

Modern methods and support schemes for RE in the EU.

Renewable Energy in Ukraine

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SHORTLY ABOUT THE PROJECT



Background for AURES

AURES: Auctions for Renewable Energy Support

The new EC State Aid Guidelines¹

- Market-based instruments, **including competitive bidding processes** but also feed in premiums (FIPs), should gradually replace existing renewable support schemes from 2015 onwards
- From January 2017, Member States shall set up **competitive auctions** (also called tenders) to grant support **to all new installations** (with only very few exceptions).

Limited experience with auctions in Europe

- Only some Member States have undertaken RES auctions (e.g. the UK, Ireland, Portugal, France, Denmark and the Netherlands) – and with mixed results

Need for analysis and coordination

- Which auction types and designs are specifically applicable for RES-E support?
- What effects (desired or undesired) do different design options have under different market conditions?
- What are lessons learnt and best practices for implementing auctions in Europe?

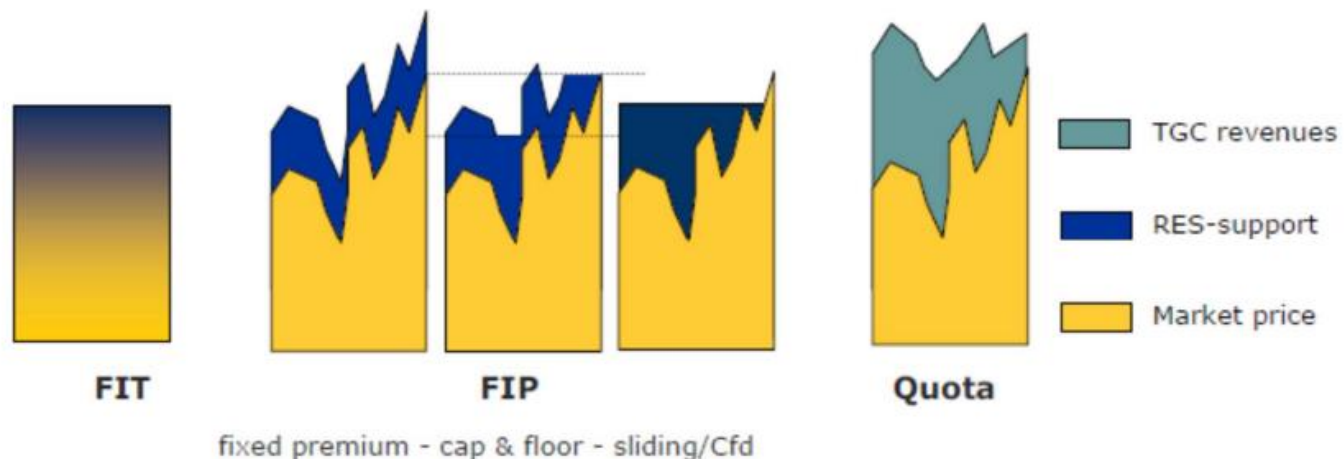
Who we are

- A coordination and support action under the EU Horizon2020 programme
- Project runs from January 2015 to December 2017
- Eight partners from seven EU countries
- Cooperation with policy makers, market participants and other stakeholders.

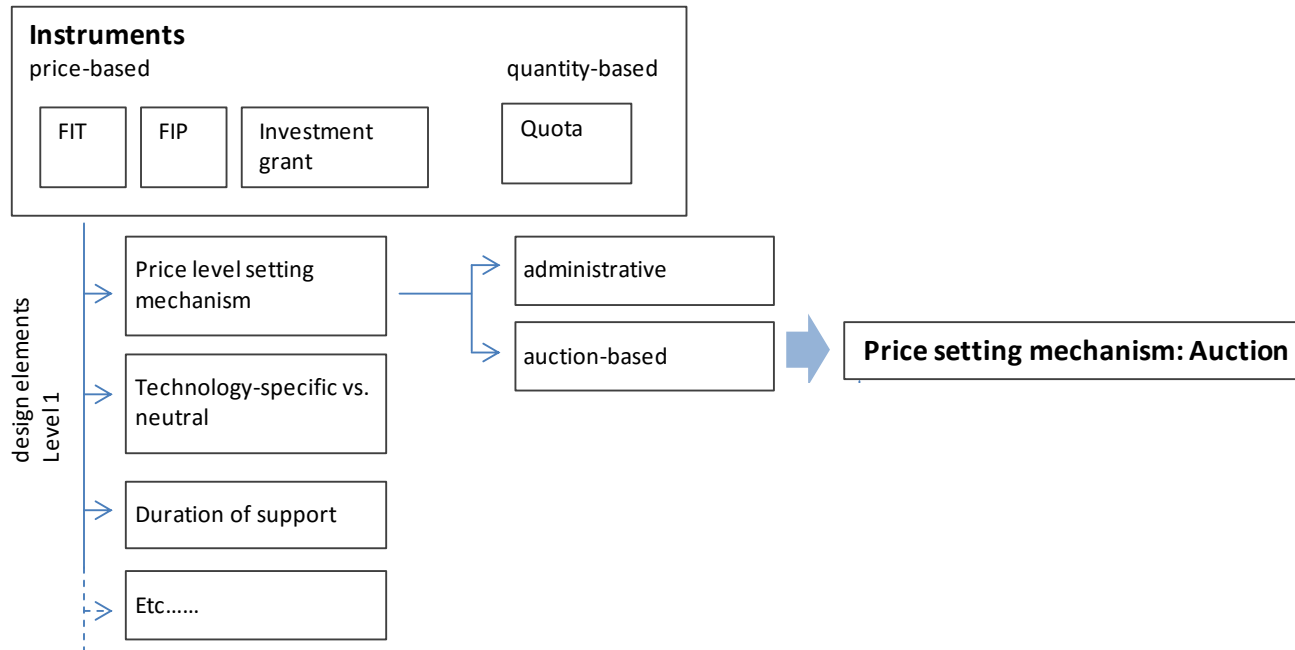


Support Schemes

- Most RES-E investments in EU countries have been triggered by primary instruments such as feed-in laws or quotas with TGCs
- Secondary instruments have been combined with the former in the past: Investment subsidies, soft loans, fiscal incentives, green pricing / funds
- Feed-in laws: **FITs** provide total payments per kWh and **FIPs** provide a payment per kWh on top of the electricity whole-sale market price
- Quota: TGC certificates that can be sold in the market, allowing RES-E generator to obtain revenue



Support Schemes: What next?



- Why auctions (cost and volume control in the EU):
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 - Market based price discovery: To avoid over- or under compensation
 - Budget capping/planning: To avoid uncontrolled open-ended support

Success depends on design elements

- Eligibility of plants (new vs. existing)
- Constant or decreasing support level during support period
- Eligibility of technologies
- Cost burden of RES-E support (electricity consumers or taxpayers)
- The duration of support: long (but not over-long) duration between 15 and 20 years provide low risks for investors
- Technology-specific support
- Size-specific support level
- Location-specific support

Recommendations

- Based on national energy plans as well as the size and maturity of the renewable energy market, the design of scheme (e.g. auction) should reflect the country's priorities in terms of technology, volume and location
- For RES-E deployment, the framework conditions need to be in place:
 - Sufficient competition
 - Good investment climate
 - Easy access to credit and low cost financing
 - Institutional conditions: Coordination of administrative, grid access and bidding procedures
 - Communication and participation
 - Power Purchase Agreements
- Each scheme should be designed to fit in a particular political, economic and social context, as well as to meet different policy objectives beyond the procurement of RE
- Predictable and stable policies should be maintained over long periods to allow for the continuity of investments into renewable energy technologies

Recommendations

- The success or failure of instruments applied in the real world mostly depends on their design elements
- An effective and cost-efficient RES-E policy is risk-conscious and does not introduce unnecessary policy-related risks
- Lower investor risks => lower specific generation cost => lower support cost

Find out more at www.auresproject.eu

AURES Reports on past and ongoing auctions

- Download all reports at www.auresproject.eu
- Learn about past auctions in Germany, California, Denmark, Italy, China, Brazil, Ireland, Netherlands, Portugal, South Africa, UK, France
- Learn about ongoing / future auction implementations in Poland, Croatia, Slovakia, Spain, and a case on cross-border auctions Denmark / Netherlands

AURES AUCTION ACADEMY

- Watch the recordings of our 8-session webinar series at www.auresproject.eu
- Learn about how to design RES auctions: practical and empirical aspects; lessons from other industries; how to participate in an auction; how to ensure actor diversity, and more...

Thank you!

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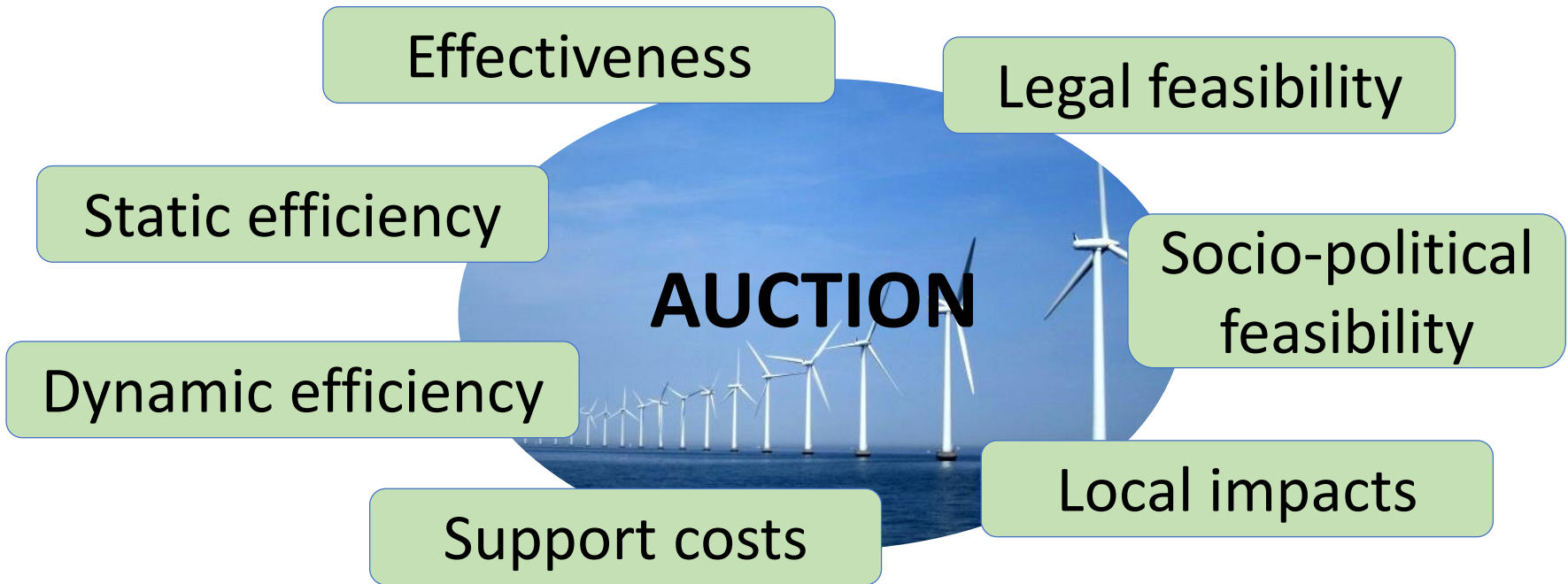
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BACKUP



Successful RES-E Auctions



Suitable formats and design elements

GENERAL AUCTION DESIGN ELEMENTS

Selection criteria

- Price-only
- Multi-criteria (tenders)

Auction format

- Single-item
- Multi-item (homogenous or heterogeneous)

Auction type

- Sealed-bid (static auctions)
- Descending clock (dynamic auctions)
- Hybrid designs

Pricing rule

- Pay-as-bid (in single-item auctions: first price)
- Vickrey (in single-item auctions: second price)
- Uniform price

Price limits

- Price ceilings
- Minimum prices

Other

- Seller concentration rules
- Information provision
- Web-based vs. in-person
- Secondary market

RES-SPECIFIC AUCTION DESIGN ELEMENTS

Scope

- Auction volume
- Periodicity (number and frequency of rounds)
- Target achievement safeguards (dealing with amounts not awarded/built)

Support

- Remuneration type (energy or capacity-related)
- Duration of contract
- Updating of remuneration over time

Diversity

- Technological diversity
- Size diversity
- Geographical diversity
- Actor diversity
- Other diversity types

Prequalification criteria

- Technical requirements
- Documentation requirements
- Preliminary licences
- Deposits and other guarantees
- Financial capability requirements
- Experience

Penalties

- Penalising non-compliance
- Penalising delays

Other

- Local content rules
- Deadlines and grace periods