Co-operative ownership models and tender conditions for nearshore wind power projects. The "Wind and Welfare" case

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Details regarding the "Wind and welfare project” can be achieved by contacting the project directors:

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Or at the homepage: vindogvelfaerd.dk
1. The need for local and regional ownership of wind power projects

1. Increasing resistance against distant ownership of wind power projects.

2. Therefore a need for ownership models that generate general acceptance and participation.

3. Need for cost efficient wind power projects. (Co-operative ownership might end up with lower profit demands than corporate ownership).

4. Need for money and tax incomes in the areas with wind power resources.

5. Need for learning processes that both develops the new organization models and the needed integration technologies linked to large shares of wind power.
Tender rules hinders competition and inclusion of co-operative investors

Case:
The Danish nearshore bidding procedure and the "Wind and Welfare" search for co-operative ownership of nearshore wind power projects.
2. The plans for nearshore projects
The nearshore project areas

- In Denmark, 6 areas have been selected for 350MW of nearshore wind capacity.
- The wind farms will receive a fixed electricity price (settlement price) for the first 50,000 full load hours.
- The settlement price will be the main evaluation parameter when the Danish Energy Agency selects the tender winner.
- The tender ends in 2016 and the wind farms must be fully operational no later than 1 January 2020.
Time line for the projects

- EIA, geophysical and MetOcean studies
- Pre qualification
- Competitive dialog
- Selection of contractor
- Construction and operations
- Operations

Business case assessment of generic nearshore wind farm
Prequalification criteria

The main and criterion is that the potential bidder only can be qualified for a bid if it has an annual turnover of more than 4 billion Dkr (533 mill. Euro)
Tender criterions after prequalification

1. The main criterion is that the bidder with the lowest bid per kWh for 50,000 hours full load production winns the tender. Other criterions-

2. That the necessary technical expertise is behind the project.

3. That the needed financial arrangements are at place.

4. A bank guarantee of min. 100 mill. Dkr (14 mill Euro)
3. The wind and welfare (WW) project
The Wind and welfare project

100 MW
## Costs of the "Wind and Welfare project"

<table>
<thead>
<tr>
<th>Aktivitet</th>
<th>Beløb i millioner DKK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anskaffelse og installation af vindmøller</td>
<td>1.210,5</td>
</tr>
<tr>
<td>Fundamenter</td>
<td>387,0</td>
</tr>
<tr>
<td>Elektrisk infrastruktur (kabler mellem møllerne og frem til transformer-station)</td>
<td>192,0</td>
</tr>
<tr>
<td>Transformer-station på land og tilkobling af møllerne</td>
<td>40,0</td>
</tr>
<tr>
<td>Betaling til ENS for forundersøgelser</td>
<td>24,1</td>
</tr>
<tr>
<td>Projektledelse i 2,5 år (projektdesign, tekniske specifikationer,</td>
<td>50,0</td>
</tr>
<tr>
<td>leverandørkontrakter, byggeledelse og kontrol, kontakt med og rapportering til relevante myndigheder)</td>
<td></td>
</tr>
<tr>
<td>Administration (stiftelse af K/S, overordnet ledelse, bogholderi etc.)</td>
<td>12,0</td>
</tr>
<tr>
<td>Hensættelse til uforudsete omkostninger</td>
<td>160,0</td>
</tr>
<tr>
<td>Stiftelsesomkostninger og af lån i byggeperioden</td>
<td>16,9</td>
</tr>
<tr>
<td>Anlægsomkostninger i alt&lt;sup&gt;12&lt;/sup&gt;</td>
<td>2.092,5</td>
</tr>
</tbody>
</table>

Total investment costs mill. Dkr.
(278 mill. Euro)
The "Wind and welfare" concept
(100 MW project)

1. 420,000 shares (could be between 100,000 and 200,000 shareholders)
2. Each share pays 1,500 Dkr (200 Euro), out of the share value of 4,800 Dkr. The rest is borrowed in a bank.
3. Of this amount 1,450 Dkr is deposited at a "blocked account", and refunded if WW does not win the tender.
4. In that case 50 Dkr (6.7 Euro) will not be refunded, and is the risk per share linked to giving a bid.
5. A participant can buy many shares. The Danish CO-OP could for instance buy shares equivalent to the annual power consumption in their 1,200 shops.
6. When/if the project gets established, the max loss per share is limited to 1,450 Dkr.
4. The prequalification result
Who were prequalified?

1. The wind and welfare project was not prequalified due to the lack of coping with the 4 billion Dkr. annual turnover requirement.
2. Lemvig municipality was rejected due to the same reason.
3. Vattenfall was prequalified.
4. Hofor (Copenhagens Energy Company) was, together with a capital fond prequalified.
5. European Energy was prequalified together with international investors.
5. The complaining process
Wind and welfare decided to start a procedure of complaining over the decision

1. The 4 billion Dkr (533 mill Euro) turnover requirement has no reasonable purpose, as a company can have a high turnover without making profit and without being financial solid at all.

2. Companies with a high degree of financial solidity and less than 533 mill Euro in turnover are excluded, which is not reasonable.

3. If the Wind and Welfare company had been prequalified, they could have collected 720 mill. Dkr (96 mill. Euro), or 30% of the investment, and have bank financing for the rest, before giving the bid. And in that way they would at that time be as financial trustworthy as any international capital fund or Vattenfall. So at the ”moment of truth”, where the financial capacity is needed, they would have this financial capacity.

4. In case they had not successfully collected this amount of money, they would not give the bid!
Wrong tender procedure

1. Tender rules says that if there is no real investor risk, it is not allowed to restrict the number of bidders.

2. Only if there is a high investor risk, it is accepted to restrict the number of bidders.

In this case there is a very low investor risk, as the government guarantees the bidders fixed price for 50,000 full load hours.
A 65% subsidy from the state (concession giver) in the first 50,000 full load hours.

Table 1. Present value of incomes in 12 years with fixed prices.

<table>
<thead>
<tr>
<th>a. Present values of 12 years subsidy from <em>concession giver</em> (DK state)</th>
<th>Million Dkr kroner/Euro</th>
<th>Share of total income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.789/238</td>
<td>65.8% (subsidy from state)</td>
<td></td>
</tr>
</tbody>
</table>

| b. Present value of sale at the market in 12 years | 928/123 | 34.2% (market price/risky) |

| a+b Present value of all incomes in 12 years (sale price til 68 Øre/kWh) | 2.717/362 |  |
Due to subsidy from "concession giver", the risks in the project are very low.

Table 2. Does the project pay back within the state subsidy period?

<table>
<thead>
<tr>
<th></th>
<th>Million Dkr/Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Present value of investment</td>
<td>2.000/266</td>
</tr>
<tr>
<td>b. PV O&amp;M in 12 years (12 øre/kWh*/1.6 Eurocent)</td>
<td>498/66</td>
</tr>
<tr>
<td>c. PV of costs the first 12 years (a+b)</td>
<td>2.498/333</td>
</tr>
<tr>
<td>d. PV incomes (from table 1.)</td>
<td>2.717</td>
</tr>
<tr>
<td>e. Debt after 12 years</td>
<td>-219/29</td>
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Conclusion on the complaint

It is not acceptable to establish though limits (the 4 billion Dkr turnover requirement) that excludes bidders, when there is almost no investor risks.

So the 4 billion turnover requirement is unacceptable.
6. Present state of the complaint.

1. Complain to the Danish complaints board (DCB).
2. Answer from the legal Adviser to the Danish Government (ADG).
3. Answer from “Wind and Welfare”.
5. Final decision from DCB has not been given.
Press and politicians

The case is being discussed in the Danish press (1 page in the newspaper, Politiken and has also shortly been in TV.)

On the 9th of September a short meeting with the Energy committee of the Danish Parliament.
7. Conclusion

The present bidding rules hinders.

1. Establishment of co-operative ownership of nearshore wind power projects in DK.
2. Establishment of many bidders and therefore lower prices.
3. An ownership model that increases the general acceptance of wind power projects.
4. Development of the participative learning proces that is urgently needed for further wind power development.