

Vattenfall Full year 2015 results

Magnus Hall, CEO and Ingrid Bonde, CFO

Presentation 3 February 2016

Highlights and key figures

2015 Highlights

- **Portfolio transformation**
 - Commissioning of new wind parks
 - Divestment of all fossil-based power plants in Denmark
 - Divestment process for German lignite
- **Expansion of partnering strategy in wind**
 - Skandia in SE onshore
 - AMF in UK offshore (Ormonde)
- **Successful cost reductions**
 - Approx. 30% cost base reduction vs. 2010
- **Consequences of low prices and new regulatory requirements**
 - Decision to close down Ringhals 1 and 2 in 2020 and 2019 respectively
 - Impairments of SEK 36.8 billion

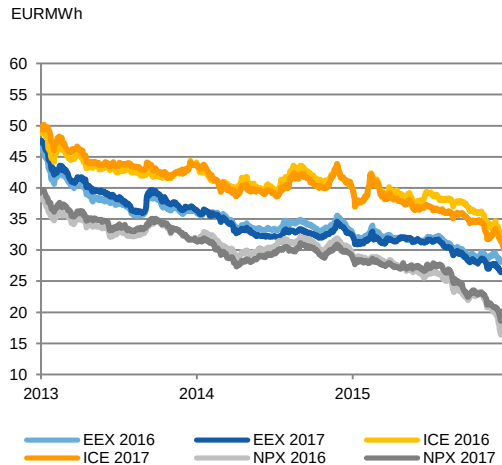
2015 Key Figures

SEK bn	FY 2015	FY 2014
Net Sales	164.5	165.9
Underlying EBIT	20.5	24.1
EBIT	-23.0	-2.2
Profit after tax	-19.8	-8.3
ROCE, %	-8.2	-0.7
ROCE excl. IAC, %	7.4	8.2
FFO/adj. net debt %	21.1	20.3

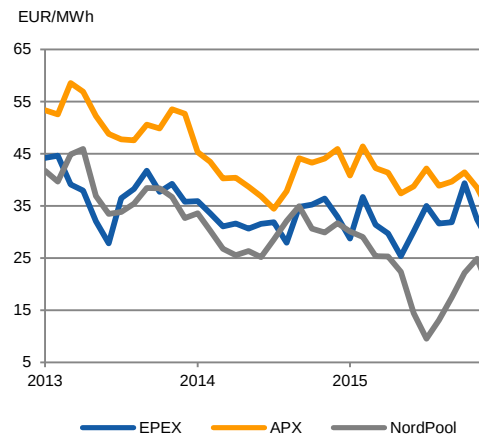
The Board proposes zero dividend for 2015

Continued pressure on conventional power generation

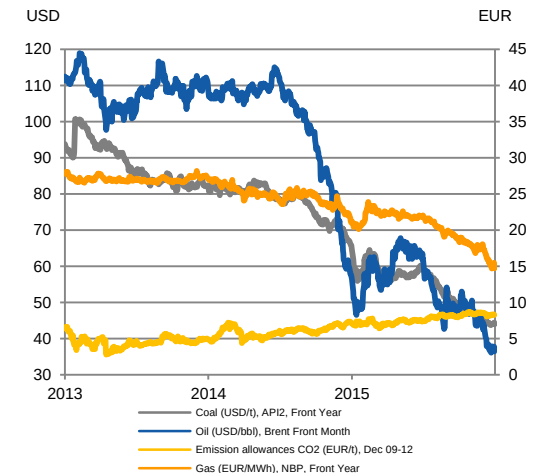
Electricity futures



Spot power price average



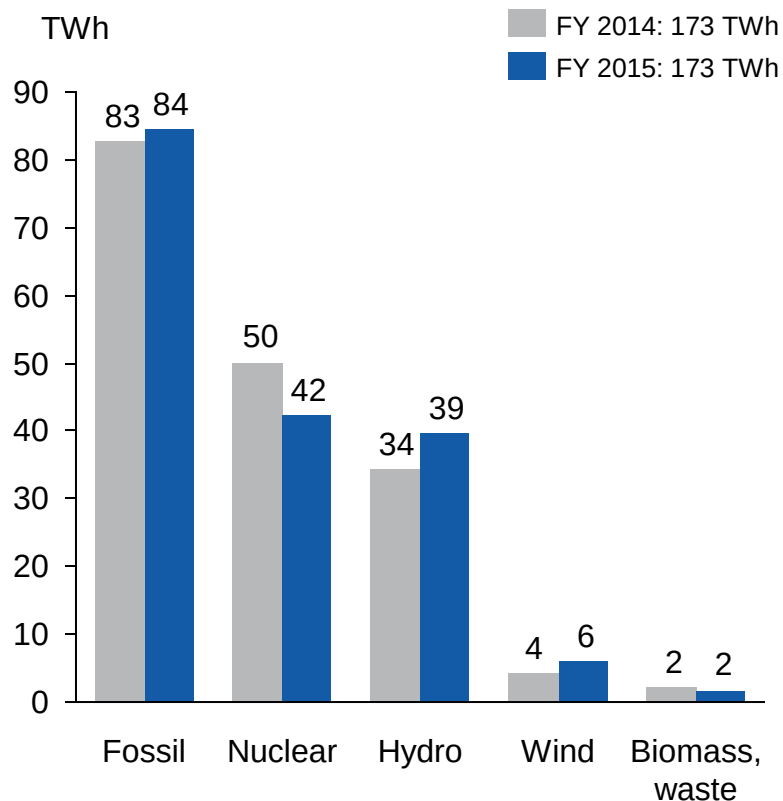
Commodity prices



- Nordic spot prices 29% lower vs 2014, mainly due to high precipitation
- German and Dutch spot prices approx. 3% lower vs 2014
- Electricity futures prices lower in all of Vattenfall's markets
- Lower prices on oil (Brent crude), coal and gas. Higher prices on CO₂ emission allowances

Vattenfall increased generation from renewables in 2015

Electricity generation



- Total electricity generation output almost unchanged compared to 2014
- Significant increase in wind power generation (+40%) with the new wind farms DanTysk (DE), Clashindarroch (UK), repowering of Klim (DK) and the extension of Kentish Flats (UK)
- Slight increase in fossil based generation following the commissioning of the Moorburg power plant
- Flexible hydro power stands strong with increased production in 2015 due to higher precipitation
- Nuclear generation decreased, mainly due to extended outages at Ringhals 2 and Forsmark 3

Regulatory developments clearly support the energy transformation whilst more clarity is still needed for German nuclear

COP21 Climate Agreement

- International Climate Agreement reached in Paris at COP21
- Reflections at national level on accelerated phase-out of coal (NL, DE) and at EU level on increasing ambition level of 2030 targets

Structural reforms to strengthen the EU ETS system

- Market Stability Reserve (MSR) to be in place by 1 January 2019
- Legislative proposal to further revise the EU ETS directive currently in the legislative process

German nuclear provisions – debate on fund or foundation

- Following the outcome of the stress test for nuclear provisions, a Commission has been established to investigate solutions to secure availability of sufficient funds if and when needed
- A final recommendation is expected by end of February 2016

Sweden's future energy supply – towards 100% RES

Sweden has important natural resources



Large hydro resources



Land and wind resources



Forest (net growth)

The path is crucial for cost efficiency and competitiveness

1. Invest in new capacity when it is rational

A transformation that occurs at a rate allowing technical and assets exchange when it is economically rational will become far less costly than if you are forced to "replace prematurely".

2. Utilize the expected cost reduction for new technology

The cost for new technology – wind, solar, storage, smart grids etc. - is expected to decrease. A gradual investment rate is expected to require less investments.

3. Utilize the low marginal production cost (excl. tax) in existing nuclear power

Existing nuclear power has a significantly lower total cost per kWh than the total cost for new capacity in all currently known technologies. The total cost for nuclear power is approx. 25 öre, excl. tax, compared to the current cost of wind power of approximately 50 öre. Every TWh not produced from existing nuclear power, but from new wind power entails an increased cost - ceteris paribus - of in total SEK 250 million/year for "Sweden AB". Operation of existing reactors according to the current plan allows Sweden to use 25 years to implement the transformation to a renewable system.

4. Align incentives and policies with the requirements of the energy system

A capacity deficit will occur significantly earlier than an energy deficit.

5. Work actively towards a close Nordic cooperation around security of supply

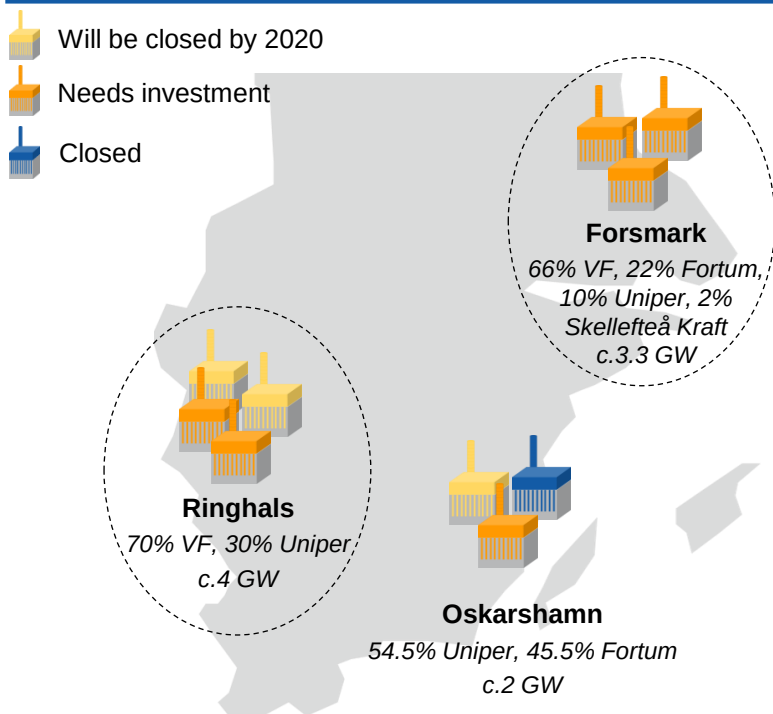
A close cooperation will decrease the need for capital investments (in the strategic reserve), thus increasing competitiveness.

6. Work actively towards a well-developed transmission grid in Sweden, Scandinavia and Europe

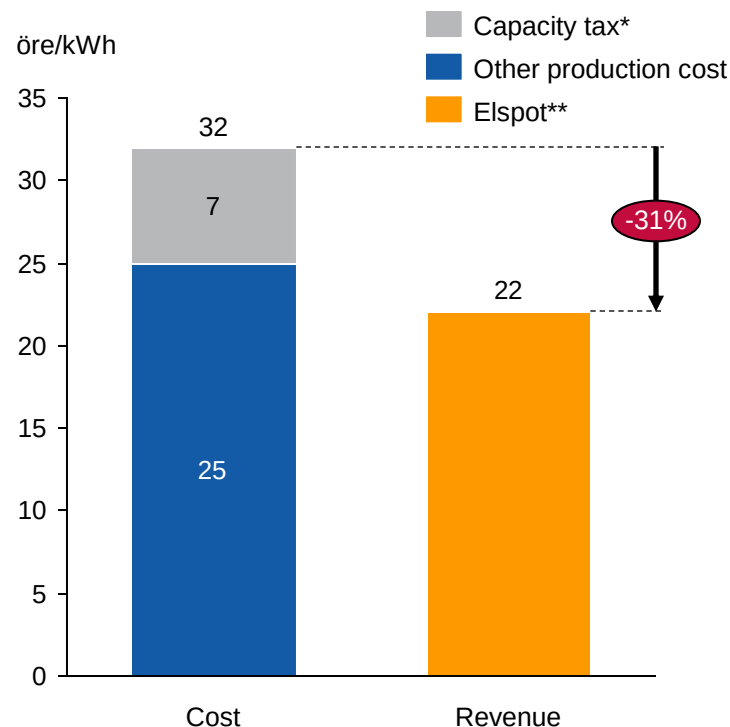
A well-developed transmission grid reduces the need for capital investments (in the strategic reserve) significantly, thus increasing competitiveness.

Difficult to motivate the required investments in Swedish nuclear for continued long-term operations

Swedish nuclear reactors



Approx. nuclear cost per kWh & Revenue



- Forsmark and Ringhals require strategic investments the coming 5-year period to ensure a 60 year operating life-time.
- Investments include the "Fukushima" measures of independent core cooling and replacement of the instrumentation and control (I&C) platform

* Swedish nuclear capacity tax is based on installed capacity (not production volume)

**Avg. market spot price in SE3 Last Twelve Months. Actual revenue from spot varies and depends on current market situation

Wind is one of the main focus areas in Vattenfall with partnering as a key enabler for growth

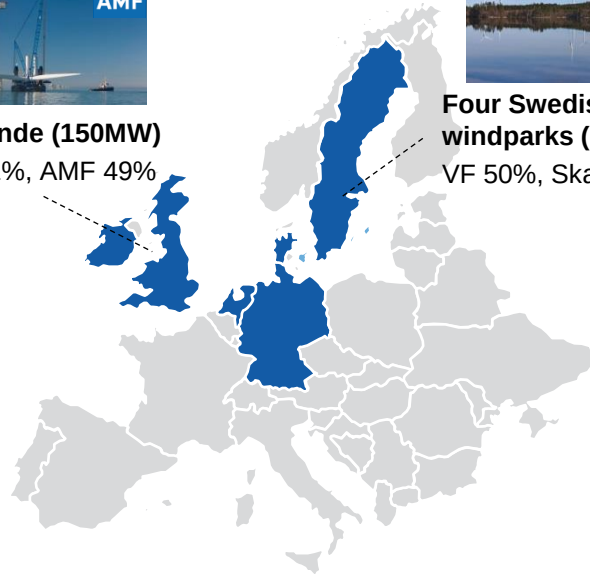
Successful partnerships in 2015



Ormonde (150MW)
VF 51%, AMF 49%



Four Swedish onshore windparks (141 MW)*
VF 50%, Skandia 50%



*Hjuleberg, Höge Våg, Juktan and Högabjär-Kärsås

Our position in wind

One of the largest players in northwestern Europe

- +1,800 MW installed capacity (pro rata, incl. DanTysk)
- Number 2 in offshore with recent win at HR3
- Increasing external recognition on position and performance

Strong platform and track record to build on

- Construction continuously improves time and budget performance
- Generation well equipped: Operating Model, Operational Centre, Operational practices
- Sound LEC** approach implemented and proven performance in HR3 tender

** Levelized Cost of Energy

Business Area Wind has an solid starting point for a strong market performance

Vattenfall is developing new business opportunities in energy solutions, including the start of its first UK solar power project

Parc Cynog in Wales, UK



Key facts

Project specifications

- Capacity: 5 MW (18,860 solar panels)
- Annual output sufficient to supply 1,441 British households
- Next to wind farms Pendine and Parc Cynog
- In operation at the end of March 2016

Principle of combined PV and wind farm

- High synergies (roads, land lease, network connection)
- Cost saving
- Save time (no waiting for network connection)
- Joint feed-in leads to more balanced feed-in profile, hence network stability increases

New business opportunities will be developed particularly within solar, decentralized generation and electric vehicles

Financials

Ingrid Bonde, CFO

FY 2015 Financial highlights

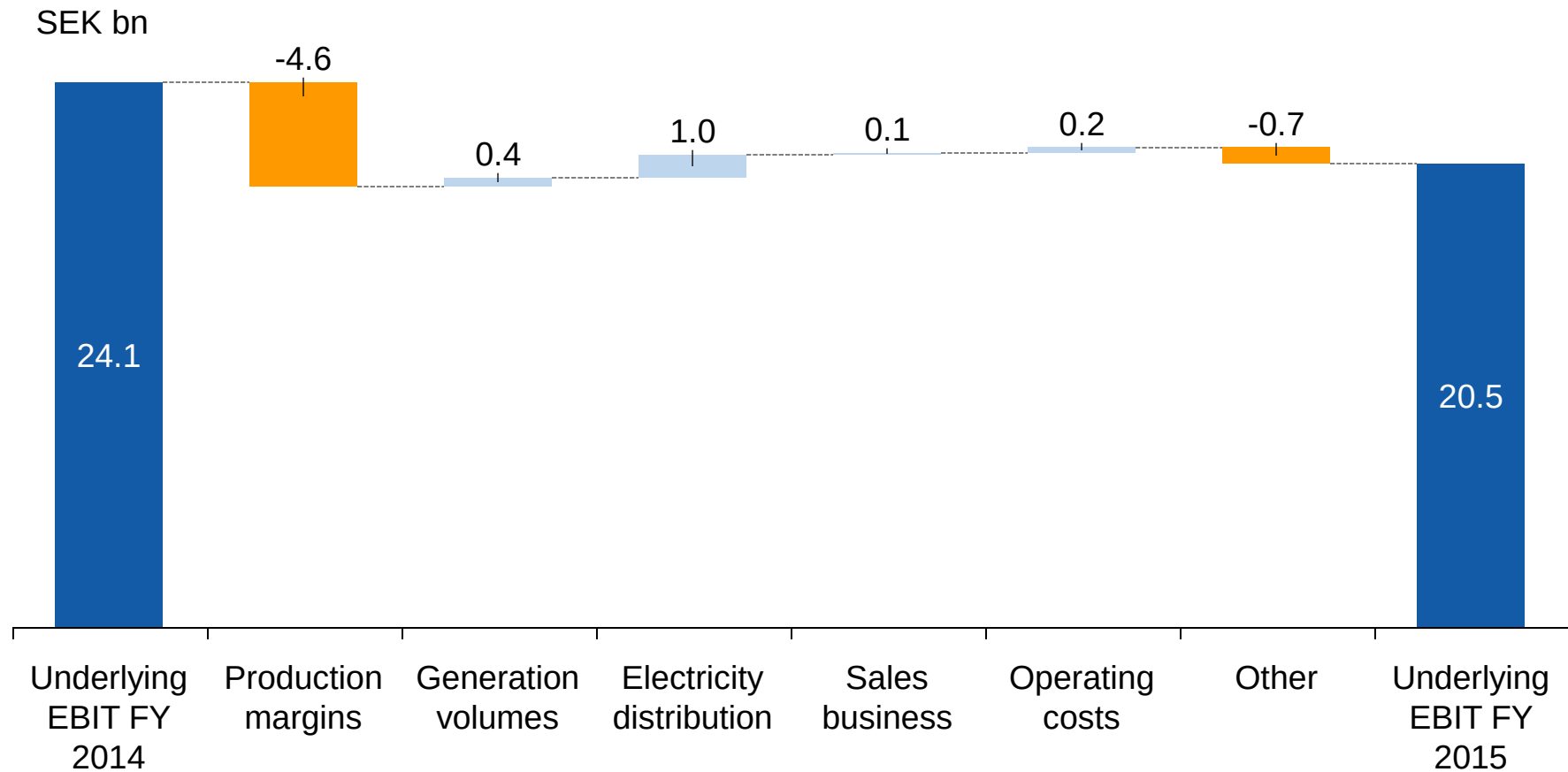
SEK bn	FY 2015	FY 2014
Net Sales	164.5	165.9
EBITDA	32.8	41.0
Underlying EBITDA (excl. items affecting comparability)	40.0	43.6
EBIT	-23.0	-2.2
Underlying EBIT (excl. items affecting comparability)	20.5	24.1
Financial items, net	-5.2	-6.0
Profit after tax	-19.8	-8.3
Cash flow (FFO)	29.0	32.1
Operating cash flow (after change in working capital)	40.9	40.1
Net debt	64.2	79.5
Adjusted net debt	137.6	158.3
FFO/Adjusted net debt (%)	21.1	20.3
Adjusted net debt/EBITDA (times)	4.2	3.9

Items affecting comparability

SEK bn	Q4 2015	Q4 2014	FY 2015	FY 2014
Capital gains	0.1	0.1	0.3	3.2
Capital losses	-0.1	-0.2	-0.4	-0.2
Impairment losses	-0.3	-0.1	-36.8	-23.8
Reversed impairment losses	-	-	0.5	-
Provisions	-2.1	-0.1	-6.0	-5.7
Unrealised changes in the fair value of energy derivatives	0.5	-0.7	1.5	0.8
Unrealised changes in the fair value of inventories	-0.4	-	-0.7	0.1
Restructuring costs	-0.1	-0.2	-1.2	-0.8
Other IACs	-0.4	-	-0.8	-
Total	-2.8	-1.2	-43.5	-26.3

- Impairment losses in 2015 of SEK 36.8bn mainly relate to items in Q2:
 - Ringhals 1 and 2 nuclear reactors (SEK 17.0bn)
 - Lignite assets in Germany (SEK 15.2bn)
 - Moorburg power plant, Hamburg (SEK 4.0bn)
- Provisions in 2015 of SEK 6.0bn mainly relate to higher provisions for nuclear power and for mining operations in Germany, and environment related provision for hydro power in Germany

Development of underlying EBIT FY 2015

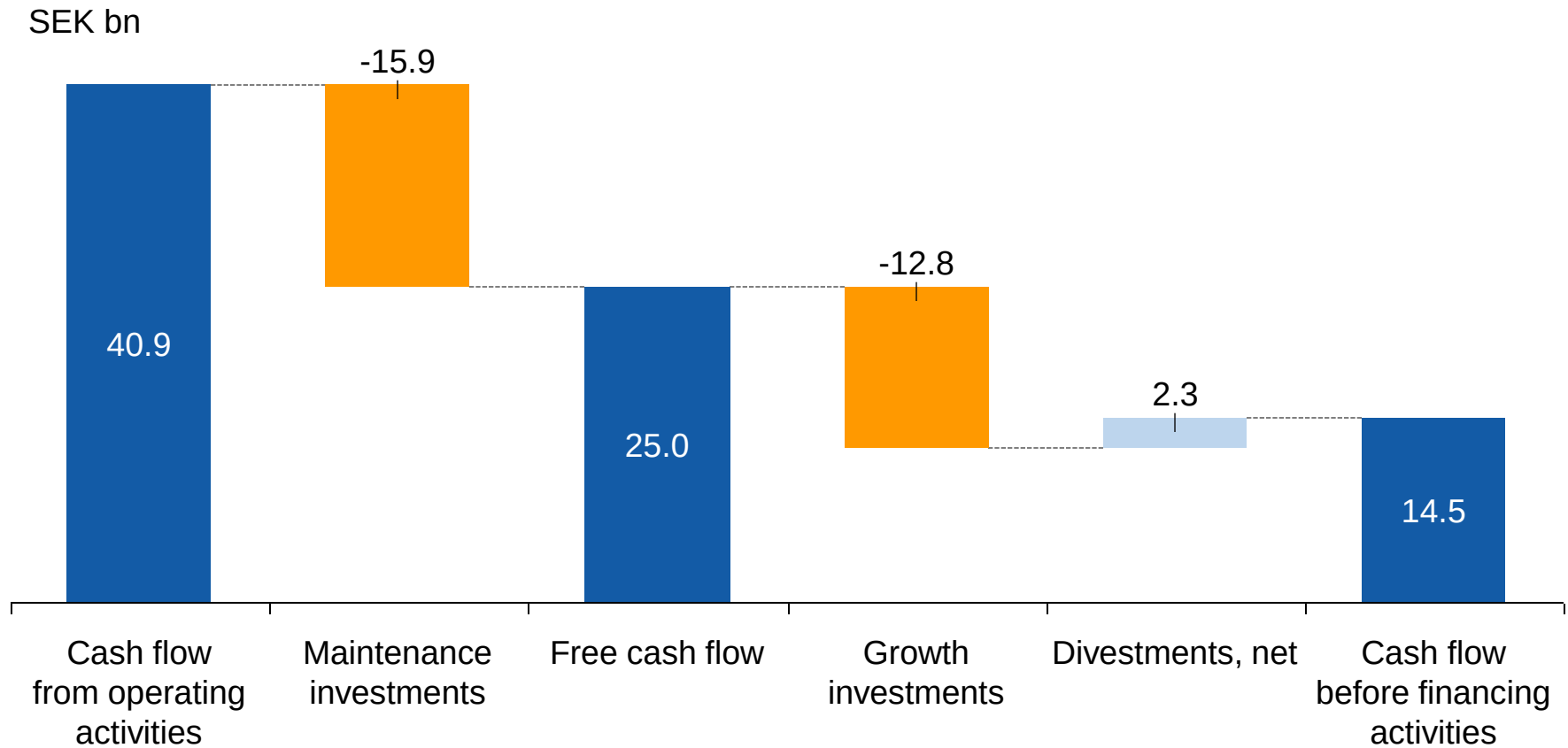


Underlying EBIT per operating segment

SEK bn	FY 2015	FY 2014	Q4 2015	Q4 2014
Customers & Solutions	1.4	1.0	0.1	0.4
Power Generation	12.4	15.6	3.6	4.0
Wind	1.5	1.7	0.6	1.1
Heat	1.7	2.4	0.3	1.2
Distribution	5.5	4.4	1.7	1.5
Other*	-1.9	-1.0	-0.1	-0.1
Eliminations	—	—	0.2	0.2
Total	20.6	24.1	6.4	8.3

* Other pertains mainly to all Staff functions including Treasury activities and Shared Service Centres

Cash flow development FY 2015



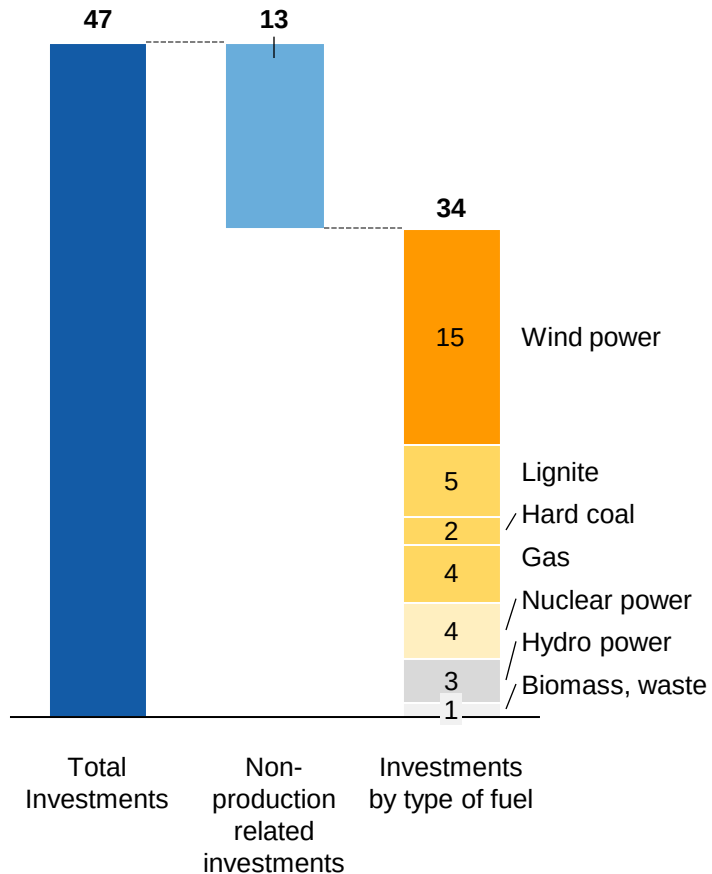
Capital expenditures

SEK bn	FY 2015	FY 2014	Change %	Q4 2015	Q4 2014	Change %
Electricity generation	16.7	17.9	-6.7	4.1	6.0	-31.7
CHP/Heat	3.3	3.7	-10.8	1.3	1.5	-13.3
Electricity networks	4.7	5.0	-6.0	1.8	2.1	-14.3
Other	4.0	2.4	66.7	1.2	0.2	-
TOTAL	28.7	29.0	-1.0	8.4	9.8	-14.3
<i>- of which maintenance and replacement</i>	<i>15.9</i>	<i>16.9</i>	<i>-5.9</i>	<i>5.3</i>	<i>6.2</i>	<i>-14.5</i>
<i>- of which growth</i>	<i>12.8</i>	<i>12.1</i>	<i>5.8</i>	<i>3.1</i>	<i>3.6</i>	<i>-13.9</i>

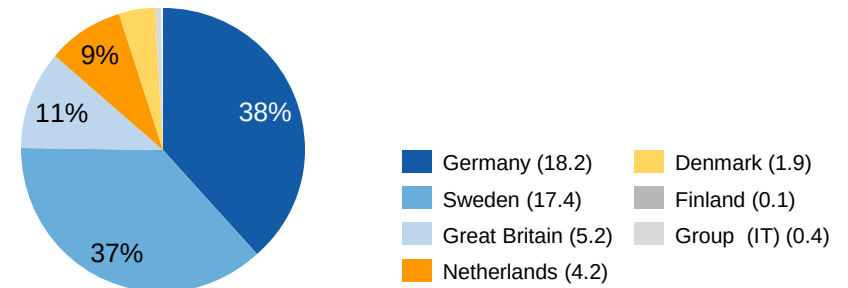
- The majority of growth investments pertain to investments within wind power.

Investment plan 2016-2017

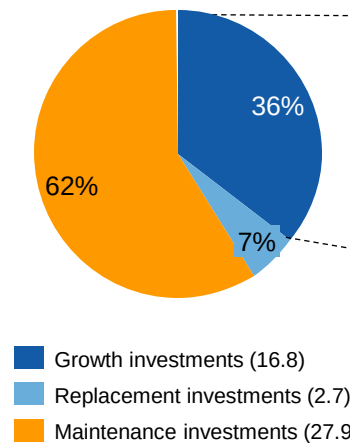
Total Investments 2016-2017: SEK 47bn



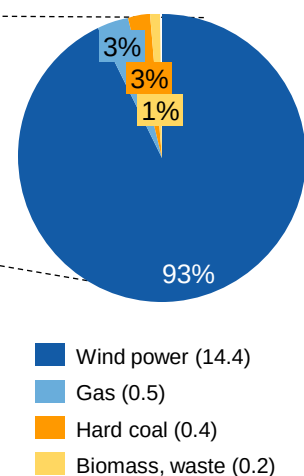
Geographical split (SEK bn)



Investment split by type (SEK bn)



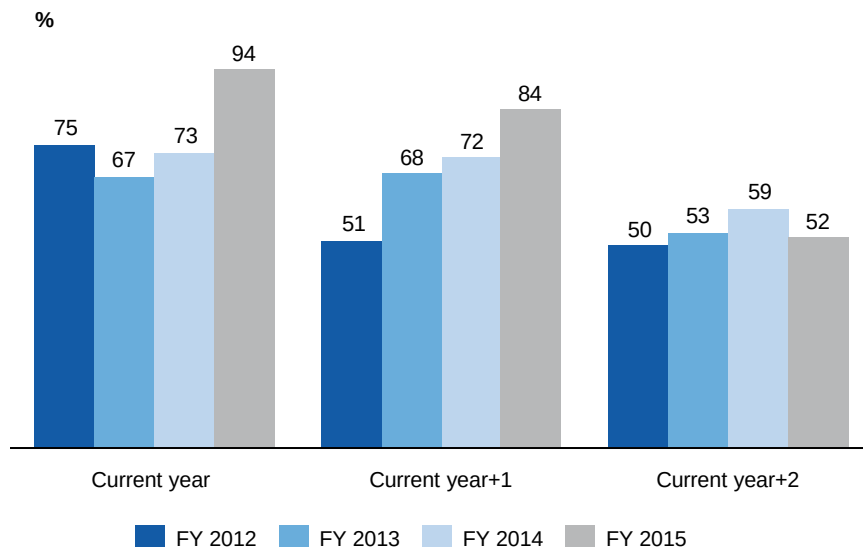
Growth investments by technology (SEK bn)*



* Growth investments in this pie chart relate to electricity and heat generation amounting to SEK 15.5bn

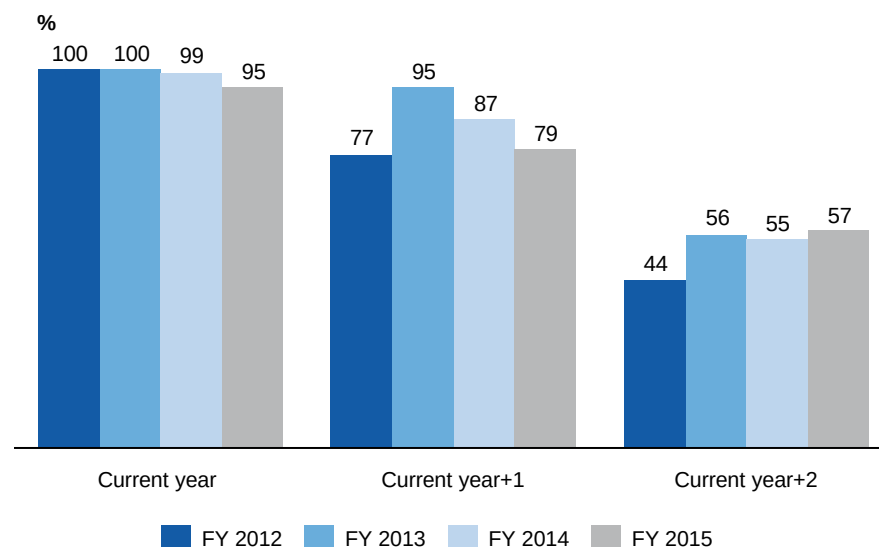
Development of hedge ratios and hedge prices

Hedge ratios - Nordic



	Current year			Current year +1			Current year +2		
	Ratio	Price	Year	Ratio	Price	Year	Ratio	Price	Year
Dec 2012	75%	45	2013	51%	42	2014	50%	41	2015
Dec 2013	67%	40	2014	68%	39	2015	53%	37	2016
Dec 2014	73%	36	2015	72%	34	2016	59%	32	2017
Dec 2015	94%	32	2016	84%	31	2017	52%	30	2018

Hedge ratios – Continental Europe



	Current year			Current year +1			Current year +2		
	Ratio	Price	Year	Ratio	Price	Year	Ratio	Price	Year
Dec 2012	100%	55	2013	77%	52	2014	44%	50	2015
Dec 2013	100%	50	2014	95%	44	2015	56%	40	2016
Dec 2014	99%	45	2015	87%	39	2016	55%	36	2017
Dec 2015	95%	39	2016	79%	35	2017	57%	33	2018

Note: hedge ratios in % and hedge prices in EUR/MWh

Financial and sustainability targets

Financial metrics	Target	Outcome FY 2015	Outcome FY 2014
Return on Capital Employed (ROCE) (Return on capital employed excl. items affecting comparability)	9.0%	-8.2% (7.4%)	-0.7% (8.2%)
Net debt/Equity	50-90%	55.4%	61.9%
FFO/Adjusted net debt	22-30%	21.1%	20.3%
Dividend policy (% of profit after tax)	40-60%	zero*	zero
Sustainability metrics & targets (-2015)		Outcome FY 2015	Outcome FY 2014
Reduce CO₂ exposure to 65 Mtonnes by 2020 (93.7 Mtonnes in 2010)		83.5 Mtonnes**	82.3 Mtonnes
Growth in renewable electricity generation capacity to be higher than the average rate of growth for ten reference countries		13.4%	6.3% (Preliminary growth rate for reference countries: 9.1%)
Energy efficiency to save 440 GWh in 2015		1,066 GWh	435 GWh

* The Board proposes a zero dividend for 2015

** Consolidated values. Value for 2015 is preliminary.

New strategic objectives and targets

Magnus Hall, CEO and Ingrid Bonde, CFO

Vattenfall's strategy means a shift from a traditional utility to capturing the business opportunities in the transformation



- Customer focus
- Growth in renewables drives decentralization
- Heat as a strong business opportunity
- Partnering becomes more important
- Climate friendly large-scale production with high efficiency
- Lean and agile organization

From a "traditional utility"...

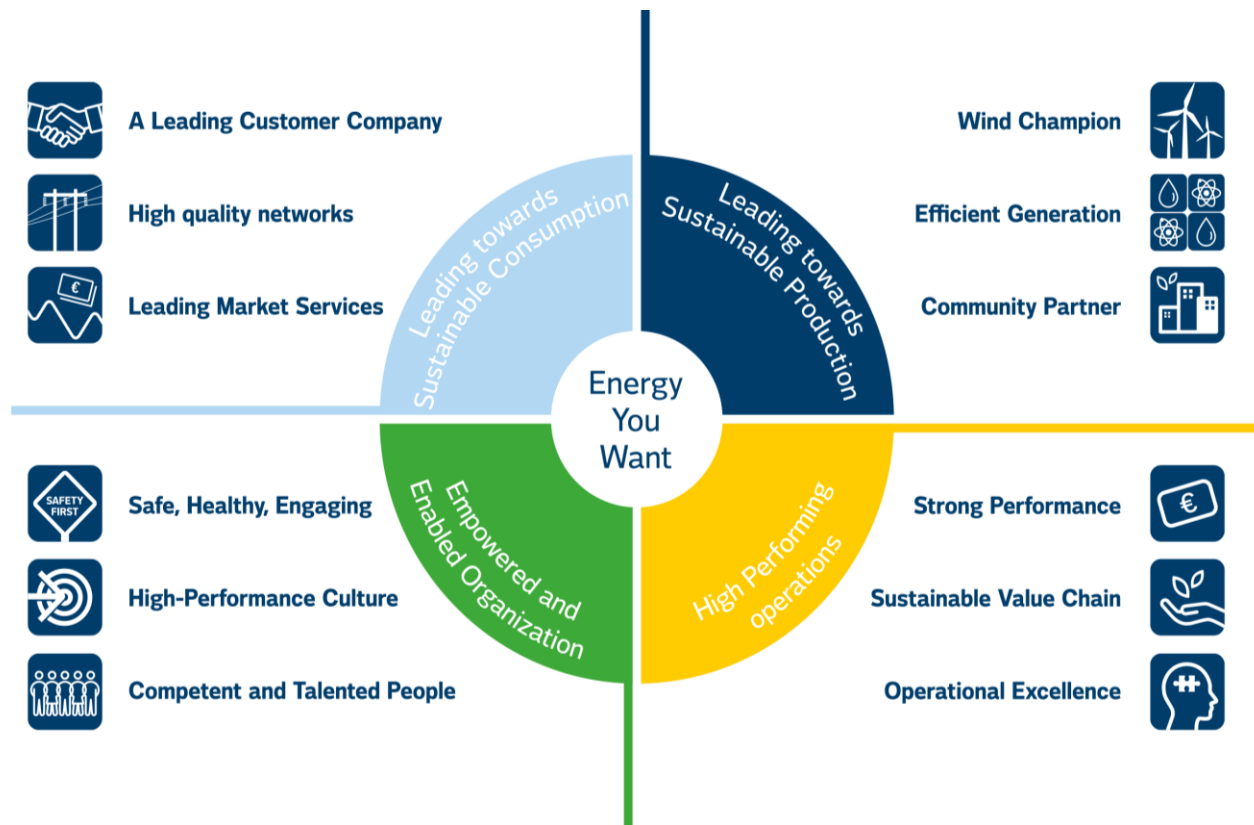
- Large-scale, centralized production
- Wholesale-focus
- 50% fossil power

...to capturing the business opportunities in the transformation

Our vision and strategic objectives

Vattenfall's vision is to be a dedicated partner to its customers and society at large, providing convenient and innovative energy solutions. Vattenfall aims to be a leader in sustainable production, ensuring reliable and cost-efficient energy supply. Vattenfall is committed to be climate neutral by 2050.

We call this ***Energy You Want***



Selected key actions

Group-wide



Increase customer centricity



Increase cost and maintenance efficiency



Actively pursue partnering



Increase efforts in Business development



Promote a sustainable energy market design



Divest lignite

BA specific



Grow in digitalized customer businesses



Improved quality of networks & regulatory optimization



Capture value in new energy markets



Develop wind pipeline and execute on new projects



Develop community partnerships



Secure nuclear and invest in hydro flexibility

New strategic targets valid as of 2016

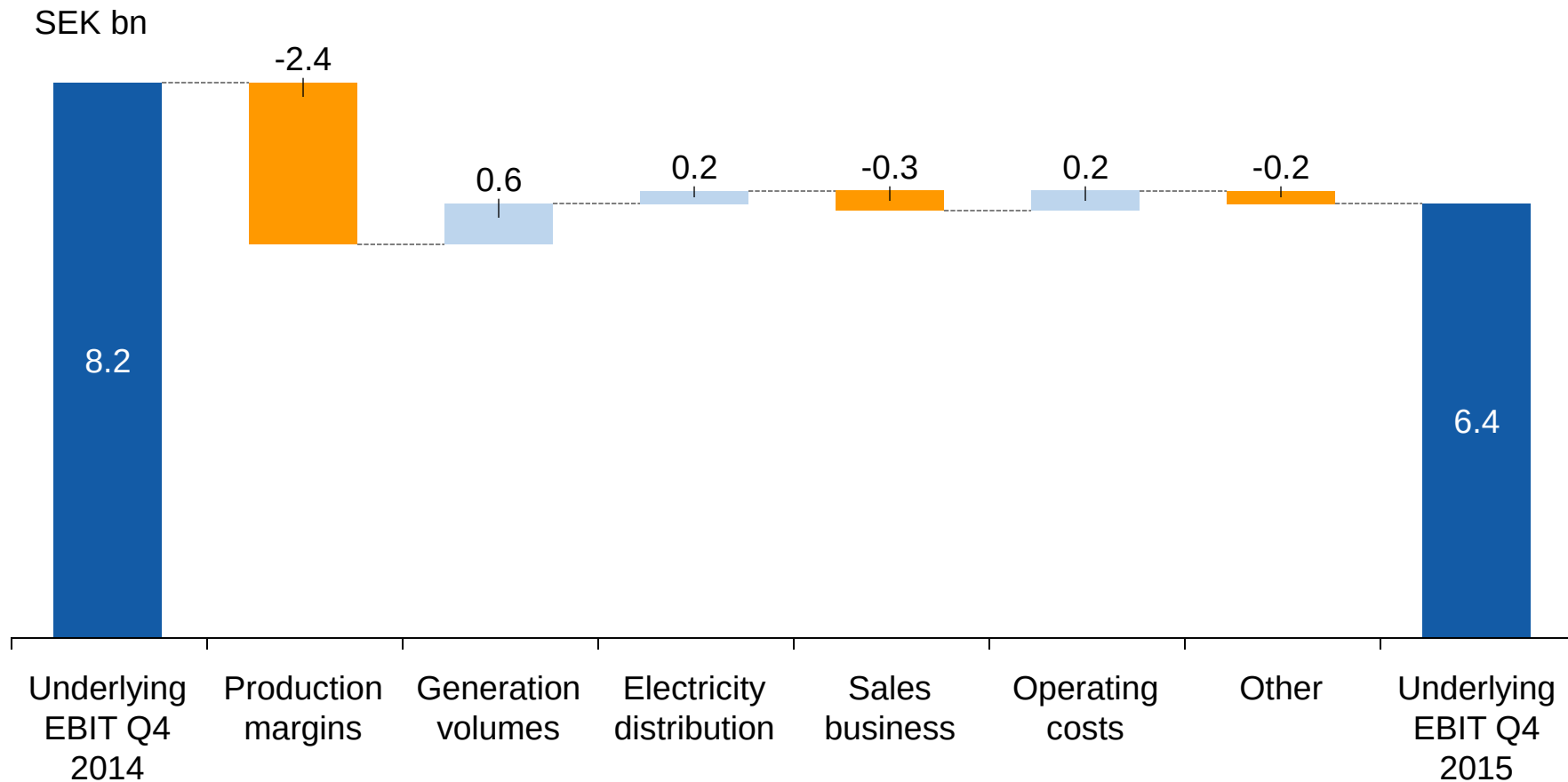
- Six strategic targets to year 2020 better reflect Vattenfall's strategic objectives
- Three sustainability targets are integrated in the new strategic targets
- Four financial targets are set by the owner (ROCE; FFO/adjusted net debt; Debt/equity ratio; Dividend policy) of which ROCE is included below

Strategic objectives	Strategic targets to 2020
Leading towards Sustainable consumption	1. Customer engagement, NPS (Net Promoter Score): +2 NPS relative
Leading towards Sustainable production	2. Commissioned renewables capacity: $\geq 2,300$ MW 3. Absolute CO ₂ emissions: ≤ 21 Mtonnes*
High performing operations	4. ROCE: $\geq 9\%$
Empowered and engaged organisation	5. Safety as LTIF (Lost Time Injury Frequency): $\leq 1,25$ 6. Employee Engagement Index: $\geq 70\%$

*Assumes significant structural changes

Appendix

Development of underlying EBIT Q4 2015

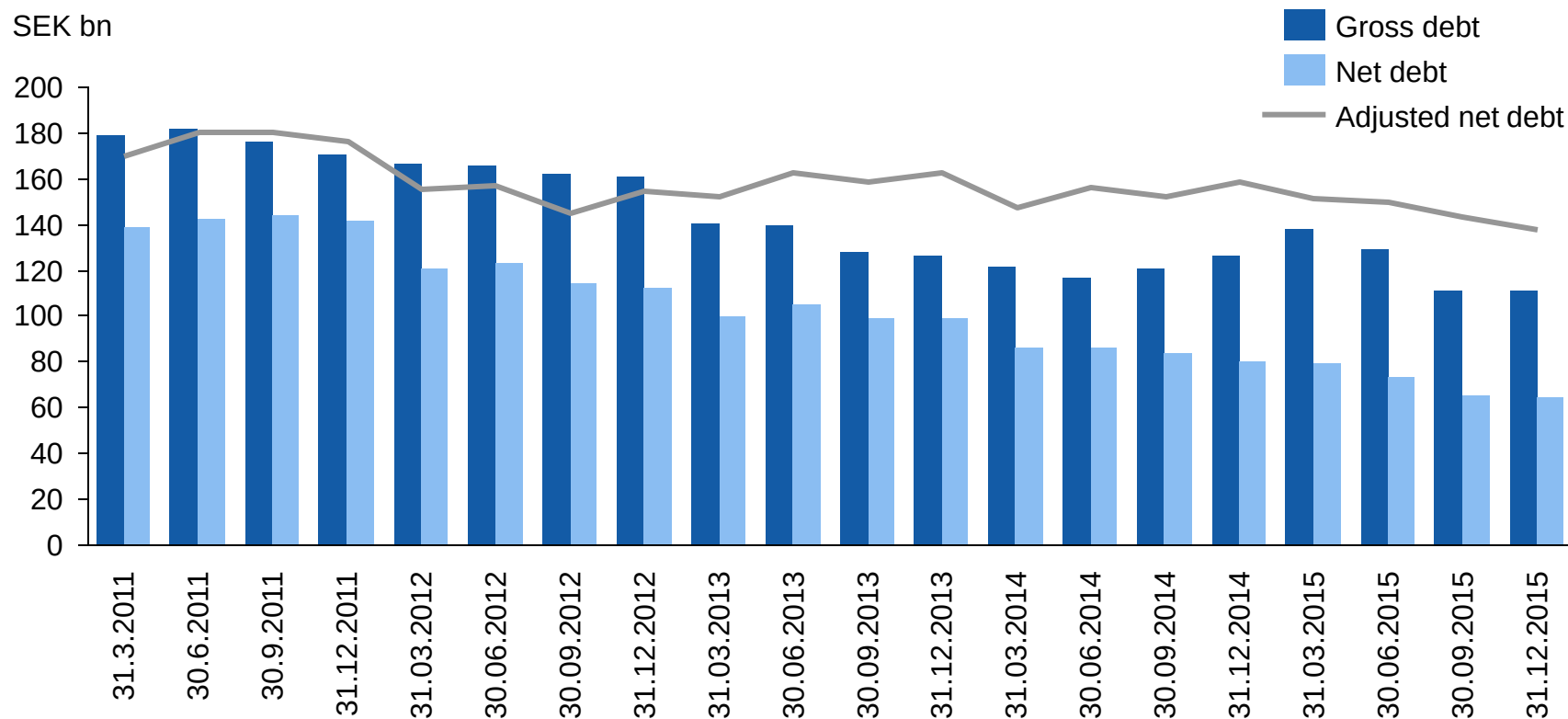


Q4 2015 Financial highlights

SEK bn	Q4 2015	Q4 2014
Net Sales	45.5	48.7
EBITDA	8.8	12.1
Underlying EBITDA (excl. items affecting comparability)	11.4	13.2
EBIT	3.7	7.0
Underlying EBIT (excl. items affecting comparability)	6.4	8.2
Financial items, net	-1.2	-1.6
Profit after tax	2.5	3.9
Cash flow (FFO)	9.4	12.5
Operating cash flow (after change in working capital)	9.6	14.3
Net debt	64.2	79.5
Adjusted net debt	137.6	158.3
FFO/Adjusted net debt (%)	21.1*	20.3*
Adjusted net debt/EBITDA (times)	4.2*	3.9*

* Last twelve months

Debt development



Net debt decreased by SEK 15.3bn compared with 31 December 2014. Adjusted net debt decreased by SEK 20.7bn, compared with 31 December 2014. For the calculation of adjusted net debt, see slide 32.

Continued strong liquidity position December 2015

Group liquidity	MSEK
Cash and cash equivalents	12,351
Short term investments	31,905
Reported cash, cash equivalents & short term investments	44,256
Unavailable liquidity*	-6,813
Available liquidity	37,443

Committed credit facilities	Facility size	MSEK
RCF (maturity Dec 2020)	2,000 MEUR	18,379
Total undrawn		18,379

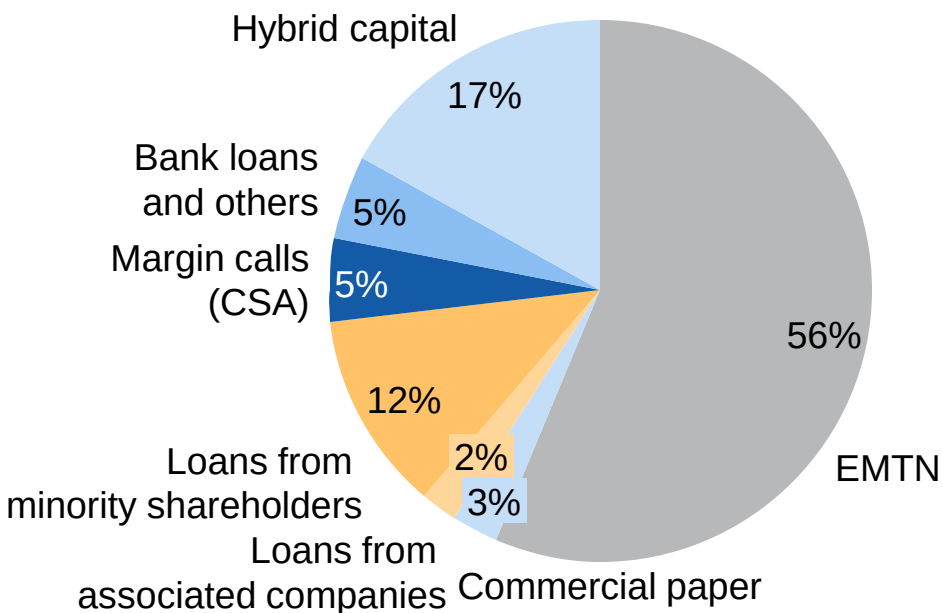
Debt maturities**	MSEK
Within 90 days	12,976
Within 180 days	14,130

* German nuclear "Solidarvereinbarung" 3,128 MSEK, Margin calls paid (CSA) 2,679 MSEK, Insurance" Provisions for claims outstanding" 1,001 MSEK and Margin accounts 5 MSEK

** Excluding loans from minority owners and associated companies.

Breakdown of gross debt as of 31 December 2015

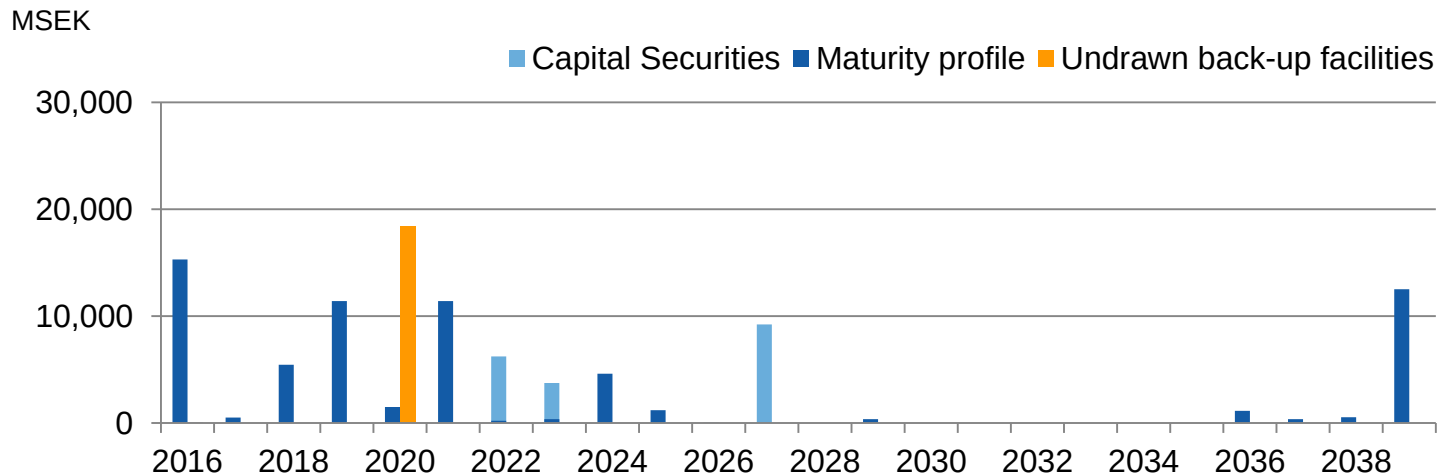
Total debt : SEK 111bn (EUR 12bn)
External market debt: SEK 95bn



Debt issuing programmes	Size (MEUR)	Utilization (MEUR)
EUR 15bn Euro MTN	15,000	6,041
EUR 2bn Euro CP	2,000	376
SEK 15bn Domestic CP	1,632	0
Total	18,632	6,417

- 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

Debt maturity profile*



	31 Dec 2015	31 Dec 2014
Duration (years)	3.9	2.8
Average time to maturity (years)	8.1	5.6
Average interest rate (%)	3.9	3.6
Net debt (SEK bn)	64.2	79.5
Available group liquidity (SEK mn)	37,443	37,796
Undrawn committed credit facilities (SEK mn)	18,379	18,786

* Loans from associated companies, minority owners, margin calls received (CSA) and valuation at fair value are excluded and currency derivatives for hedging debt in foreign currency are included

Reported and adjusted net debt

Reported net debt (SEK billion)	Dec 31 2015	Dec 31 2014
Hybrid capital	-18.5	-9.4
Bond issues and commercial papers and liabilities to credit institutions	-68.9	-72.5
Present value of liability pertaining to acquisition of subsidiaries	-	-19.3
Liabilities to associated companies	-2.8	-2.6
Liabilities to minority shareholders	-13.0	-12.4
Other liabilities	-7.3	-9.8
Total interest-bearing liabilities	-110.6	-125.9
Reported cash, cash equivalents & short-term investments	44.3	45.1
Loans to minority owners of foreign subsidiaries	2.1	1.4
Net debt	-64.2	-79.5

Adjusted net debt (SEK billion)	Dec 31 2015	Dec 31 2014
Total interest-bearing liabilities	-110.6	-125.9
50% of Hybrid capital	9.3	4.7
Present value of pension obligations	-38.9	-45.3
Mining & environmental provisions	-19.1	-14.5
Provisions for nuclear power (net)	-32.9	-33.7
Margin calls received	5.3	7.0
Liabilities to minority owners due to consortium agreements	11.9	11.6
= Adjusted gross debt	-175.0	-196.1
Reported cash, cash equivalents & short-term investments	44.3	45.1
Unavailable liquidity	-6.8*	-7.3*
= Adjusted cash, cash equivalents & short-term investments	37.4	37.8
= Adjusted net debt	-137.6	-158.3

* Of which: German nuclear "Solidarvereinbarung" 3.1, Margin calls paid (CSA) 2.7, Insurance "Provisions for claims outstanding" 1.0

Discount rates used in calculation of provisions as of December 2015

Type of provision	Discount rate	Inflation rate	Real discount rate
Nuclear, Germany	4.0%	3.0%	1.0%
Nuclear, Sweden	4.0%	2.0%	2.0%

Type of provision	Discount rate
Pensions, Germany	2.25%
Pensions, Sweden	3.25%

Nuclear provisions as per 31 Dec 2015

Reactor	Net capacity (MW)	Start (year)	Vattenfall share (%)	Vattenfall provisions, SEKbn (IFRS accounting)	Vattenfall provisions, SEKbn (pro rata)	Sw nuclear waste fund (Vattenfall pro rata share)
Ringhals 1	879	1976	70.4	Total Ringhals: 21,892	Total Ringhals: 21,892 ¹⁾	
Ringhals 2	809	1975	70.4			
Ringhals 3	1,070	1981	70.4			
Ringhals 4	942	1983	70.4			
Forsmark 1	984	1980	66.0	Total Forsmark: 19,431	Total Forsmark: 12,824	
Forsmark 2	1,120	1981	66.0			
Forsmark 3	1,170	1985	66.0			
Total Sweden	6,974	-		41,553²⁾	34,946²⁾	28,650 ³⁾
Brunsbüttel	771	1977	66.7	18,664	12,443	
Brokdorf	1,410	1986	20.0	0	4,225	
Krümmel	1,346	1984	50.0	10,788	10,788	
Stade ⁴⁾	640	1972	33.3	0	1,942	
Total Germany	4,167	-	-	29,452	29,398	
Total SE & DE	11,141			71,005	64,344	

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

2) Total provisions in Sweden (IFRS accounting) include provisions of SEK 230mn related to Ägesta

3) Vattenfall's share of the Nuclear Waste Fund (book value). IFRS consolidated value is SEK 34,172mn

4) Stade is being dismantled

Ongoing process to divest lignite assets

- On 22 September Vattenfall announced the next step in the lignite sales process by publicly inviting potential bidders to state their interest in acquiring Vattenfall's German lignite assets
- By 20 October Vattenfall has received statements of interest from a number of potential bidders
- Qualification process is now ongoing
- Vattenfall's ambition is to reach an agreement in H1 2016

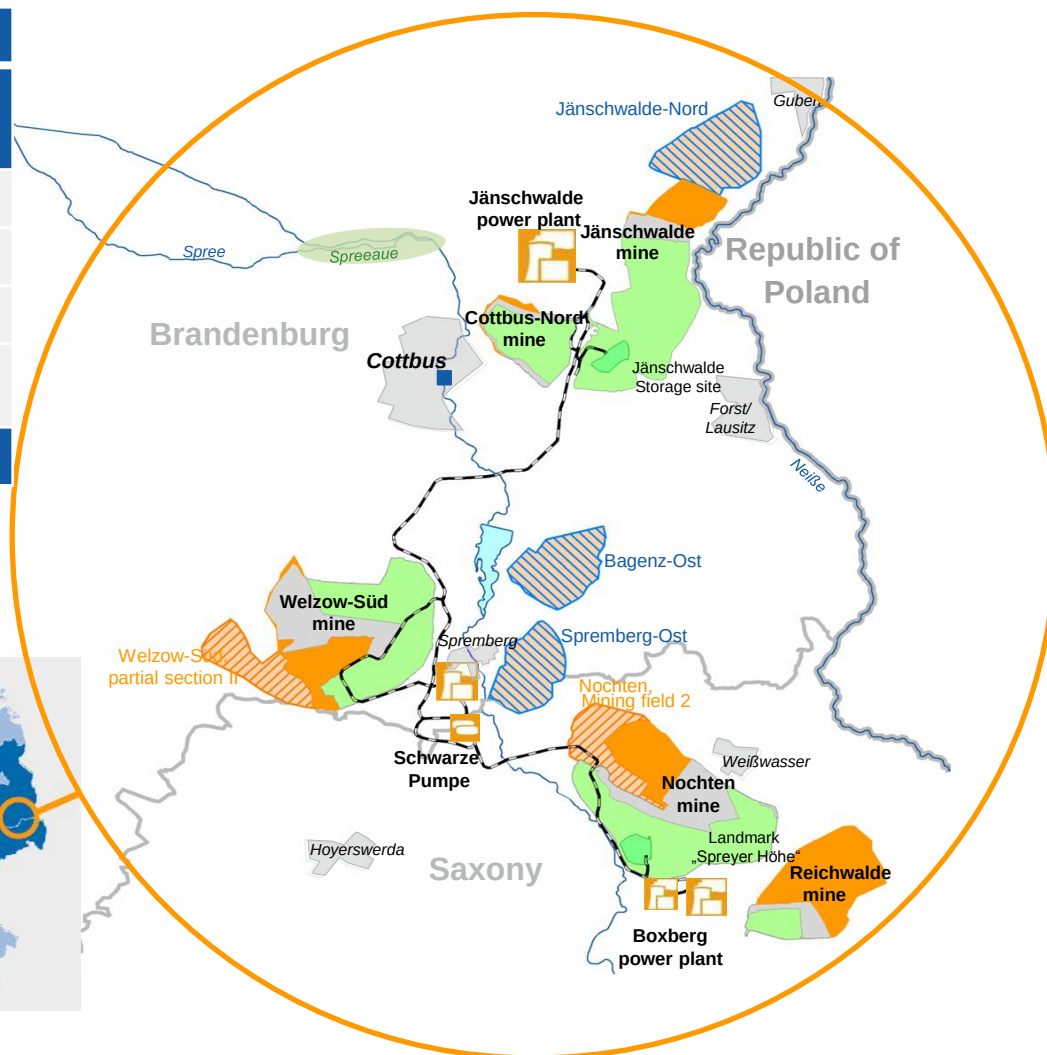
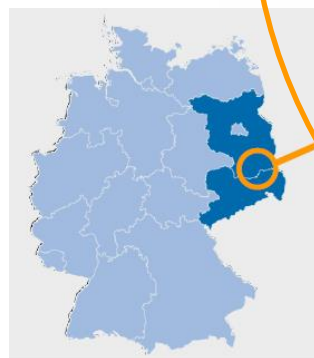


Overview of Vattenfall's lignite operations

Lignite production	60-65mn tonnes/a
Installed power plant capacity	8,095 MW _{gross}
Jämschwalde	3,000 MW
Schwarze Pumpe	1,600 MW
Boxberg	2,575 MW
Lippendorf R* (Vattenfall share)	920 MW
Electricity generation	approx. 55 TWh/a

* Outside of the Lusatian portfolio

- Operating opencast mine areas
- Recultivation areas
- Approved mining fields
- Continuation
- Future fields
- Lignite-fuelled power plants
- Refining plant
- Central railway operation VEM



Impairment history 2009-2015 (1)

Impairments	SEK billion
Germany	46.5
- Transmission (2010)	5.1
- Thermal assets	29.5
- 2011(Assets)	0.3
- H1 2013 (Assets)	4.3
- Q3 2014 (Assets)	5.7
- Q2 2015 (Assets)	19.2
- Nuclear assets	10.5
- 2011 (Assets)	10.5
- Other assets	1.4
- Q2 2013 (Assets)	0.1
- Q3 2014 (Assets)	1.1
- Q2 2015 (Wind power assets, other assets)	0.2

Impairment history 2009-2015 (2)

Impairments	SEK billion
Netherlands	52.3
- Thermal assets	30.6
- 2010 (Goodwill)	4.3
- 2011 (Assets, Goodwill)	0.4
- 2012 (Assets, Goodwill)	8.6
- H1 2013 (Assets)	14.7
- Q3 2014 (Assets)	2.6
- Trading	16.5
- H1 2013 (Goodwill)	6.5
- Q3 2014 (Goodwill)	10.0
- Other assets	5.2
- 2010 (Assets)	1.7
- H1 2013 (Assets, Goodwill)	1.5
- Q2 2014 (Assets)	1.9
- Q4 2015 (Assets)	0.1

Impairment history 2009-2015 (3)

Impairments	SEK billion
Nordic	25.6
- Renewable assets	1.4
- Q3 2014 (Assets)	1.4
- Thermal assets	7.2
- 2009 (Assets)	4.1
- H1 2013 (Assets)	3.0
- Q4 2015 (Assets)	0.1
- Nuclear assets (Q2 2015)	17.0
Other (mainly UK)	2.7
Total impairments 2009 – H1 2015	127.1
Reversed impairment losses	-3.5
Total impairments, (net, incl. reversed impairment losses) 2009 – H1 2015	123.6
Poland (2011, 2012, 2013; Shares in Enea S.A.) – accounted for as financial expense	2.4
Liberia (2012, biomass project) – of which 0.8 accounted for as financial expense	1.3
Total impairments, (incl. Poland and Liberia) 2009 – H1 2015	127.3