IMPROVED RISK PROFILE

The new Vattenfall is financially more resilient with a lower downside risk

Key contributing factors in 2016

✓ Lignite divestment
  - Reduced exposure to power prices, fossil generation and CO₂

✓ German nuclear fund
  - Regulatory clarity on the externalisation of liabilities for interim and final storage of nuclear waste

✓ Swedish energy agreement
  - Pending law change, capacity tax on nuclear to be abolished (~SEK 3bn EBITDA effect) and real-estate tax on hydro to be significantly reduced (~SEK 2bn EBITDA effect)

Risk on FFO/adjusted net debt (illustrative)

- The improved risk profile leads to a less utilized risk-bearing capability
- This allowed for a more risk tolerant hedge strategy implemented in autumn 2016, reducing cost and complexity
WE POWER CLIMATE SMARTER LIVING

We will help power our customers to live free from fossil fuels within one generation.
Vattenfall is well on track to meet its strategic targets until 2020

Our strategic objectives and prioritised areas

- Increase customer centricity and build a sizable position in decentralized energy
- Grow in renewables, maintain efficient operations within hydro and nuclear power and implement our CO₂ roadmap
- Develop culture, competence and brand
- Reduce costs and improve operational efficiency

Strategic targets to 2020

1. Customer engagement, Net Promotor Score (NPS) relative +2
2. Aggregated commissioned new renewables capacity 2016-2020: ≥2,300 MW
3. Absolute CO₂ emissions, pro rata, continuing operations: ≤21 Mtonnes
4. ROCE: ≥9% (continuing operations)
5. Safety as LTIF (Lost Time Injury Frequency): ≤1.25
6. Employee Engagement Index: ≥70%

---

1) Only updated on an annual basis
VATTENFALL AT A GLANCE

• One of Europe’s largest producers of electricity and heat
• 100% owned by the Swedish state
• Main products: electricity, heat, gas, energy services
• Main markets are Sweden, Germany, Netherlands, UK, Denmark and Finland
• 20,000 employees

Vattenfall’s total electricity production in 2016: 119.0 TWh

Net sales in 2016: SEK 139bn
Underlying operating profit¹ in 2016: SEK 22bn

¹) Operating profit (EBIT) excluding items affecting comparability
A NEW VATTENFALL IS TAKING SHAPE

A new Vattenfall is taking shape, both from a strategic and financial perspective.

Vattenfall has moved from a heavy fossil-based production towards a more sustainable portfolio in 2016

... and are further moving towards more quasi-regulated business with more limited risk exposure going forward

Vattenfall production mix 2015-2016 (TWh)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th></th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fossil-based power</td>
<td>52% (84)</td>
<td>19% (31)</td>
<td>24% (38)</td>
</tr>
<tr>
<td>Nuclear power</td>
<td>24% (38)</td>
<td>41% (47)</td>
<td>27% (31)</td>
</tr>
<tr>
<td>Hydro power</td>
<td>27% (31)</td>
<td>1% (6)</td>
<td>4% (6)</td>
</tr>
<tr>
<td>Wind power</td>
<td>1% (2)</td>
<td>1% (1)</td>
<td>5% (6)</td>
</tr>
<tr>
<td>Biomass and waste</td>
<td>1% (2)</td>
<td>1% (1)</td>
<td>5% (6)</td>
</tr>
</tbody>
</table>

Vattenfall future value pools - EBITDA

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th></th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-regulated</td>
<td>~43%</td>
<td>~30%</td>
<td>~47%</td>
</tr>
<tr>
<td>Quasi-regulated</td>
<td>~32%</td>
<td>~25%</td>
<td>~23%</td>
</tr>
<tr>
<td>Regulated</td>
<td>~27%</td>
<td>~31%</td>
<td>~84%</td>
</tr>
</tbody>
</table>
WE ARE RESHAPING OUR ASSET BASE TO MEET NEW MARKET REQUIREMENTS

<table>
<thead>
<tr>
<th>Grow</th>
<th>Customer attractiveness ✓</th>
<th>Long term viability ✓</th>
<th>Strong Vattenfall capabilities ✓</th>
<th>Attractive returns ✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Production</td>
<td>Wind • Solar • District heating</td>
<td>Regulated • Non-regulated • Services</td>
<td>Trading • Aggregation Optimization Marketing</td>
<td>Electricity retail • Decentralized solutions**</td>
</tr>
<tr>
<td>Keep and develop</td>
<td>Hydro • Nuclear • Gas condensing • Hard coal CHP *</td>
<td>Gas retail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non core</td>
<td>Hard coal condensing • Lignite</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Hard coal CHP to be converted to gas end of economic life time

**E.g. aggregation services, heat pumps and solar panels
CORNERSTONES TOWARDS CLIMATE NEUTRALITY

Portfolio transformation
Major shift in 2016 following lignite divestment

Continued CO₂ phase out
Ongoing initiatives support the targeted ambition

Supporting our partners
Enabling partners to reach climate targets

Climate neutrality 2050
Climate neutrality Nordic 2030

✓ Phase out of coal, e.g., Klingenberg conversion
✓ Efficient gas-fired CHPs
✓ New smart energy and heat solutions
✓ Partnerships for CO₂-free industry processes (e.g. steel, cement)
✓ Electrification of industrial processes and transport
✓ Life Cycle Analysis and Environmental Performance Declarations
✓ Cooperate with partners, suppliers, cities and customers to set joint CO₂ targets

Vattenfall absolute CO₂ 2015: 84 MT, 2016: 23 MT
*Source: Company reports 2015–RWE, Enel, E.ON, EDP, EnBW, Iberdrola, DONG, Fortum, Centrica, EDF, Statkraft
# ELECTRIFICATION IS AN ENABLER FOR SOLVING THE CLIMATE ISSUE

Vattenfall aims to play a leading role given our strong position in heating, renewable generation and our “Nordic” heritage coming from a low-emitting region.

<table>
<thead>
<tr>
<th>Electrification of the transport sector</th>
<th>Electrification of heating</th>
<th>Electrification of the industry</th>
</tr>
</thead>
</table>
| ▪ Supports e-mobility growth with resulting reduction of CO₂ as well as solving pollution and noise issues | ▪ Energy efficiency achieved by switching from gas, oil or electric boilers to heat pumps or district heating  
▪ Power to heat is an attractive solution to reduce the cost of heating | ▪ Greater use of electricity by industry can lead to fossil free steel, green concrete and boost the production of non-fossil diesel |
AN ATTRACTIVE PARTNER IN THE ENERGY TRANSITION

- Research project for a carbon dioxide free steel industry
  - SSAB
  - LKAB
- Cooperation in large scale bio-diesel production
  - Preem
- Supplier of carbon dioxide neutral district cooling
  - GE Healthcare
- Storage projects at a number of wind parks
  - BMW
- Launch of a market place for energy sharing
  - Powerpeers
- Support of a major enterprise for battery production in Sweden
  - Northvolt
- Study on electrified cement production
  - HeidelbergCement Group
CHALLENGING MARKET CONDITIONS

Challenging market conditions with depressed electricity prices have lead to impairments

Front year contract price (EUR/MWh)

- China induced commodity boom
- High fuel prices
- Financial crisis
- Fukushima
- Increase of German renewables, dropping CO₂ prices, lower demand
- Low coal prices, strong hydro supply

Source: Argus Germany, NPX Nordpool SYS

Total impairments of SEK 160.3bn

- Thermal assets
- Goodwill
- Other
- Nuclear
- Renewable assets

Source: Argus Germany, NPX Nordpool SYS
SUCCESSFUL IN MANAGING LEVERAGE IN A TOUGH MARKET

Despite drop in FFO due to declining market conditions...

- Pressure on earnings as a result of weaker situation for merchant generation → FFO declining by SEK 11bn
- Higher share of regulated and contracted earnings will lower volatility going forward

...and increase of provisions...

- Declining discount rate environment and revised cost estimates → Provisions increased by SEK 16bn
- Reduced uncertainty in provision development going forward with the transfer of medium and long-term nuclear liabilities in Germany

...FFO/AND is today within our target range

During the past 5 years, we have actively reduced the overall net debt position by SEK 86bn through:
- Cost reductions
- Reduced capex
- Divestments
- No dividend pay-out

1) Last 12 months value
SIGNIFICANT GROWTH IN RENEWABLES

A total of 2.8 GW are now in operation. With a further ~2 GW in development and construction or awarded, Vattenfall is well on track meeting its strategic long-term target on renewable capacity growth.

Highlights Q3 2017

- FID for onshore wind farm Wieringermeer, 180MW, NL
- Acquired neighbouring project Wieringermeer Extention, 115 MW, NL
- BU Solar & Batteries constantly developing pipeline

1) Danish Kriegers Flak expected commissioning 2021
2) Commissioning expected in 2025-2027
3) Commissioning TBD
INVESTMENT PLAN 2017-2018

The investment plan reflects a clear shift in our strategy with a large part dedicated to growth investments, with the majority in wind power, solar power and distribution networks.

Investment split by type: SEK 50 bn

- Growth investments, 56%
- Replacement investments, 13%
- Maintenance investments, 31%

Growth investment by technology: SEK 28 bn

- Wind power, 62%
- Distribution grids, 20%
- Solar PV, 6%
- Heat grids, 4%
- Other, 8%
• Underlying EBIT increased by SEK 1.4 bn to SEK 16.0 bn due to increased earnings in heat, distribution and power generation
• Program launched to increase efficiency in staff functions (SEK 2 bn cost reduction target by 2020)
• FFO and debt levels stable, with FFO/adjusted net debt at 24.0%, above target of 22%
• Adjusted net debt improved with SEK 10.8 bn, mainly due to positive cash flow after investment, decrease in pension provisions and refund of nuclear fuel tax from the German government

1) Excluding divested lignite operations
## FINANCIAL TARGETS

On an underlying basis Vattenfall meets its financial targets

<table>
<thead>
<tr>
<th>Financial metric</th>
<th>Target²</th>
<th>9M 2017</th>
<th>9M 2016³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Capital Employed (ROCE)¹</td>
<td>9%</td>
<td>4.2</td>
<td>3.1</td>
</tr>
<tr>
<td>(ROCE excl. items affecting comparability)</td>
<td></td>
<td>9.8</td>
<td>8.4</td>
</tr>
<tr>
<td>FFO/adjusted net debt¹</td>
<td>22-30%</td>
<td>24.0</td>
<td>23.9</td>
</tr>
<tr>
<td>Net debt/equity</td>
<td>50-90%</td>
<td>62.4</td>
<td>66.8</td>
</tr>
<tr>
<td>Dividend policy (% of the year’s profit after tax)</td>
<td>40-60%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

1) Last 12-months value  
2) Financial targets are set and reviewed by the owner for a business cycle-period  
3) Excluding divested lignite operations
Net debt increased by SEK 6.1 bn compared with the level at 31 Dec. 2016. Adjusted net debt improved by SEK 11.5 bn, compared with the level at 31 Dec. 2016.
Total debt: SEK 91.9bn (EUR 9.5bn)
External market debt: SEK 78.6bn (EUR 8.1bn)

- Hybrid capital: 21%
- EMTN: 53%
- Other liabilities: 2%
- Margin calls (CSA): 3%
- Loans from minority shareholders: 12%
- Loans from associated companies: 3%
- Bank loans: 3%
- Commercial paper: 4%

Debt issuing programmes

<table>
<thead>
<tr>
<th>Debt issuing programmes</th>
<th>Size (EUR bn)</th>
<th>Utilization (EUR bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR 10bn Euro MTN</td>
<td>10.0</td>
<td>4.6</td>
</tr>
<tr>
<td>EUR 2bn Euro CP</td>
<td>2.0</td>
<td>0.7</td>
</tr>
<tr>
<td>SEK 15bn Domestic CP</td>
<td>1.6</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13.6</strong></td>
<td><strong>5.3</strong></td>
</tr>
</tbody>
</table>

- 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
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\(^1\) hedge ratio (%) and indicative prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Average indicative Nordic hedge prices in EUR/MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>27</td>
</tr>
<tr>
<td>2019</td>
<td>28</td>
</tr>
<tr>
<td>2020</td>
<td>32</td>
</tr>
</tbody>
</table>

Sensitivity analysis – Continental\(^2\) portfolio

<table>
<thead>
<tr>
<th>Market quoted</th>
<th>+/- 10% price impact on future profit before tax, MSEK(^3)</th>
<th>Observed yearly volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Electricity</td>
<td>+/- 789</td>
<td>+/- 1084</td>
</tr>
<tr>
<td>Coal</td>
<td>-/+ 286</td>
<td>-/+ 269</td>
</tr>
<tr>
<td>Gas</td>
<td>-/+ 678</td>
<td>-/+ 572</td>
</tr>
<tr>
<td>CO(_2)</td>
<td>-/+ 117</td>
<td>-/+ 125</td>
</tr>
</tbody>
</table>

1) Nordic: SE, DK, NO, FI
2) Continental: GE, NL, UK
3) The denotation +/- entails that a higher price affects operating profit favourably, and -/+ vice versa
ADAPTING THE HEDGE STRATEGY TO CHANGING POWER PRICE EXPOSURE

Before lignite divestment

- Electricity price
- "Fixed fuel cost" (lignite)
- "Variable fuel cost" (gas, coal, CO₂)
- Base load
- Condensing coal & gas
- Renewables

After lignite divestment

- From fixed fuel to variable fuel dominated in Germany
- Group base load production hours reduced by ~33%
- C/UK power production share reduced from 49% to 32%

- Lower hedge ratio
- Hedging primarily Nordic exposure
- Hedging closer to delivery

Key figures:

- TWh 2016
- 160
- 31
- 123
- 119
- 31
- 82
- 49%
- 51%
- 32%
- 68%
APPENDIX
VATTENFALL’S HISTORY
From a domestic Swedish hydro power generator to an European energy company

- 1992: Vattenfall is commercialised
- 1996: Deregulation of Swedish energy market
- 1999–2006: Acquisitions in Germany, Denmark and Poland
- 2009: Vattenfall acquires Nuon in the Netherlands
- 2010: New vision and clearer assignment from owner
- 2016: Divestments of lignite operations in Germany

1990–2000: Part of developing the Swedish energy system

- 1995: Sweden joins the EU
- 1999: Vattenfall acquires 25.1% of HEW
- 2008: Lehman Brothers defaults
- 2009: Vattenfall acquires Nuon in the Netherlands
- 2010–2015: New strategic direction
- 2011: Germany decides to stop nuclear by 2022
- 2011–2015: Divestments of operations in Belgium, Germany, Finland, Poland and Denmark
- 2016: Towards a fossil-free future

- 2010: New vision and clearer assignment from owner
- 2011–2015: Divestments of operations in Belgium, Germany, Finland, Poland and Denmark
- 2016: Towards a fossil-free future
THE ENERGY AGREEMENT – POSITIVE FOR VATTENFALL

### Targets
- Target of **100% renewable production by 2040** (annual production level corresponding to domestic demand)
- Sweden should **have zero net emission of GHG by 2045**, implying further electrification
- A target for **energy efficiency** for 2020-2030 to be set

### Nuclear
- **Capacity tax**\(^1\) abolished over two years beginning 2017
- Adjustments to changes in **Nuclear Waste Fund payments** under investigation
- No “political phase-out” of nuclear
- Permission to replace reactors at existing sites can be given

### Hydro
- **Real estate tax**\(^2\) reduced to same level as other power plants (from 2.8% to 0.5% over a four year period starting 2017)
- Expansion of hydro power should in first hand occur through **capacity increases in existing plants**. “Nationalälvarna” still protected.

### Renewables
- El-certificate system prolonged - **18 TWh added 2020-2030**
- Connection charges for **offshore wind** discontinued
- Facilitation of **small-scale production and services** for energy efficiency, storage and sales of power

---

1. Nuclear capacity tax ~SEK 3bn p.a.
2. Real-estate tax for hydro power plants ~SEK 2bn p.a.

The energy agreement enables Vattenfall to take the lead in the transformation to a sustainability energy system in Sweden.
GROWTH IN DECENTRALISED SOLUTIONS

Declining costs for solar and batteries together with a strengthened political framework enable new customer offerings

Launch of Vattenfall InHouse, SE
Launch of InHouse, to tenant-owner housing associations and property owners
- InHouse Heating
- InHouse Electricity
- InHouse Charging
- InHouse Smart

Launch of solar panels for tenant customers, DE & NL
New offering to tenant customers in Berlin and Hamburg to install solar panels on the roofs for self consumption → remaining demand from micro CHP

Launch of solar panels for private customers, NL & DE
Private customers to lease or buy solar panels for personal consumption through new offering

Joined the EV100 initiative
Vattenfall joined the initiative EV100 together with 9 other multinational companies → exchange the entire car fleet, 3500 cars, to electrical vehicles within the next five years
STABILISED FINANCIAL DEVELOPMENT

After several years of challenging market conditions leading to recognition of substantial impairment losses and pressure on profitability, profit levels have now stabilised.
Key takeaways

- The industrialisation of offshore wind is rapidly changing the competitive environment
- Winning bid levels of 372 DKK/MWh (Vattenfall – Danish Kriegers Flak) and 54.50 EUR/MWh (Shell consortium – Borssele 3/4) considered new industry benchmarks
- Offshore wind is experiencing a learning curve similar to other renewable technologies, from learning to fine-tuning
- The development over the last years ensures offshore wind a long term position in the energy production mix, with benefits for the customers/consumers and the most competitive operators

Vattenfall’s competitive advantage is based on three pillars: fast adaptation to the tender landscape, ability to decrease O&M costs applying latest business standards, lean and agile organisation set-up

1. Figures are only considering revenue streams and are not scope-adjusted, e.g., UK OFTO and grid charges. This might lead to 5-15% correction factor, which does not question the trend as such
## Wind - Installed Capacity Q3 2017

<table>
<thead>
<tr>
<th>Country</th>
<th>Onshore²</th>
<th>Offshore</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>396</td>
<td>590</td>
<td>986</td>
</tr>
<tr>
<td>Denmark</td>
<td>245</td>
<td>158</td>
<td>403</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>241</td>
<td>108</td>
<td>349</td>
</tr>
<tr>
<td>Sweden</td>
<td>255</td>
<td>121</td>
<td>376</td>
</tr>
<tr>
<td>Germany</td>
<td>19</td>
<td>636</td>
<td>655</td>
</tr>
<tr>
<td><strong>Total (MW³)</strong></td>
<td>1,156</td>
<td>1,613</td>
<td>2,769</td>
</tr>
</tbody>
</table>

### Installed capacity (MW³) 986

#### United Kingdom – ROC scheme
- Thetan
- Ormonde (51%)
- Kentish Flats
- Kentish Flats Extension
- Pen Y Cymoedd
- Ray
- Edinbane
- Clashindarroch
- Swinford
- Parc Cynog incl. Solar²
- Pendine

**Installed capacity (MW³) 376**

#### Denmark – FIT scheme
- Horns Rev 1 (60%)
- Klim (98%)
- Nørrekaer Enge 1 (99%)
- Rejsby Hede
- Hagesholm
- Nørre Øksne 5Ø
- Tjæreborg Enge
- Hollandsbjerg
- Bajlum (89%)
- DræbyFed
- Ryå
- Ejings (97%)
- Nordjyllandsværket
- Lyngmose
- Vellingmæsk

**Installed capacity (MW³) 403**

#### Germany – EEG scheme
- DanTysk (51%)
- Sandbank (51%)
- alpha ventus (26%)
- Jänschwalde
- Westküste (20%)

**Installed capacity (MW³) 655**

#### The Netherlands – MEP/SDE(+) scheme
- NoordzeeWind (50%)
- Prinses Alexia
- Eemmerdijk
- Irene Vorrink
- Jaap Rodenburg
- Windpoort (40%)
- Hoofdplaatpolder (70%)
- Reijndersweg (50%)
- Echteld
- De Bijmen
- Oom Kees (12%)
- Oudendijk
- Mariapolder
- Hidum Houw
- Enkhuizen

**Installed capacity (MW³) 349**

---

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

2) 5 MW Solar

3) Kulle (1 MW), Stenkyrka (1 MW), Ruuthsbo (1 MW)
## PIPELINE OF KEY WIND FARMS

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>No. of Turbines</th>
<th>Capacity (MW)</th>
<th>Support scheme</th>
<th>Awarded</th>
<th>Duration of support</th>
<th>Ownership (%)</th>
<th>Commissioning</th>
<th>Current status</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>Aberdeen</td>
<td>11</td>
<td>92</td>
<td>ROC</td>
<td>X</td>
<td>20 yrs</td>
<td>100</td>
<td>2018</td>
<td>Under construction</td>
</tr>
<tr>
<td>DK</td>
<td>Horns Rev 3</td>
<td>49</td>
<td>407</td>
<td>FIT</td>
<td>X</td>
<td>50,000hrs</td>
<td>100</td>
<td>2019</td>
<td>Under construction</td>
</tr>
<tr>
<td>NL</td>
<td>Slufterdam</td>
<td>8</td>
<td>29</td>
<td>SDE+</td>
<td>X</td>
<td>15 yrs</td>
<td>100</td>
<td>2018</td>
<td>Under construction</td>
</tr>
</tbody>
</table>

Total 528 MW

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>No. of Turbines</th>
<th>Capacity (MW)</th>
<th>Support scheme</th>
<th>Awarded</th>
<th>Duration of support</th>
<th>Ownership (%)</th>
<th>Commissioning</th>
<th>Current status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL</td>
<td>Wieringermeer</td>
<td>50</td>
<td>180</td>
<td>SDE+</td>
<td>X</td>
<td>15 yrs</td>
<td>100</td>
<td>2019</td>
<td>Investment decision taken</td>
</tr>
<tr>
<td>NL</td>
<td>Wieringermeer ext.</td>
<td>32</td>
<td>~115</td>
<td>SDE+</td>
<td>X</td>
<td>15 yrs</td>
<td>100</td>
<td>2019</td>
<td>Procurement</td>
</tr>
<tr>
<td>SE</td>
<td>Blakliden + Fäbodberget</td>
<td>84</td>
<td>~350</td>
<td>Certs</td>
<td>N/A</td>
<td>15 yrs</td>
<td>100</td>
<td>2021</td>
<td>Procurement, preparing for grid investment decision</td>
</tr>
<tr>
<td>NL</td>
<td>Moerdijk</td>
<td>7</td>
<td>~28</td>
<td>SDE+</td>
<td>X</td>
<td>15 yrs</td>
<td>100</td>
<td>2019</td>
<td>Procurement</td>
</tr>
<tr>
<td>NL</td>
<td>Haringvliet</td>
<td>6</td>
<td>~21</td>
<td>SDE+</td>
<td>X</td>
<td>15 yrs</td>
<td>100</td>
<td>2019</td>
<td>Procurement</td>
</tr>
<tr>
<td>DE</td>
<td>Forst Briesnig</td>
<td>5</td>
<td>16</td>
<td>FIT (old EEG)</td>
<td>X</td>
<td>20 yrs</td>
<td>100</td>
<td>2018</td>
<td>Procurement</td>
</tr>
<tr>
<td>NL</td>
<td>Nieuwe Hemweg</td>
<td>6</td>
<td>~20</td>
<td>SDE+</td>
<td>X</td>
<td>15 yrs</td>
<td>100</td>
<td>2020</td>
<td>Applied for subsidy</td>
</tr>
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Total ~7GW

1) Capacity in operation: total capacity of the wind farms that Vattenfall has an ownership in. Minority shares included as 100%
### Pipeline of Solar and Batteries

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<th>Duration of support</th>
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**Total 132.8**
## IMPAIRMENT HISTORY 2009 – 9M 2017

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1) Impairment of goodwill
2) Impairment of assets and goodwill