RENEWABLE ENERGY AUCTIONS: BEYOND PRICE

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Trends in deployment policies

Number of countries that have adopted support mechanisms

- Reduction in sales, energy, CO2, VAT or other taxes
- Feed-in tariff/ premium
- Auctions
- Electric utility quota obligation / RPS
- Tradable REC
- Investment or production tax credits
- Net metering
**Auctions trends, weaknesses and strengths**

**Based on REN21 Global Status Report (2005 to 2019)**

**Strengths**
- Flexibility in the design according to conditions and objectives
- Enable commitments and transparency
- Provide greater certainty regarding prices and quantities
- Permit real price discovery

**Weaknesses**
- Associated with relatively high transaction costs for both developer and auctioneer
- Risk of underbuilding and delays

**Number of countries that have adopted auctions**

![Graph showing the number of countries adopting auctions from 2005 to 2019.](image-url)
• Solar prices continue to fall, albeit at a slower rate, as PV auctions expand to newcomers
• Wind edged out, due to higher prices in countries with majority of volume auctioned
Factors that impact the price

<table>
<thead>
<tr>
<th>Country-specific conditions</th>
<th>Investor confidence and learning curve</th>
<th>Policies supporting renewables</th>
<th>Auction design</th>
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<tr>
<td>• Potential of renewable energy resources</td>
<td>• Credibility of the off-taker and additional guarantees</td>
<td>• Renewable energy targets and national plans that provide a trajectory for the sector</td>
<td>Trade-off between lowest price and other objectives:</td>
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<tr>
<td>• Financing costs</td>
<td>• Presence of a stable and enabling environment that is conducive to market growth</td>
<td>• Fiscal and financial incentives for RE projects</td>
<td>• Auction demand (auctioned volume, off-taker, regularity of auctions)</td>
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<td>• Installation and building costs (land, labour, energy, etc.)</td>
<td>• Past experience with auctions for both auctioneer and developers</td>
<td>• Grid access rules</td>
<td>• Qualification requirements</td>
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<td>• Ease of access to equipment</td>
<td>• Renewable energy targets and national plans that provide a trajectory for the sector</td>
<td>• Risk mitigation instruments</td>
<td>• Winner selection method and criteria</td>
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<td>• Foreign exchange rates</td>
<td>• Policies to promote broader development objectives (incl. socio-economic benefits and industrial development)</td>
<td>• Sellers’ liabilities (compliance rules distribution of financial and production risks)</td>
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Price resulting from an auction

Factors that impact the price: Auction design

Objectives beyond price

• Ensure winning projects are completed on time and deliver as per the bid

• As more projects get completed and as the share of VRE increases, support integration into the system

• Make sure the projects align with the strategy to achieve a just and inclusive energy transition
Ensuring project timely completion

Bidding stage
- Undersubscription: not enough bids to guarantee competition

Contracting stage
- Undercontracting: contracted amount is lower than quantity demanded
- Underbidding: developers bid too low in order to win, but cannot develop the project at bid price

Construction stage
- Underbuilding and delays: projects face difficulties leading to cancellation or delays in the commercial operation

Operational stage
- Over- or under-production
- Deviation from generation profile required
- Failure to meet socio-economic goals
Integrating high shares of VRE

Highest degree of central planning required, with centralization of roles and responsibilities

- Implementation strategy
  - Project-based strategy
  - Quantity-based strategy
  - Adjustment-based strategy
  - Price-based strategy
  - Product-based strategy

- Auction design
  - Project-specific auctions
  - Constraints-based limits
  - Predetermined corrections
  - Exposure to market risks
  - Product-specific auctions

Highest degree of flexibility to the developers, along with the risks and responsibilities
Ensuring just and inclusive transition

Inclusion of small and new players

Local job creation

Subnational development and community benefits

Development of local industries
Policy framework for a just transition
Thank you