GETTING RENEWABLES AUCTIONS RIGHT

7TH VIENNA FORUM ON EUROPEAN ENERGY LAW

CORINNA KLESSMANN

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OUR TRACK RECORD ON RENEWABLES AUCTIONS

Navigant (incl. former Ecofys)
>600 energy experts
>60 offices worldwide
>20 years experience in designing & implementing competitive procurement/auctions

Consultancy services on auctions performed
Analysis of auction schemes

Part of the EUH2020 research project on RES auctions

AURES II: http://aures2project.eu/
AURES I: http://auresproject.eu/
INTERNATIONAL EXPERIENCE WITH RENEWAL BES AUCTIONS
Auctions have helped to drive down support costs for renewables, especially for solar PV.

Global average prices resulting from RES auctions 2010-18

Source: IRENA 2019
AUCTION RESULTS ACROSS THE GLOBE

** Lowest awarded bids
All prices in US ct/kWh
1 EUR = 1.1 USD

* Countries with a feed-in premium
  (instead of a feed-in tariff / PPA)

** Value corresponds to the subsidy paid on top of the market price

USA: 2.2
Mexico: 1.9
Peru: 4.8
Chile: 2.1
Argentina: 5.4
Brazil: 6.0
Senegal: 4.3
Denmark*: 1.9**
The Netherlands*: 0**
UK*: 8.5
Germany*: 4.2
Portugal: 1.3
Morocco: 2.5
France*: 4.7
Jordan: 3.4
UAE: 4.3
South Africa: 6.4
Poland*: 3.5
Turkey: 4.3
Saudi Arabia: 2.0
Jordan: 6.0
China: 4.1
Australia: 3.8
India: 3.7
UK*: 8.5
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MOST EUROPEAN COUNTRIES HAVE INTRODUCED RENEWABLES AUCTIONS, PARTLY DRIVEN BY EUROPEAN STATE AID GUIDELINES

- Auctions for some technologies
- Auctions planned or considered
- Quota scheme (RPS)
- Other
AUCTION DESIGN: ENSURING EFFECTIVENESS AND EFFICIENCY
### DESIGN ELEMENTS FOR ACHIEVING LOW AUCTION RESULTS

<table>
<thead>
<tr>
<th>Adjust auction volume to market potential</th>
<th>Limit bidder risks</th>
<th>Ceiling prices</th>
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<tbody>
<tr>
<td>• Competition is key → market potential needs to be larger than auction volume</td>
<td>• Combine auctions with risk hedging PPA or support scheme, e.g. CfD</td>
<td>• Ceiling prices can hedge the risk of high support costs in case of limited competition</td>
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<td>• Auction volume should be high enough to attract interest and low enough to ensure competition among bidders</td>
<td>• Avoid retroactive changes and legal uncertainty for auction winners</td>
<td>• Ceiling prices should be a safeguard but not the mechanism to drive down prices</td>
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<td>• Early notification and long-term auction schedule allow project developers to build up project pipeline</td>
<td>• Avoid excessive requirements (transaction costs) and unproportionate penalties</td>
<td>• Strong competition will ensure minimisation of prices</td>
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Material qualifications and bidder qualifications

- Material qualifications (e.g. permits) preselect RES projects in advanced development status with lower realisation risks
- High material qualifications lead to sunk costs for bidders and may discourage them from participation
- Bidder qualifications preselect experienced bidders but limit number of bidders and competition

Financial qualifications and penalties

- Bid/completion bonds ensure participation of „serious“ bidders and incentivise project realisation
- Financial qualifications provide more flexibility to bidders than material qualifications but do not avoid winner’s curse
- High financial qualifications/penalties increase risk premiums and disadvantage smaller bidders

Trade off
SUMMARY: BEST PRACTICE AUCTION DESIGN PRINCIPLES

- **No “one size fits all”**
  Consider political goals, market situation and technology maturity

- **Ensure competition**
  Consider how design elements promote or restrain competition
  Safeguard against insufficient competition through auction volume and ceiling prices

- **Limit transaction costs**
  Reduce formalities in the process for high bidder participation and low support costs

- **Attract interest of investors**
  A credible long-term schedule of renewables auctions attracts interest and justifies transaction costs to enter market
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AURES II
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