green:field

Vattenfall’s open innovation platform

The end of the energy giants and the beginning of a new era
- changing actors in an evolving energy landscape -

July 2016, Juliane Schulze, Vattenfall GmbH
The end of the energy giants?
RWE AG (RWE.DE)
The end of the energy giants?
E.ON SE (EOAN.DE)
COMPARISON WITH DAX

KW 6. Jun 2016: 
- GBAXI 983,462 
- EDAN.DE 6,69 
- RWE.DE 12,12

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The end of the energy giants
and the beginning of a new era

The new era

- Decreasing electricity prices due to:
  - Increasing volumes of RES and decentral assets
  - Decreasing residual load for baseload power plants
  - Overcapacity with subsidized assets
- Shrinking value of large scale fossil power plants
The end of the energy giants and the beginning of a new era
- also true for Vattenfall -

Sales and operating profit, SEK million, 1990–2015

1) Starting in 2004, Vattenfall reports in accordance with IFRS. Prior to this, reporting was conducted in accordance with national regulations.
2) Underlying operating profit is defined as operating profit excluding items affecting comparability.
VATTENFALL’S TRANSFORMATION

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

From a “traditional utility”...

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

...to capturing the business opportunities in the transformation
green:field
Vattenfall’s open innovation platform
WHAT DO WE DO?

- green:field is a platform for entrepreneurs
- We connect people with promising business ideas inside and outside Vattenfall
- We support them to build strong business models and realise their ideas
- We want to realise the most promising ideas to:
  - create new offers to our clients
  - increase efficiency in our daily work
  - drive the Energiewende
## THREE AREAS OF INTEREST

<table>
<thead>
<tr>
<th>Area</th>
<th>Details</th>
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<tbody>
<tr>
<td>1) <strong>Renewable energy and storage</strong></td>
<td>- Onshore &amp; offshore wind (development, financing, O&amp;M)</td>
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<td>- Photovoltaics and batteries</td>
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<td>- Alternative storage technologies and flexibility options</td>
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<td>2) <strong>Customer relationship</strong></td>
<td>- Customer access and marketing in Renewables</td>
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<td></td>
<td>- On-site customer services</td>
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<td>(configuration, installation, operation &amp; maintenance)</td>
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<td></td>
<td>- Customer relationship management</td>
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<td></td>
<td>(contact &amp; contract mgmt, energy data processing, invoicing, GPKE)</td>
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<td>3) <strong>Big energy data</strong></td>
<td>- Whatever you can come up with</td>
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<td></td>
<td>- BTB concepts</td>
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<td></td>
<td>- BTC concepts outside smart home</td>
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green:field & STARTUPS

We build up relationships to the most promising startups with their dynamic, fast and creative culture and excellent ideas. Throughout the whole process we support you, if you need help, e.g. with access to market experts, assets or data.

Cooperation first, Investment later

Throughout the whole process we support you, if you need help, e.g. with access to market experts, assets or data.
green:field & EMPLOYEES

Develop the most promising ideas to minimal viable products, prototypes and finally integrate them into our everyday business.

Top management-support is crucial. Internal idea competitions and cooperation with external incubators support the whole process.
OUR CURRENT REGIONAL FOCUS

Startups from Berlin

Cooperation first
Investment later

Focus on ideas relevant for our core countries:

- Sweden
- UK
- Netherlands
- Denmark
- Germany

Our employees in renewable business

Entrepreneurs inside the company
FIRST INITIATIVES

- Blockchain conference
- Support of Vattenfall Vision → coaching and training events
- Sponsoring Ecosummit Berlin
- First startup cooperation: → Solandeo, talks with others
- Corporate Startups: → greenHAUS, → sunBESSY
FIND US

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