Pilot tender for solar PV
The Background of the Danish Pilot Solar PV Tender

The Commission: Danish PSO tariff could entail discrimination against imported electricity within the meaning of Articles 30 and 110 of the Treaty (potential discrimination)

Temporary solution for the years 2015 & 2016: Denmark to open a share of 6 % of the tendered capacity in 2015 and 2016 or 2,4 MW (the bigger of the two figures shall prevail)
The project package

- **Preparation**
  - Legal basis
  - Tender material
  - Cooperation agreement
  - State aid approval

- **Tender**
  - Call for bids
  - Evaluation
  - Contract signing

- **Construction**
  - 2 years (grid connection)
  - Extensions possible
  - Guarantee active

- **Production**
  - Support payments
Tender vs. old support scheme

Old Scheme

- Feed in tariff of 60/40 øre DKK/kWh
- TSO handles sale in electricity market
- TSO responsible for balancing
- Can be combined with self consumption
- Installations up to 500 kW
- Only installations in Denmark

Tender

- Fixed premium based on tenders
- Owner selling
- Owner responsible for balancing
- Self consumption not allowed
- Installations up to 2.4 MW
- Partial opening for installations in Germany
Fixed premium

• The premium is a fixed amount per kWh when the market price is positive.

• No premium when the market price is zero or negative.

Example without premium
Fixed premium

- The premium is a fixed amount per kWh when the market price is positive.

- No premium when the market price is zero or negative.
• Existing rules apply for local planning, grid connection, curtailment, trade in the market, taxation, technical standards etc.

• No qualification requirements

• No planning approval required when bidding

• Project location can be changed without penalty

• Low retention penalty (24 €/kW)

• Letter of intent when bidding – only winners deliver first demand guarantee
Cooperation Agreement between Denmark and Germany (the CA)


- Denmark opens 2.4 MW (full capacity of the Danish tender 20 MW)
- Germany opens 50 MW
- Capacities not reserved for projects in the cooperating state
- One single pilot run in 2016
Individual tender design **BUT**

Local rules and conditions apply
- unless it is not possible due to existing national legislation or/and the political interests of the cooperating state

Example: the German ground-mounted requirement
## Differences in tender designs

<table>
<thead>
<tr>
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<th>Germany</th>
<th>Denmark</th>
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<tbody>
<tr>
<td><strong>Market premium</strong></td>
<td>Floating premium based on local market value</td>
<td>Fixed premium</td>
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<tr>
<td><strong>Negative prices</strong></td>
<td>6 hours rule</td>
<td>No remuneration</td>
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<td><strong>Max bid size</strong></td>
<td>10 MW</td>
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<td><strong>Max price</strong></td>
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<tr>
<td><strong>Allocation</strong></td>
<td>Decision</td>
<td>Contract</td>
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<td><strong>Guarantees of Origin</strong></td>
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</table>
Approval of state aid

Pre-notification

Close dialouge with DG COMP

Approval two months after notification
Tender material

Tender conditions

Tender letter - template

Letter of intent - template

Contract - template

First demand guarantee - template

Electronic tender platform (ETHICS)
Results of the Danish tender

The graph shows the results of the Danish tender with the price in €/kWh on the y-axis and MW on the x-axis. The data points indicate a trend where the price increases with the MW capacity. The red circle highlights a specific point on the graph.
Results of German PV tenders

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<th>c€/kWh</th>
<th>15.04.2015</th>
<th>01.08.2015</th>
<th>01.12.2015</th>
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Conclusion

Surprising outcome of the Danish-German pilot run
- Historic low price in Danish pilot tender
- Projects located in Denmark won both German and Danish pilot tenders

Valuable experience gained & still to be gained from the 1st cross-border RES tenders

Rasmus Zink Sørensen
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