

# Policy dialogue on

## RENEWABLE GENERATION AND REGIONAL POWER TRADE IN AFRICA

### Program

February 20, 21 and 22, Madrid, Spain

#### Context and Background

The International Renewable Energy Conference ([IREC](#)) brings representatives from business, governments, civil society, science and academia all of whom participate in discussions and debates with the objective of building collective know-how to advance renewables at the international, national and sub-national levels. The IREC is hosted by a national government and is held biennially. The Government of Spain has teamed up with REN21 to organise the next IREC. [SPIREC](#) will be held in Madrid from 21-23 February 2023.

At the international SPIREC Conference, the opportunity exists to set up a policy dialogue between African and European role players in a context where extensive networking and broader dialogue would be possible. Broader dialogue and brainstorming may include deliberations on the design of an African Green Deal and how to redesign the rules of the international order to allow for Just Energy Transition in Africa.

#### Renewable generation and regional power trade in Africa

An efficient and effective utilization of the immense renewable resources capable of generating electricity all over the African continent can be only possible if countries join their efforts in planning and building transmission interconnection capacity and generation plants at regional scale and establish common rules to trade power. Coordination agreements among several countries – regional power pools – are the right instrument to achieve this objective.

Regional power pools are particularly relevant in the context of Africa, because of the small size of many national power systems and the uneven geographical distribution of the abundant energy resources. Five power pools are under development in Africa – North, East, West, Central and South – with the ambition to bring the entire continent into a single electricity market. Power pools will be essential participants in manifesting the Continental Master Plan (CMP) and Africa Single Electricity Market (AFSEM).

When properly designed and implemented, regional power pools can lower the cost of electricity supply and improve the quality of delivered electricity services, thereby driving socio-economic development. However, these prerequisites can only be met under sound power pool rules and governance.

Despite its potential benefits, regional integration in Africa is hampered by the absence of strong regional institutions and enabling regulations. Existing power pools generally lack executive powers and capacity in two key regional institutions: the system operator and the regulator. This institutional weakness inhibits harmonization in areas such as regional market trading rules and capacity mechanisms or the coordination of operating reserves and undermines a regional perspective on generation expansion, effective transmission planning,

utilisation of the massive renewable resources and coordinated regional operation. Flaws in the rules for regional trading and network cost allocation discourage investments in transmission infrastructure and regional-scale generation plants.

National-level political commitment is needed to give executive responsibilities and resources to regional institutions, identify barriers and vested interests that impede progress, and build the capacity to regulate and operate regional systems.

## Partner organisations

### The Policy Dialogue. Organisation and Programme

The policy dialogue on “Renewable generation and regional power trade in Africa” will be held during SPIREC 2023 and aims to identify the key improvements that are necessary at institutional and regulatory level, and to explore the paths to implementing them, including efforts in capacity building to disseminate and adapt the best international practices to the African context.

#### Organisation

This high-level Policy Dialogue will take place as a side event to the SPIREC.

The event will be organized by the African School of Regulation ([ASR](#)), in collaboration with the Africa Europe Energy Partnership ([AEEP](#)), the Tony Blair Institute for Global Change ([TBI](#)), [REN21](#), [GET.TRANSFORM](#), the Institute for Research in Technology at Comillas ([IIT](#)), [RES4Africa](#), and the Florence School of Regulation ([FSR](#)), also with strong presence of the ESMAP-World Bank Group, IRENA and the African Development Bank.

This policy dialogue – on facilitating renewable generation by releasing the potential of regional power trade in Africa – will bring a number of invited, experienced participants – from the power pools, system operators, ministries, regulatory agencies, development financial institutions, think tanks, private companies, and academia – who will debate under the Chatham House rule. Delegate travel and accommodation plus per diem stipends of most delegates will be covered by the AEEP.

#### Program

The debates of the Policy Dialogue will occur at the same venue as the SPIREC, in sessions focusing on the topic of regional trade, which will spread over the duration of the SPIREC Conference, while broader debates, interactions and networking would be leveraged on the same days with participants at the SPIREC Conference. In broad terms, the debate will be structured according to these guidelines:

- Each session will start with a 20 minute presentation by a member of the ASR team, introducing the topic of the session and followed by an open debate in which all the invited experts can participate, moderated by one of them.
- After a first session where data on the situation of the deployment of renewable-based electricity generation and power trade in Africa will be presented, the objective of the next three sessions will be to identify where there is room for improvement in regional institutions, transmission regulation and regional market rules, so that actionable measures could be adopted in each one of these three topics. A final wrap

up session will take stock of the findings and will debate how to disseminate and bring them to implementation.

**DAY 1. FEBRUARY 20<sup>th</sup>.** *(all times are CET, local Madrid times)*

The Opening Ceremony and High Level Panel of the SPIREC Conference starts at 10 am in the same premises as the Policy Dialogue. Participants of the Policy Dialogue are invited to attend these events. See the SPIREC Program for details.

**13:00 to 14:30. Lunch.**

**14:30 to 16:00. Session 1. Large renewable-based generation: Current development, transmission infrastructure and off-taker situation.**

- Potential for renewables in Africa, actual deployment, interconnection capacities, contracts and off-taker situation.
- The potential benefits of power trade for the deployment of renewable generation at scale. Power system integration challenges. Power pools in Africa, level of development, volume of trade, and existing regulation for the integration of renewables.

**16:00 to 16:30. Coffee break.**

**16:30 to 18:00. Session 2. Regional institutions: Accomplishments, shortcomings, and paths for improvement.**

- A regional or even continental perspective for power sector development in Africa. Generation, transmission, system operation, and the design of regional markets.
- Political commitment and the executive powers of regional organisations. The actual and the desirable role of regional regulators and regional system operators.

**DAY 2. FEBRUARY 21<sup>st</sup>.** *(all times are CET, local Madrid times)*

**9:30 to 11:00. Session 3. Deployment of network infrastructure with a regional perspective.**

- Transmission planning: Allocation of responsibilities in setting the criteria, decision making, enforcement and implementation.
- A regional approach to transmission cost allocation.

**11:00 to 11:30. Coffee break.**

**11:30 to 13:00. Session 4. Market rules for efficient operation. Dealing with security of supply concerns.**

- Issues with physical bilateral contracts. Addressing economic efficiency and security of supply.
- Approaches to regional market organisation

**13:00 to 14:30. Lunch.**

**14:30 to 16:00. Optional session on “Grids and Infrastructure: The backbone of renewable energy systems”** within the SPIREC main program.

**16:00 to 16:30. Coffee break.**

**DAY 3. FEBRUARY 22<sup>nd</sup>.** *(all CET, local Madrid times)*

**9:30 to 11:00. Session 5. Wrap up. Highlights, findings and actionable decisions.**

- Messages for policymakers.
- Interaction and networking with participants at the SPIREC Conference.

**11:00 to 11:30. Coffee break.**

Participants of the Policy Dialogue are invited to attend the final sessions, Closing Ceremony, lunch and community events of the SPIREC Conference. See the SPIREC Program for details.