# Renewable Energy Auctions in the EU

Workshop om udbud og planlægning om vind og sol

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# **Background for AURES**

#### AURES: <u>AU</u>ctions for <u>Renewable Energy Support</u>

#### The new EC State Aid Guidelines<sup>1</sup>

- 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

#### 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?



## **RES** auction design elements (selected)

What is auctioned?	<ul> <li>Technology-specific / neutral</li> <li>Output-based / investment grants</li> <li>Sliding / fixed premiums</li> <li>Support duration, adjustments,</li> </ul>
How much is auctioned?	<ul> <li>Single-item / multiple items</li> <li>Volume (capacities / budget)</li> </ul>
How should the winners be selected?	<ul><li>Price-only</li><li>Multiple criteria</li></ul>
How should the price be determined?	<ul> <li>Pay-as-bid</li> <li>Uniform / pay-as-cleared</li> </ul>
Should there be special bidding rules?	<ul><li>Price caps / floors</li><li>Quotas for diversity</li></ul>
Should there be safeguards?	<ul><li>Pre-qualification rules</li><li>Penalties (non-compliance/delays)</li></ul>

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### **Successful RES-E Auctions**



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## Secondary objectives in auctions

- Apart from getting the lowest price, the auctioneer may pursue further objectives in an auction:
  - a certain geographic distribution
  - development of the domestic industry and value chain
  - actor diversity or the promotion of certain actor types
  - system integration
  - certain technical characteristics of projects
- A policy maker may choose to address secondary objectives within the auction design itself or outside the auction.



### Technology-neutral vs. technologyspecific auctions

- A trade-off exists between an auction technology specific and technology neutral. Whether the advantages or disadvantages of technology-neutrality prevail depends on:
  - The level of technology costs
  - The market potential
  - Technology differences in system integration costs and technology maturity.
- REDII should allow for the application of technology-specific auctions so that auction design can be adapted to the specific needs of individual RES-technologies.
- Technology clusters may be an option to foster competition between technologies instead of using pure technologyneutral auctions.



# Increasing the diversity in technology neutral auctions

- Discrimination enables technology<sup>1</sup> steering, e.g. regarding network expansion or load distribution.
  - Lower integration costs.
- Discrimination can reduce support level.
- Target conflict regarding non-discrimination and cost-effective RES.

<sup>1</sup> or regarding location, alignment, type of company.

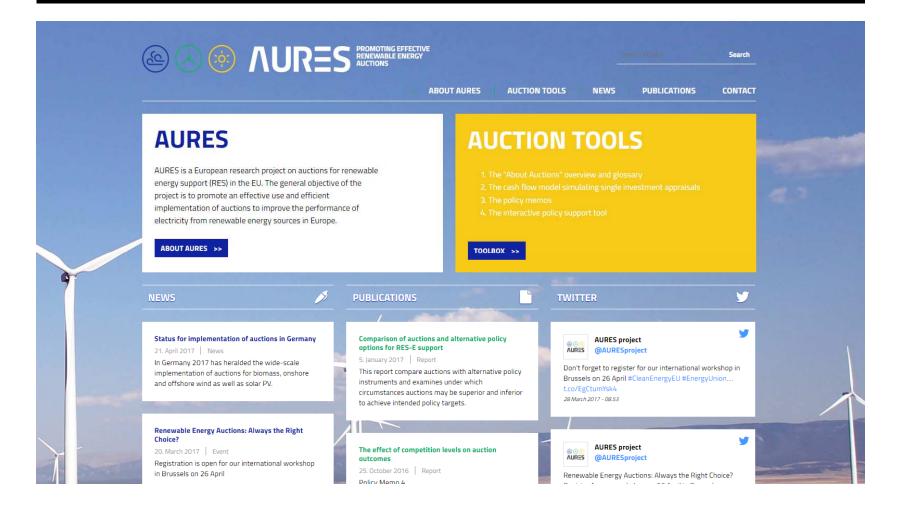


## Conclusion

- Many design options
  - Affect both competition level and ability to realise project
- No one-size-fits-all
  - Design needs to match the market environment
  - Past experiences guide towards best practices



## Website www.auresproject.eu



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# Thank you!

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