

# Competitive Selection and Support for Renewable Energy

Kiev, 21 February 2019

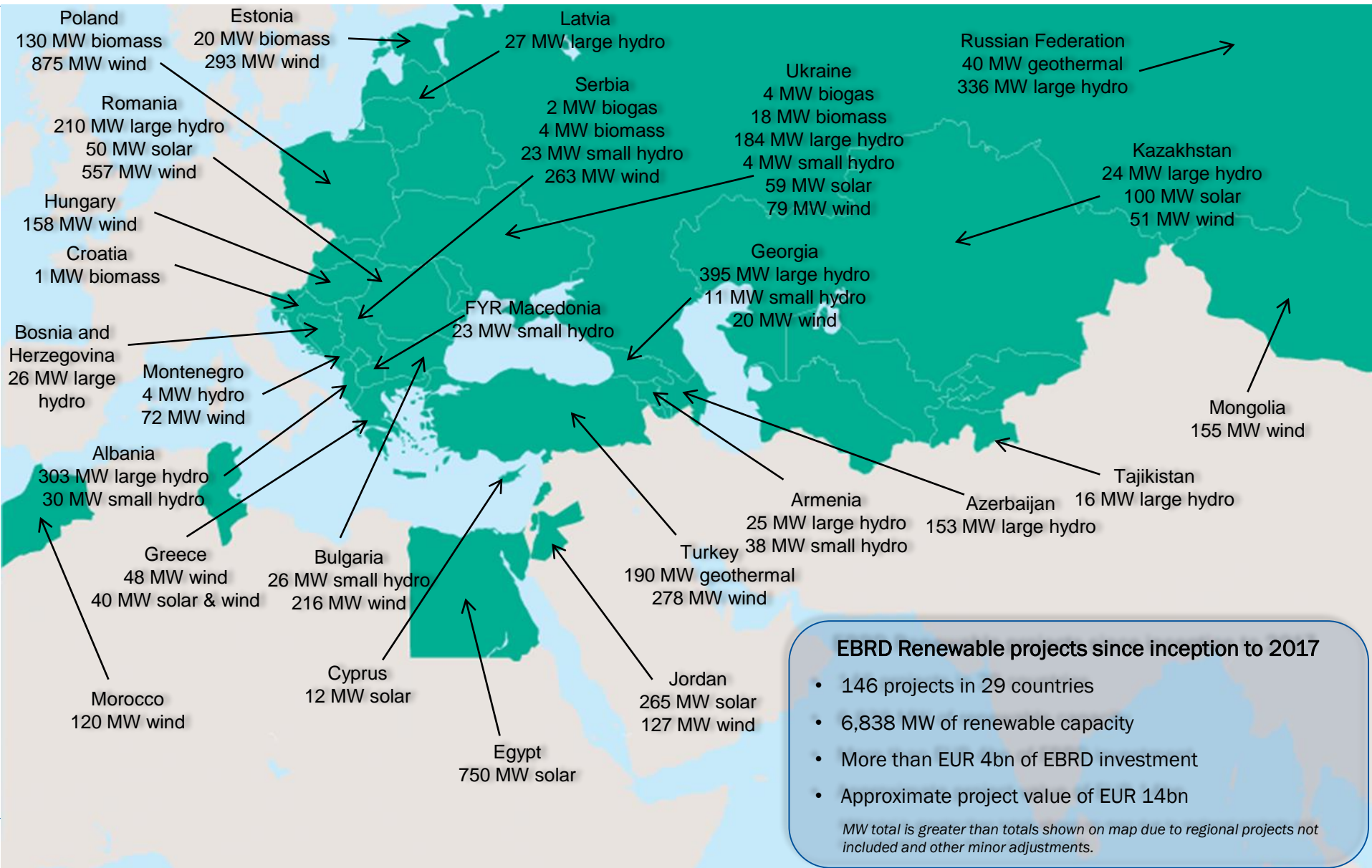


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# Extensive experience of financing RE projects



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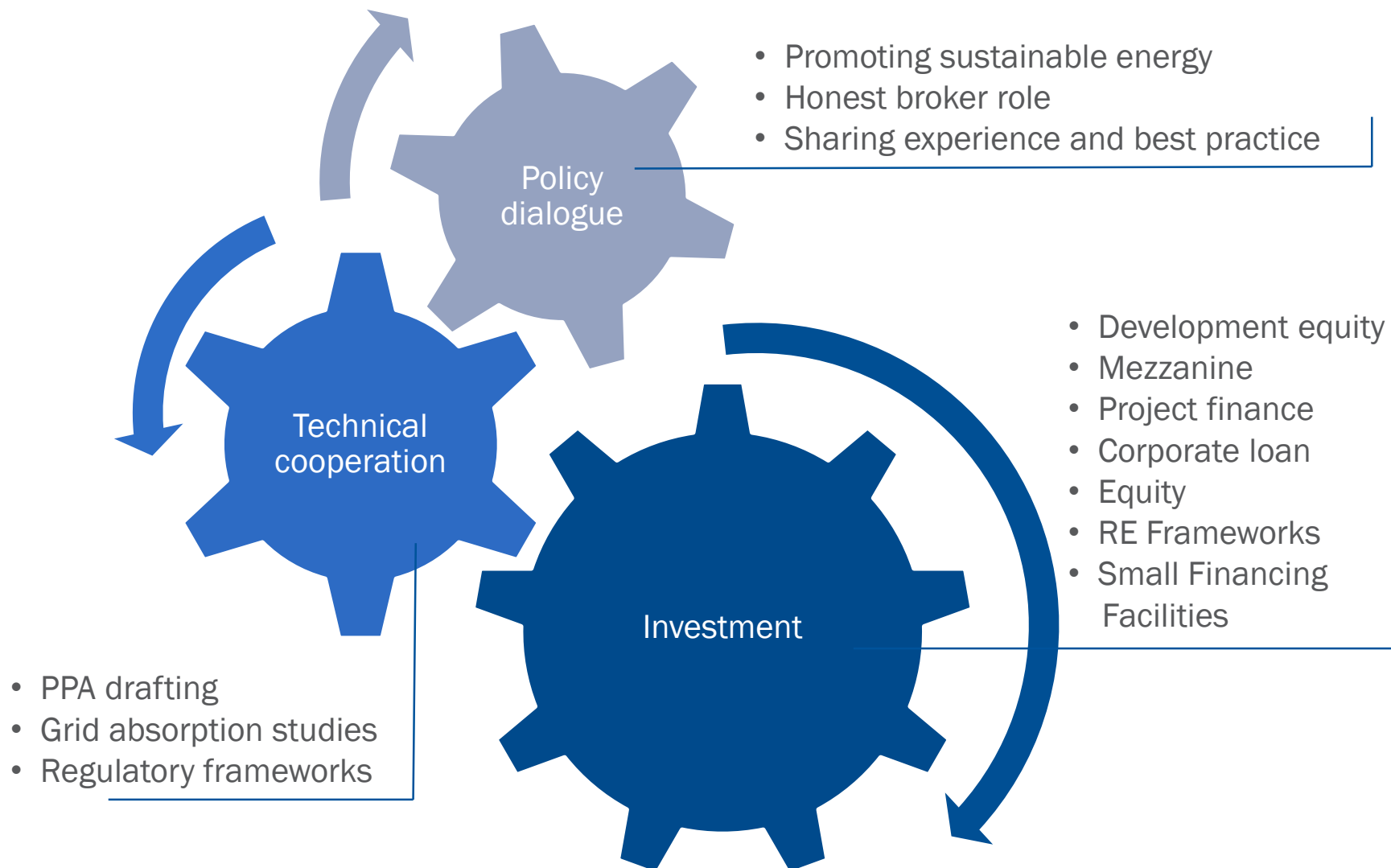


**EBRD Renewable projects since inception to 2017**

- 146 projects in 29 countries
- 6,838 MW of renewable capacity
- More than EUR 4bn of EBRD investment
- Approximate project value of EUR 14bn

*MW total is greater than totals shown on map due to regional projects not included and other minor adjustments.*

# Renewables – Operational Approach



# EBRD has been supporting countries on the transition to renewable energy auctions

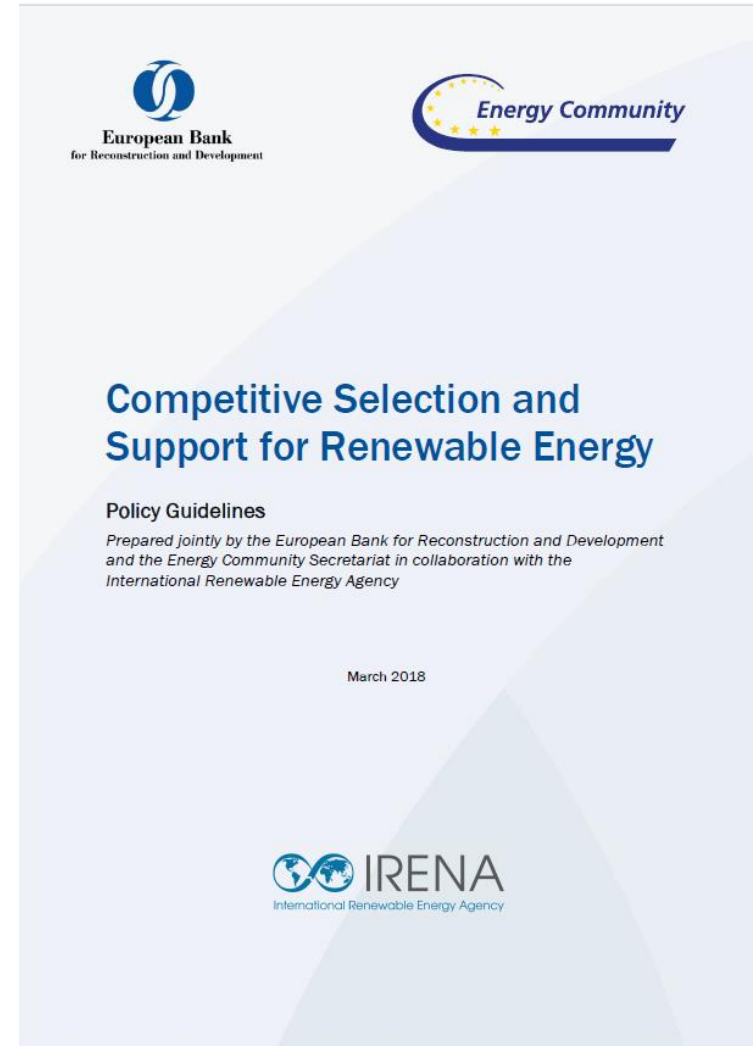
Joint EBRD and Energy Community Secretariat Policy Guidelines on Competitive Selection and Support for Renewable Energy, prepared in collaboration with IRENA.

These Guidelines are divided into four broad areas – namely:

- (1) the overall framework for the competitive process;
- (2) choices relating to what is being procured;
- (3) choices relating to the selection process; and
- (4) the mechanism for the delivery of RE support.

**Underpins EBRD technical assistance to policy makers**

Planned and ongoing assistance on auction design and/or implementation in: Albania, Egypt, North Macedonia, Lebanon, Moldova, Mongolia, Serbia, and Turkey.



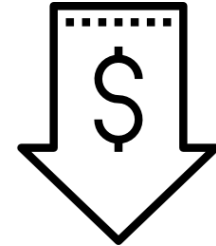
# Why Auctions?



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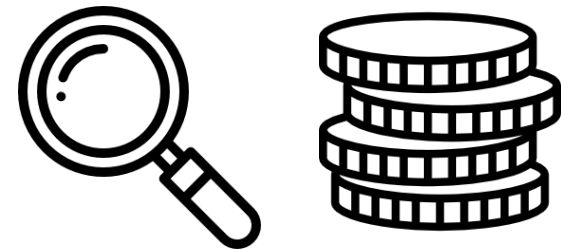
## ➤ Good for consumers

- *energy at the lowest price*



## ➤ Good for the authorities

- *transparent and objective selection process and price determination*
- *control over budget, timing and location*



## ➤ Good for industry

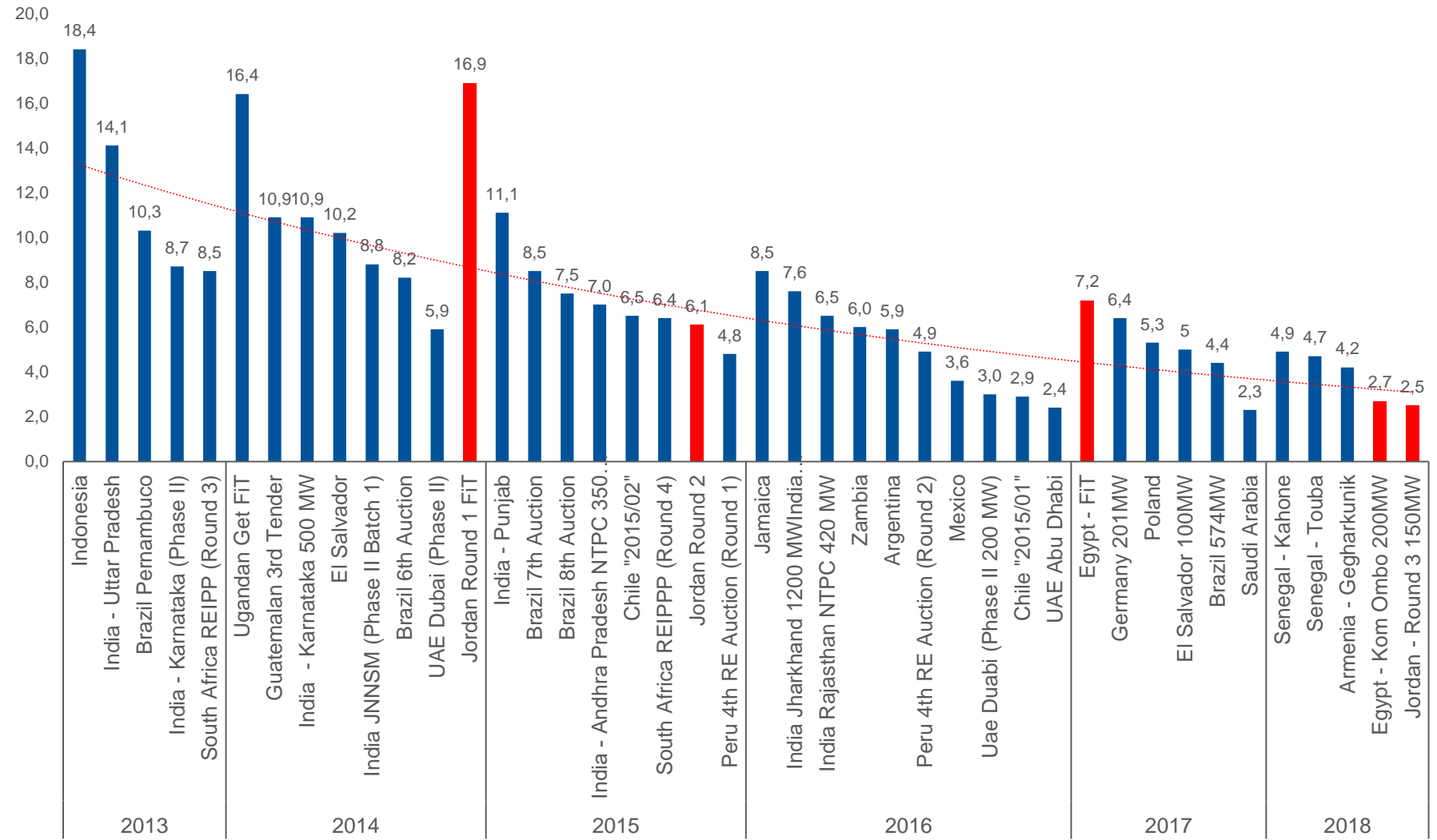
- *lower regulatory risk (is the price “right”?)*
- *stable and long-term high volume business*



# Solar PV (USDc/kWh)



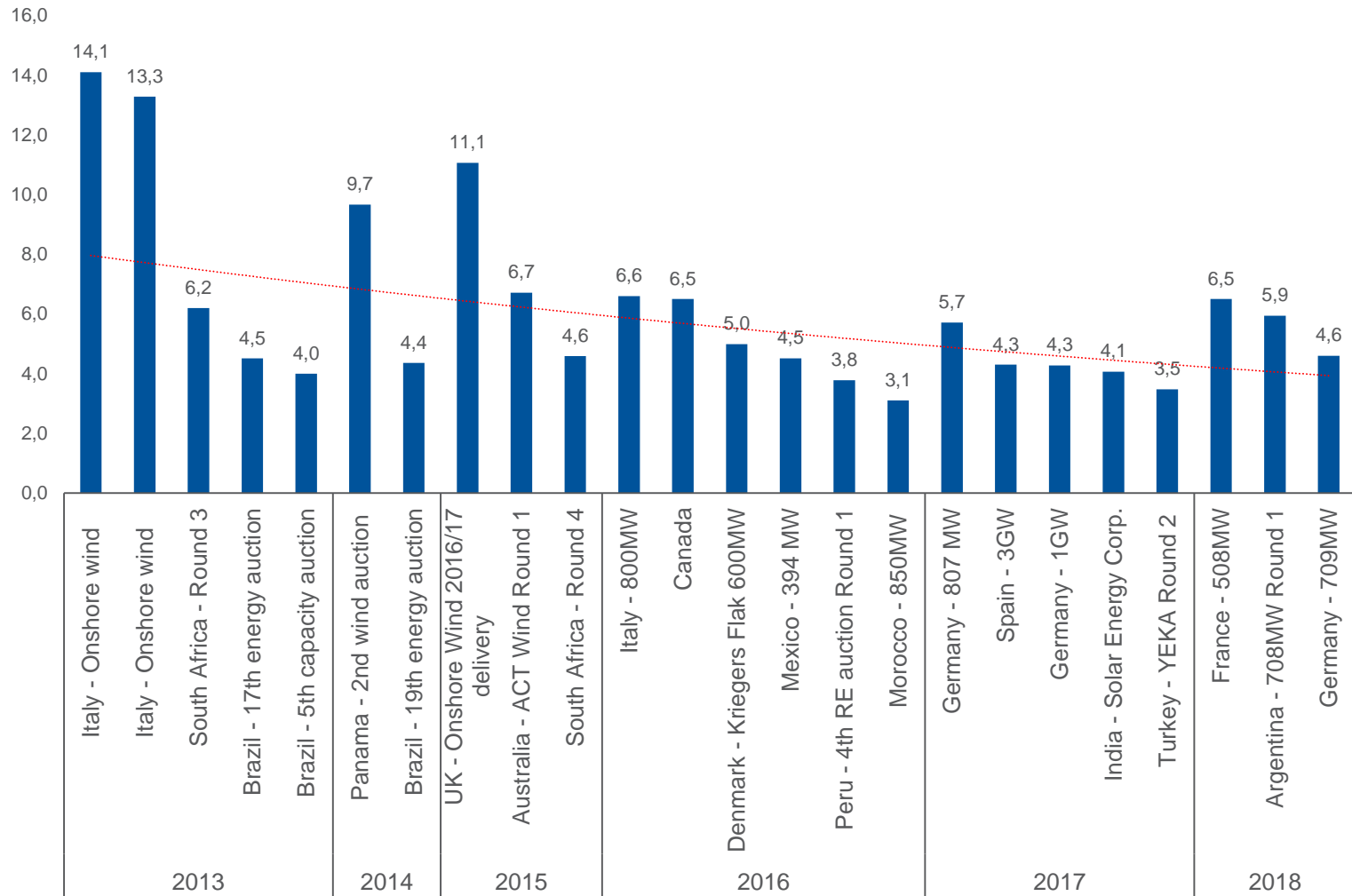
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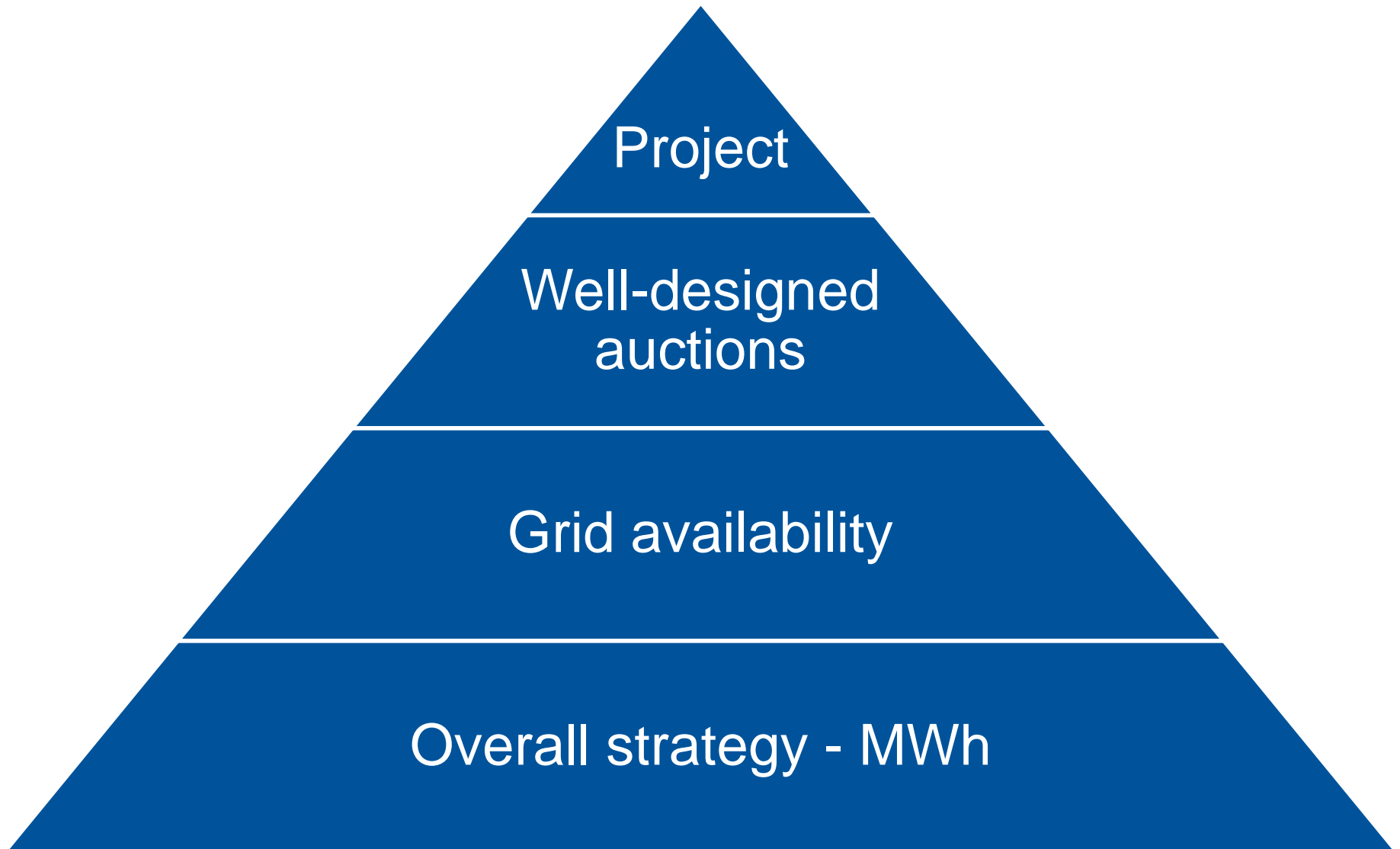


# Onshore Wind (USDc/kWh)



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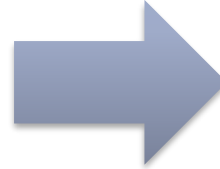


# A supportive policy framework is needed alongside well-designed auctions



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## Supportive policy framework



## Well-designed auctions

- Policy commitment
- Long-term and medium term RE targets
- Schedule of RE auctions
- Clear and credible institutional arrangements
- Robust legislative and contractual framework

- What is being procured (location, volume, technology)?
- Who is eligible?
- How will projects be selected?
- How to promote project delivery?
- How will support be provided?

# What influences auction outcomes?



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Strict penalties  
for non  
implementation

Prequalification  
conditions

Auction projects  
at advanced  
stage

Lowest  
cost



Implementation  
certainty

Multiple bidders

Low barriers to  
entry

Price-only  
criterion

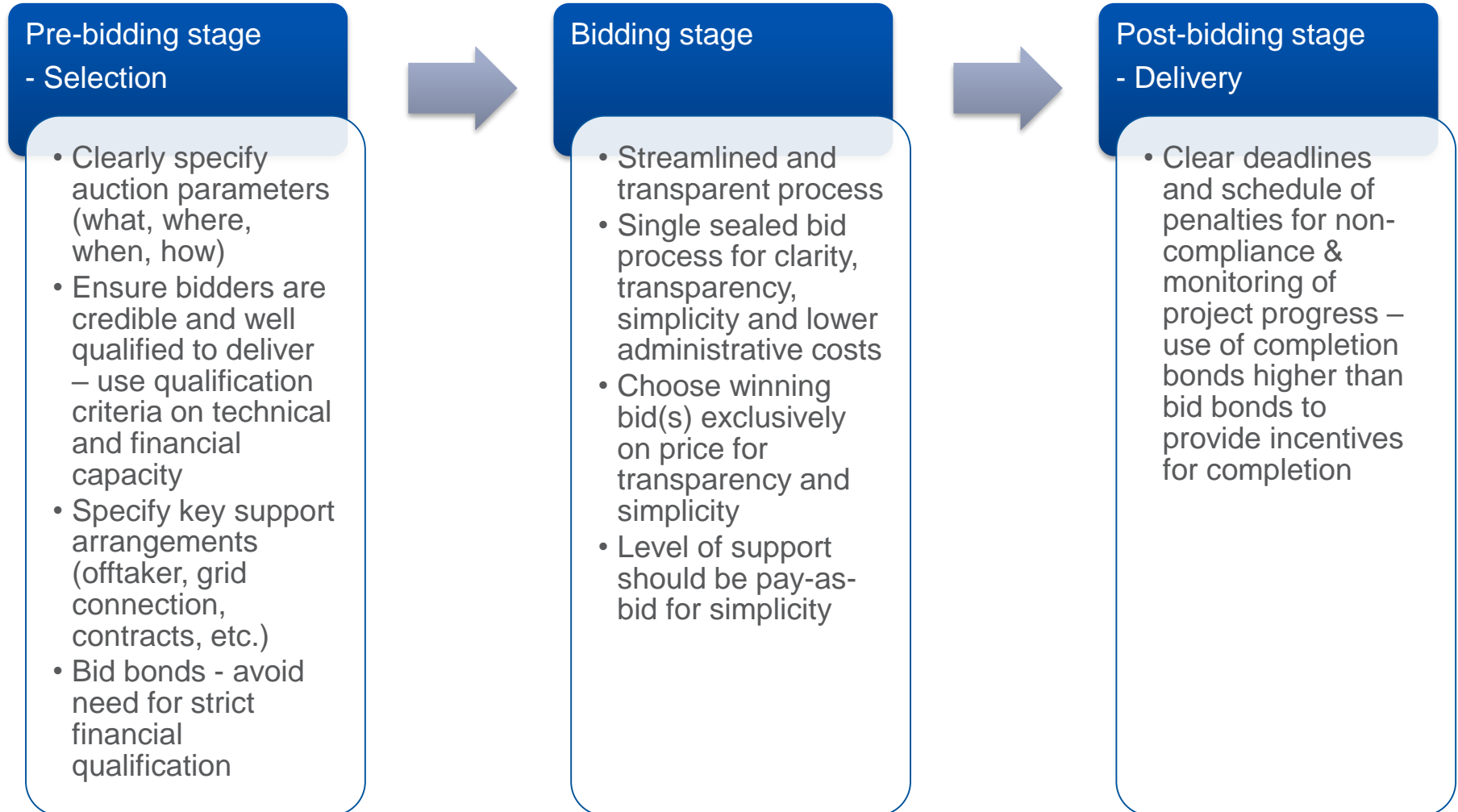
Reasonable  
penalties for non  
implementation

Robust  
Contracts

# Auction design – timeline



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# Supplementary slides

# Some auction and policy framework design choices



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1. Institutional arrangements
2. Setting volumes and timelines
3. What to procure
4. Offtake arrangements
5. How is support provided
6. Promoting project delivery
7. Qualification requirements
8. Financial evaluation
9. Balancing responsibility

## Issue

- Which entities: (1) set overall policy (targets, auction schedule); (2) organise and supervise auctions; and (3) contract with winners?

## Discussion

- Consider roles of different institutions

## Recommendation

- All institutional roles need to be clearly specified
- Institutions need to be credible (transparent administrator, credit-worthy offtaker, etc.)
- Choice will depend on local context

# Setting volumes and timelines



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## Issue

- How to set a long-term plan for auctions?

## Discussion

- Goal – what is the long-term goal: share of electricity generation, share of energy consumption, shares of technologies?
- Establish annual quotas linked to long-term goals
- How to capture regional constraints and ambitions?

## Recommendation

- Set a long-term target and rolling timeframe
- Identify grid constraints and availability
- Address grid constraints through: (1) nodal quotas; (2) locational pricing; or (3) connection costs

## Issue

- How much is being procured and where?

## Discussion

- Capacity – how many MW?
- Projects – how many projects?
- Sizes – maximum or minimum size limits?
- Land – developer or government chooses?
- Grid connection – whose responsibility?

## Recommendation

- Set capacity, number of projects, and size restrictions to balance economies of scale, attract diverse participants, promote competition and meet legal obligations
- Considering establishing caps (for example – for first round, no project larger than XX MW)
- Small projects supported through administratively set FiT



## Issue

- Arrangements for power purchase

## Discussion

- Power purchase: what is needed for financing?

## Recommendation

- Robust PPA based on existing model with longer tenure
- Clear and credible funding structure for offtaker
- Visibility over future offtake arrangements in case of sector reforms

# How should support be provided

## Issue

- How should support be provided to projects?

## Discussion

- Interaction with market reform
- Adoption of CfDs

## Recommendation

- Support: PPA with fixed price per delivered kWh
- Transition to CfDs when electricity markets are liquid and accessible to market participants
- Ensure bidders have visibility over transition arrangements

## Issue

- How to promote project delivery by winning bidders?

## Discussion

- Project requirements – permits, land, grid connection, technical characteristics.
- Bidder requirements – experience, financial standing, absence of legal concerns?
- Financial guarantees – bid bonds, completion bonds

## Recommendation

- Facilitate permitting, grid connection and land access to allow advanced stage projects
- Specify bidder requirements to balance credibility and competition
- Use financial guarantees to promote credible bids and provide incentives for delivery

## Issue

- How should the financial proposals be evaluated?

## Discussion

- Complexity – simple tender or descending auction?
- Support level – pay-as-bid or marginal price?

## Recommendation

- Use a simple auction procedure in early stages of the transition to auctions
- Use pay-as-bid in early stages of the transition to auctions
- Use price as the sole evaluation criteria to selected between all qualifying bidders

## Issue

- How should balancing costs for intermittent RE sources be recovered?

## Discussion

- Should intermittent RE have balancing responsibility?

## Recommendation

- Introduce balancing responsibility when intraday and balancing markets are liquid and readily accessible by RE producers
- Include clear criteria for establishing liquidity of markets (including institutional responsibility)

# Contact



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