3.4	4.0
Net debt (SEK bn)	48.2	64.3
Available group liquidity (MSEK)	50.8	29.3
Undrawn committed credit facilities (MSEK)	23.1	21.4

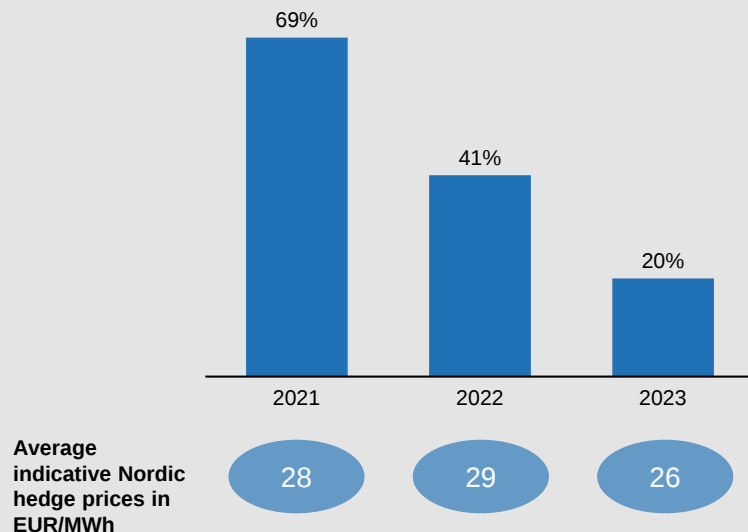
Cumulative maturities excl. undrawn back-up facilities

	2021- 2023	2024- 2026	From 2027
Debt incl. hybrid capital	31.7	15.2	25.7
% of total	44%	21%	35%

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 Nordic¹ hedge ratio (%) and indicative prices



Achieved prices² - Nordic portfolio

2020	2019	Q4 2020	Q4 2019
31	32	31	33

Sensitivity analysis – Continental³ portfolio

Market quoted	+/- 10% price impact on future profit before tax, MSEK ⁴			Observed yearly volatility
	2021	2022	2023	
Electricity	+/- 352	+/- 454	+/- 1,439	19% - 27%
Coal	-/+ 43	-/+ 22	-/+ 7	17% - 21%
Gas	-/+ 133	-/+ 156	-/+ 720	18% - 28%
CO ₂	-/+ 60	-/+ 72	-/+ 318	48% - 50%

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

³ Continental: DE, NL, UK.

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

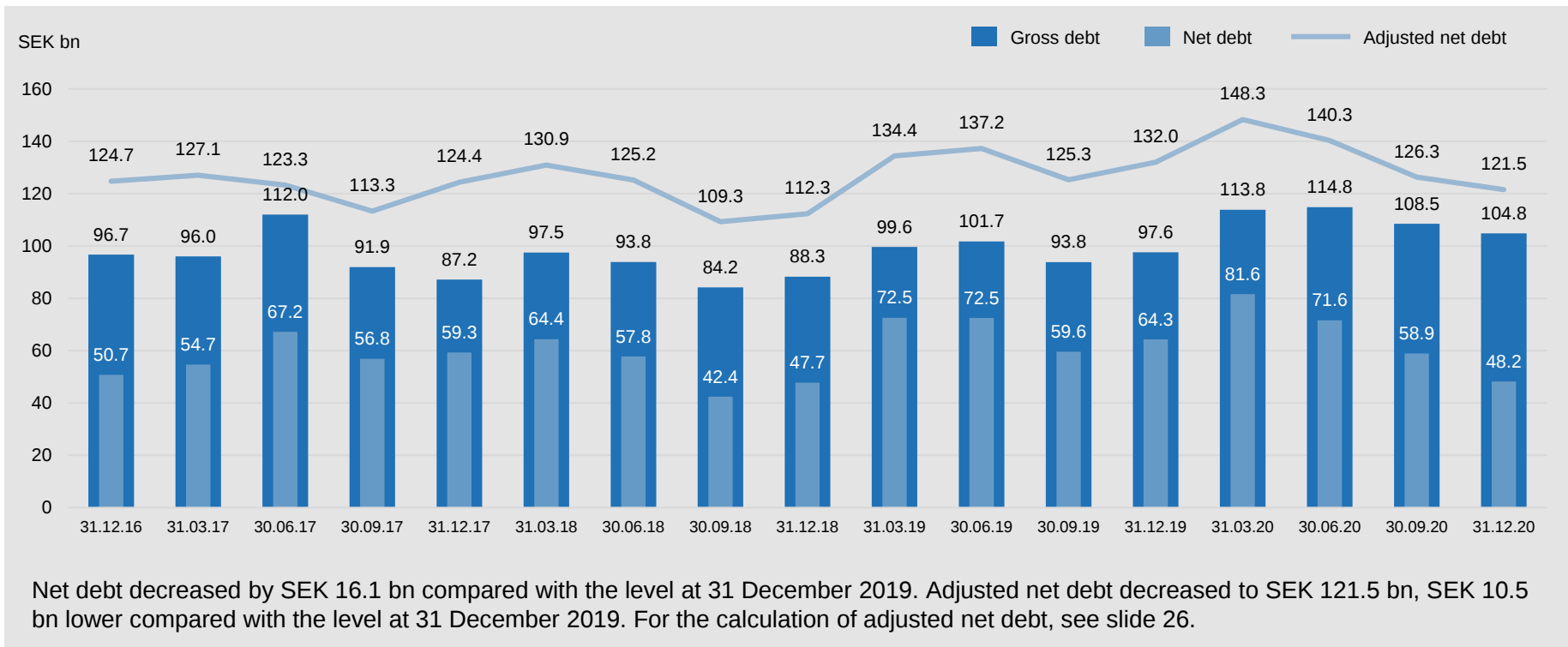
Liquidity position

Group liquidity	SEK bn	Committed credit facilities	Facility size, EUR bn	SEK bn
Cash and cash equivalents	26.1	RCF (maturity Nov 2023)	2.0	20.1
Short term investments	30.1	RCF (maturity Jan 2022)		3.0
Reported cash, cash equivalents & short term investments	56.2	Total undrawn		23.1
		Debt maturities²		SEK bn
Unavailable liquidity ¹	-5.4	Within 90 days		11.6
Available liquidity	50.8	Within 180 days		11.6

¹ German nuclear "Solidarvereinbarung" 1.2 SEK bn, Margin calls paid (CSA) 3.3 SEK bn, Insurance "Provisions for claims outstanding" 0.8 SEK bn

² Excluding loans from minority owners and associated companies

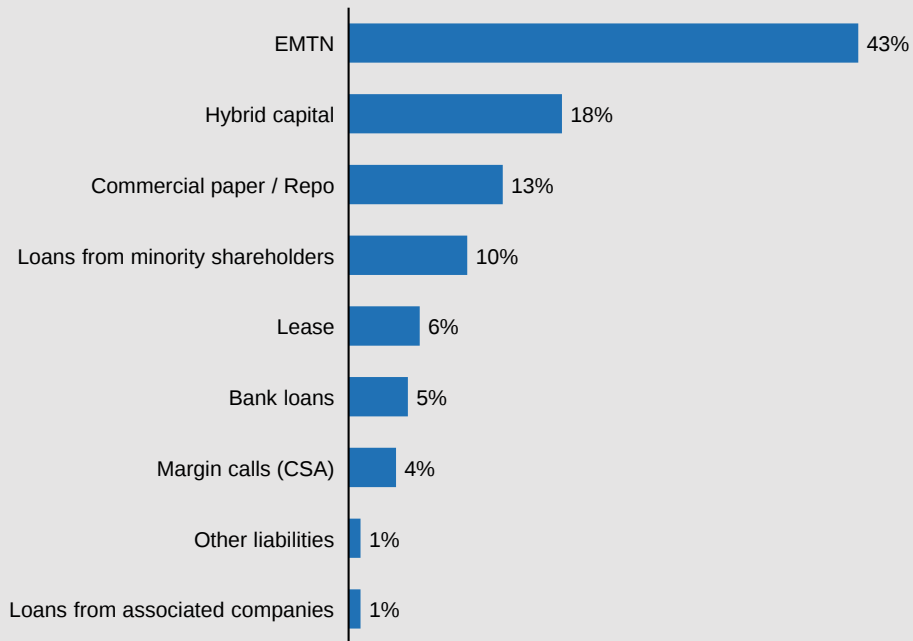
Debt development



Breakdown of gross debt

Total debt: SEK 104.8 bn (EUR 10.4 bn)

External market debt: SEK 93.2 bn (EUR 9.3 bn)



Debt issuing programmes	Size (EUR bn)	Utilization (EUR bn)
EUR 10bn Euro MTN	10.0	4.1
EUR 4bn Euro CP	4.0	1.4
Total	14.0	5.4

- 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

¹ EMTN= Euro Medium Term Notes

Reported and adjusted net debt

Reported net debt (SEK bn)	31 Dec. 2020	31 Dec. 2019	Adjusted net debt (SEK bn)	31 Dec. 2020	31 Dec. 2019
Hybrid capital	-19.3	-20.2	Total interest-bearing liabilities	-104.8	-97.6
Bond issues and liabilities to credit institutions	-49.6	-38.8	50% of Hybrid capital	9.7	10.1
Commercial papers and Repos	-13.3	-17.2	Present value of pension obligations	-43.8	-44.0
Liabilities to associated companies	-0.7	-0.7	Wind & other environmental provisions	-10.6	-8.6
Liabilities to minority shareholders	-10.9	-10.6	Provisions for nuclear power (net)	-37.8	-35.5
Lease liabilities	-6.0	-4.6	Margin calls received	4.1	3.7
Other liabilities	-4.9	-5.2	Liabilities to minority owners due to consortium agreements	10.9	10.6
Total interest-bearing liabilities	-104.8	-97.6	= Adjusted gross debt	-172.3	-161.3
Reported cash, cash equivalents & short-term investments	56.2	33.2	Reported cash, cash equivalents & short-term investments	56.2	33.2
Loans to minority owners of foreign subsidiaries	0.4	0.2	Unavailable liquidity	-5.4	-3.9
Net debt	-48.2	-64.3	= Adjusted cash, cash equivalents & short-term investments	50.8	29.3
			= Adjusted net debt	-121.5	-132.0

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: 37.1	Total Ringhals: 37.1²	
Forsmark 1	984	1980	66.0			
Forsmark 2	1,120	1981	66.0			
Forsmark 3	1,170	1985	66.0	Total Forsmark: 32.0	Total Forsmark: 21.1	
Total Sweden	6,974	-		72.3³	59.9³	41.0⁴
Brunsbüttel	771	1977	66.7	11.6	7.7	
Brokdorf	1,410	1986	20.0	0	3.6	
Krömmel	1,346	1984	50.0	7.1	7.1	
Stade ⁵	640	1972	33.3	0	0.9	
Total Germany	4,167	-	-	18.6	19.3	
Total SE & DE	11,141			90.9	79.2	

¹ 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)

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

³ Total provisions in Sweden (IFRS accounting) include provisions of SEK 0.7 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

⁴ Vattenfall's share of the Nuclear Waste Fund. IFRS consolidated value is SEK 48.3 bn.

⁵ Stade is being dismantled

Impairment history 2009 – 2020

SEK bn		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	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	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
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	180.8
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	-4.4
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	176.4

¹ Impairment of goodwill

² Impairment of assets and goodwill

Wind & Solar - Installed capacity (MW¹) Q4 2020

	Solar	Onshore	Offshore	Total
United Kingdom	5	391	687	1,083
Denmark	0	237	565	802
The Netherlands	75	540	108	723
Sweden	0	218	110	328
Germany	3	19	636	658
Total (MW)	82	1,406	2,106	3,593



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 Våg (50%)	37
■ Hjuleberg (50%)	36
■ Juktan (50%)	29

Installed capacity (MW) 328

Denmark – FIT scheme

■ Horns Rev 1 (60%)	158
■ Horns Rev 3	407
■ Klim (98%)	67
■ Nørrekær 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) 802

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(+)

■ NoordzeeWind (50%)	108
■ Princess Ariane	294
■ Princess Alexia	122
■ Haringvliet	38
■ Slufterdam	29
■ Eemmeerdijk	17
■ Irene Vorrink	17
■ Hoofdplaatpolder (70%)	10
■ Reyndersweg (50%)	9
■ Echteld	8
■ Coevorden	7
■ Nieuwe Hemweg	7
■ De Bjirmen	6
■ Oom Kees (12%)	6
■ Oudendijk	5
■ Mariapolder	5
■ Hiddum Houw	4
■ Eemshaven	6
■ Gasselternijveen	2
■ Velsen	2
■ Enkhuizen	2
■ Hemweg	2
■ Diemen	1
■ Decentral Solar installations	16

Installed capacity (MW) 723

¹ Capacity in operation: total capacity of the wind farms that Vattenfall has an ownership in.
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
DK	Kriegers Flak	605	FIT	X	50.000hrs	100	2021	Offshore construction works started
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	2020	Commissioning ongoing
NL	Moerdijk	27	SDE+	X	15 yrs	100	2020	Commissioning ongoing
NL	Haringvliet	22	SDE+	X	15 yrs	100	2020	Commissioning ongoing
NL	Nieuwe Hemweg	19	SDE+	X	15 yrs	100	2021	Commissioning ongoing
NL	Ny Hiddum Houw	14	SDE+	X	15 yrs	100	2021	Early construction phase
UK	South Kyle	240	-	N/A	-	100	2023	Early construction phase
NL	Jaap Rodenburg	30	SDE+	X	15 yrs	100	2021	Under construction
NL	A16	20	SDE+	X	15 yrs	100	2022	Early construction phase
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	Preparing for construction
NL	Haringvliet	12	FCR*			100	2020	Commissioning ongoing
In construction		3 231						
UK	Norfolk projects	3 600	CfD		15 yrs	100	2027-2029	Offshore Site Investigation completed.
DK	Vesterhav	344	FIT	X	50.000hrs	100	2023/2024	Construction permit received Dec-2020
NL	Windplan Blauw	57	SDE+	X	15 yrs	100	2023	In development
SE	Grönhult	67	Certs	N/A	-	100	2023	Preparing for FID
SE	Klevberget	126	Certs	N/A	-	100	2023	Preparing for FID
In development (in mature stage)		> 4 GW						

	Offshore
	Onshore
	Solar
	Batteries

* FCR - Frequency Response Regulation