Case studies from CEE countries

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Ongoing and proposed RES-E auctions

- Poland
- Croatia
- Slovakia

Poland – country characteristics

- First auction to be held in 2016
- RES-E approx. 12.4% of consumption (2014)
- Current support scheme
  - Tradable renewable energy certificates
  - Guaranteed purchase for the average URE price
- Technology focus
  - Technologies for a stable and predictable electricity generation
- Policy goals
  - Reduce cost of renewable energy support
  - Promote investment and reach 2020 and 2030 climate policy targets
  - Create a transparent and predictable investment environment

Poland – design parameters (1/2)

- Energy-based & budget-based auction volume
- Static auction with sealed bids
- Multi-item, multi-technology
  - Separate auctions for installations <1MW
  - 5 technology groups with quotas
- Remuneration
  - Pay-as-bid, max 15 year support
  - Sliding premium (feed-in tariff for installations <0.5MW)
  - Reference price based on weighted hourly spot price
  - Periods with >6h of negative prices not included
  - Cap on total support awarded over lifetime

Capacity factor >0.4
Biodegradable waste, CO_2 emission <100 kg/MWh
Members of macro-cluster
Members of micro-cluster
Other insttallations

Poland – design parameters (2/2)

- Technology specific ceiling prices for bids
- Pre-qualification
  - Financial capability
  - Preliminary licenses
  - Grid connection agreement
  - Constraints for onshore wind regarding construction permits
- Penalties
  - Non-completion: 11,300 € per MW
  - More than 15% production deficit over 3 years: 50% of award price times non-delivered energy

Poland – conclusions

- Significant design uncertainties prevail late in the process (e.g. duration of support)
- Design has potential for reducing support expenditures
- Inclusion of clusters and co-firing opens for support to non-RES technologies
- May be problematic for wind power
- Risk of underbidding, and thus low realisation rates

Croatia – country characteristics

- First auction law passed, implementing law under preparation
- RES-E approx. 28% of consumption (2014)
- Current support scheme
  - Technology specific FIT.
  - Good financing options and interest free loans
- Technology focus
  - NREAP 2020-targets almost reached
  - Additional 450 MW wind power according to National Energy Strategy.
- Policy goals
  - Support the construction of new power production plants based on renewable energy sources and high-efficiency cogeneration

Croatia – design parameters (1/2)

- Static auctions with sealed bids
- Multiple-item, multiple-category
  - Separate for small (<30kW) and large installations.
  - Options for quotas for technology type and capacity.
- Remuneration
  - Pay-as-bid, 12 year contracts
  - Sliding premium (FIT for small installations <30kW)
  - Croatian, Hungarian and Slovenian power exchange used for reference price
  - Reference prices for wind power and solar PV are weighed with generation
  - Correction factor (0.95 for solar power, and 0.85 for other technologies) and special bonuses for cogeneration plants

Croatia – design parameters (2/2)

- Grace period determined according to voltage level of grid connection
- Technology specific ceiling prices
- Pre-qualification
  - Obtain status as eligible producer.
  - Construction permits
  - Financial pre-qualification
  - No outstanding taxes, no convictions of bribery, fraud or similar.

Croatia – conclusions

- Design has potential for reducing support costs
- Auction volume needs to be communicated and be sufficient for competition
- Auctions for <30kW installations could prove difficult to realise in practice
- Does compliance with State Aid guidelines require such comprehensive auction implementation?

Slovakia – country characteristics

- Auction status: exploring opportunities
- RES-E approx. 24% (2014)
- Current support scheme
  - Technology specific FIT
  - RES-E exempt from excise tax
  - Limited investment grant
- Technology focus
  - Wind and hydropower (compared to NREAP)
- Policy goals
  - RES deployment at least cost
  - Provide stable, reliable and transparent support mechanism

Slovakia – design parameters

Suggestions by AURES project based on country assessment

Identified country characteristic	Suggested design parameter
Focus on costs	• Selection criteria: Price-only
Many projects in pipeline	• Multiple-item auction • Adequate pre-qualification rules
Inexperienced bidders	• Static auction format (sealed bids) • Pay-as-bid • Sliding premiums

Slovakia – conclusions

- Grid access issues must be addressed outside the auction scheme
- Many projects in the pipeline combined with uncertainty about upcoming auctions may lead to overly aggressive bidding
- Clear auction schedule is important to creating stable investment conditions

Cross-country Comparison

- Overall similar design

Focus Area	Common overall design parameter
Technology focus	• Multi-technology
Auction procedure	• Static, sealed bid, once a year
Selection criteria	• Price-only
Price rule	• Pay-as-bid • Technology specific ceiling prices
Remuneration	• Sliding premiums • FIT for small installations

→ but the details matter!

Common concerns in CEE

- Policy focus on cost efficiency and security of supply
- Can the auction design deliver a stable investment climate for all desired technologies
- Uncertainty regarding auction volumes and schedule
- Other barriers must be overcome to make RES development under auctions a success

Past and ongoing RES-E auctions

- Germany
- Netherlands

ROUNDTABLE

specific issues with RES-E auctions in the CEE region

Roundtable participants

- **Hungary**, *Attila Bagi*, Energy and Public Utility Regulatory Authority
- **Poland** *Michał Motylewski,* Counsel, Dentons Law firm
- **Romania**, *Cristina Irimescu,* Ministry of Energy
- **Germany** *Fabian Wigand,* Senior Consultant, Ecofys
- **European Commission** *Pierre Loaec,* Policy Officer, DG Energy

- **Chair** *Lena Kitzing,* Technical University of Denmark

Thank you!

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