Corporate PPAs in Scandinavia

Kari Tikkanen, PPA Manager, OX2
Strommarktetreffen, January 2019

Ajos wind farm, Kemi, Finland
Delivered to IKEA in October 2017
OX2 - a leading developer and EPC/turnkey supplier of wind farms

- > 900 MW in construction
- > 1.6 GW of wind power constructed last 12 years
- Technical and commercial management of > 1.1 GW

- Largest supplier of EPC contracts for wind farms in the Nordics
- More than 90 engineering, finance and construction project management professionals in the Nordics, France and Germany
- Over 12 years of TCM experience in the Nordics with offices in Sweden, Finland and Lithuania

>500MW of investment decisions made based on corporate PPAs
Alternatives to manage price risk

<table>
<thead>
<tr>
<th>Subsidy as price floor</th>
<th>Market-based subsidy</th>
<th>Market-based agreement</th>
<th>Merchant pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent on government policy</td>
<td>‘Independent’ of government policy</td>
<td></td>
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Sources: Nasdaq, SKM, Nordpool, Finnish energy authority
Largest corporate PPAs announced in the Nordics in 2018
Recent corporate PPAs could be simplified into two main categories

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<th>Baseload PPA</th>
<th>As-generated PPA</th>
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<tbody>
<tr>
<td><strong>Profile</strong></td>
<td>Fixed</td>
<td>Variable</td>
</tr>
<tr>
<td><strong>Certificates</strong></td>
<td>No GoO’s</td>
<td>Including GoO’s</td>
</tr>
<tr>
<td><strong>Share of annual production</strong></td>
<td>50-100 %</td>
<td>50-100 %</td>
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<tr>
<td><strong>Duration</strong></td>
<td>10-25 years</td>
<td>10-15 years</td>
</tr>
<tr>
<td><strong>Agreement terms</strong></td>
<td>Standard hedges</td>
<td>Complex, continuous improvement</td>
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<tr>
<td><strong>Typical offtaker</strong></td>
<td>Traditional industry</td>
<td>Agile, new industry</td>
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Why are corporate PPAs taking place in Scandinavia's diverse market?

System prices - spot vs. NPV 2021-2032

System price: Nordpool market data
Other numbers are based on OX2 observations and normalized estimates
For any questions you might have, please do not hesitate to contact:

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