## Thirteenth session of the IRENA Assembly

**Side Event**
**14 January 2023, 13:00 – 14:30 GST**
**St. Regis Hotel, Saadiyat Island, Abu Dhabi**

# Power system RE-structuring for the transition and to avoid the next power price crisis

## *Background*

The events of the last two years have emphasised the main weaknesses of current energy systems – as well as our social and economic systems - in adapting to the requirements of the energy transition. Examples include the structures of the current power system, unfit for the new era, which showed major repercussions on societies and economies.

In fact, current power system organisational structures were designed for centralised and dispatchable power plants generating the bulk of electricity. These structures must now be re-designed to support the transition to renewable and decentralised power systems.

If not addressed from the onset, existing misalignments between the current power system organisational structures, the supporting policies to deploy renewable power generation and the specific characteristics and needs of a renewable-based power system will hamper the transition, resulting in inefficient outcomes, including lower levels of renewable power and less system flexibility, higher costs and social inequalities.

Current windfall inframarginal revenues in liberalised power markets that remain exposed to natural gas price fluctuations result from such existing misalignments. The ensuing increases in energy bills and burden on consumers have prompted policy makers to take action, with new caps, taxes on windfall profits and relief packages.

A holistic policy framework - fit for the new renewable energy era - is needed, one that goes beyond fixes to current power structures.

IRENA's workstream on organizational structures explores existing challenges and proposes a way forward to address main potential misalignments. The Agency's report "**RE-organising the Power Systems for the Transition**" analyses the main misalignments and proposes an inclusive approach in both the liberalised and non-liberalised contexts.

The dual procurement approach, proposed by IRENA, builds upon the experience gained to-date with the growing integration of renewables and offers a framework that can address the specific needs of a renewable-based power system, yielding an organizational structure that properly supports capital-intensive renewable power plants and flexible resources.

### *Objectives*

The event is organised to hold a discussion with an expert audience and policy makers about:

- Country-specific perceived misalignments between the prevalent power system structure and renewable energy deployment, targets and policies.
- Experience with fixes to the current power system structure to address misalignments and their suitability for the needed increase in renewables for the energy transition.
- The need to re-design power system structures to support the transition and the post-transition power systems.
- The dual procurement proposal, its suitability for supporting the energy transition and the potential roadmap for its implementation.
- Future analysis by IRENA and interested parties.

### *Associated Publications*

RE-organising Power Systems for the Transition (2022)
Potential Limitations of Marginal Pricing for a Power System Based on Renewables (2022)
Power system organisational structures for the renewable energy era (2020)

### *For more information please contact:*

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