

Fourteenth session of the IRENA Assembly

Side Event 18 April 2024, 13:00 – 14:30 GST St. Regis Hotel, Saadiyat Island, Abu Dhabi

Regional Energy Transition Outlooks for Africa – Setting a vision for a 1.5C pathway

Background

IRENA's 1.5°C scenario, set out in the World Energy Transitions Outlook (WETO), presents a pathway to achieve the global net zero emissions target by 2050. To translate this vision into regional frameworks, IRENA is developing Regional Energy Transition Outlook (RETOs) reports for the five African regions (North, East, West, Central, and Southern). RETOs for Africa also build on IRENA's contribution to the Continental Power System Masterplan (CMP), an initiative led by the African Union Development Agency (AUDA-NEPAD) to which IRENA is a modelling partner, IRENA and AfDB's Renewable Market Analysis for Africa and its regions, as well as Renewable Energy Roadmap Analyses already conducted in Africa. The African RETOs will mark the continuation of the Agency's efforts to support African partners in envisioning holistic, inclusive and just energy transitions in the continent.

The objective of African RETOs is to develop comprehensive quantitative scenarios for climate-compatible energy transformation by 2050. These scenarios aim to offer insights into potential sustainable development pathways for future energy systems on the continent, augmenting socio-economic benefits and aligning with Sustainable Development Goals (SDGs) and the African Union's Agenda 2063. A suite of modelling tools will be used to cover energy demand and supply, power sector expansion, socio-economic objectives and impacts, policies and investments.

The RETO scenarios will inform how international collaboration can help advance socio-economic development and industrialisation in the five regions, fuelled by energy systems based on renewables and local value chains, maximising socio-economic benefits in a just and inclusive way, while orienting policy and investments towards resilient and renewable-based energy systems. The Africa RETO processes will also promote regional cooperation, strengthening regional institutions.

The RETO process is one of IRENA's key engagement activities with countries, aimed at creating dialogue, promoting knowledge exchange and raising ambition towards low-carbon pathways. It includes an extensive knowledge transfer component whereby work is undertaken in direct

consultation with country and regional-level stakeholders, enabling local ownership of the joint effort and fostering national and regional action on the analytical outcomes. This side event constitutes the official kick-off of the project and will introduce African RETOs to stakeholders. It will be followed by a full-day workshop to delve into RETOs' regional aspects and discuss RETOs narratives in more detail.

Objectives

- Introduce the African Regional Energy Transition Outlooks (RETOs) and how they complement IRENA's World Energy Transition Outlook (WETO) and the recent IRENA support to the Africa Continental Power System Masterplan (CMP) process.
- Engage IRENA Members in the RETO process, establishing a participatory process to facilitate their contributions.
- Take stock of the short and long-term energy sector development, as well as economic diversification priorities, of African partners, including regional entities.
- Identify the key socio-economic development goals and opportunities linked to energy transitions in Africa, as perceived by African energy experts.
- Collect feedback from African energy stakeholders, as well as regional and international partners, on leveraging the RETOs to support and facilitate the energy transitions in Africa.

Associated Publications

World Energy Transitions Outlook 2023: 1.5°C Pathway (2023)

Renewable Energy Market Analysis: Africa and its Regions (2022)

Renewable Energy Roadmap: Nigeria (2023)

Renewable Energy Prospects: South Africa (2020)

Energy Planning and Modelling Support in Africa (2020)

Planning and prospects for renewable power: North Africa (2023)

Planning and prospects for renewable power: Eastern and Southern Africa (2021)

The Renewable Energy Transition in Africa (2021)

Planning and prospects for renewable power: West Africa (2018)

Africa Power Sector: Planning and Prospects for Renewable Energy (synthesis report) (2015)

Scenarios for the energy transition: Experience and good practices in Africa (2023)

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