

IRENA 12TH ASSEMBLY– VIRTUAL SIDE EVENT

# LONG-TERM ENERGY SCENARIOS (LTES) FOR DEVELOPING NATIONAL ENERGY TRANSITION PLANS IN AFRICA FEATURING REGIONAL POWER POOLS

Thursday, 13 January 2021, 14:00 – 16:00 (Gulf Standard Time)

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Long-term energy scenarios have been used as effective tools for energy planning by various governments. In the face of the clean energy transition, transformative change is envisioned not only within the energy sector and but also for society at large. There is an increased awareness that planning for the clean energy transition may demand a new level of complexity to the governance of the scenario planning process and in some cases, to the underlying modelling methodologies.

During the [LTES Africa webinar series](#) that IRENA organized in partnership with the African Union Commission, African Union Development Agency (AUDA-NEPAD), African Development Bank, United Nations Economic Commission for Africa, GET.transform and the Kenyan Ministry of Energy in November and December 2021, nine African countries shared their experience on how they effectively develop and use energy scenarios in support of long-term policy documents such as integrated resource plans, nationally determined contributions, and energy master plans.

This side event, which is also a special and the final session of the LTES Africa webinar series, features the development and use of LTES by selected African power pools. The power pools devise the regional master plan to enable intra-continental power system integration between African countries in the same region.

The objective of the side event is to share the lessons learnt from the African power pools' LTES planning practices, both in terms of institutional governance as well as LTES methodologies, and how these lessons can be used in the upcoming Continental Masterplan development process. *Special attentions are given to understand (1) the linkages between national planning and regional planning (session A) (2) the linkages between the power system planning and broader energy system planning within a national context (session B).* The webinar series was organized under IRENA's LTES Network, a network of energy scenario practitioners in the government sector, aimed at facilitating the exchanges of experiences in the development and the use of long-term energy scenarios for planning clean energy transition.

## The questions addressed in this event

The focus of the side event is on *the governance structures around the development and the use of LTES to plan the energy transition within the regional masterplan, and institutional efforts to enhance them.*

The event is NOT meant to focus on *displaying quantitative scenario results or energy policies, targets or goals for new energy sector infrastructure.*

Below are the concrete questions that are to be addressed during the event.

1) Development of scenarios

- **Governance structure:** *How are the LTES development process governed in the respective power pools? Who is responsible for developing them and how is the process coordinated regionally across countries and on the national level (e.g., power system planning vis a vis energy sector planning, or GHG emission scenarios)? What are the measures in place that enable the effective development of regional LTES?*
- **Boundary of planning scenarios:** *What are the scopes of the LTES defined? How are they defined? How are clean energy transition features reflected (e.g. socio-economic elements of a just transition, renewable energies and clean fuels, low emission development, innovation in the energy sector etc)?*

2) Use of scenarios

- **Purpose of the use of the scenario building:** *In which ways are the LTES used What are the main purposes of LTES development within the respective master plan? For example, to forecast or backcast, build consensus, raise target ambition, plan infrastructure development, or explore alternatives.*
- **Communication of scenario results:** *What approaches have been implemented to communicate the government scenarios? How transparent the scenario assumptions and results have been communicated? For example, an annual publication, workshops, online visualisation platforms of scenarios.*

3) Scenario capacity building

- **Planning capacity in government:** *What type of scenario planning capacity does your institution support and how are they being enhanced? For instance, does the power pool secretariat possess in-house modelling capacity or are these skills rather outsourced to its members or external consultancy? How is the cooperation with external institutions such as consultancy firms, research institutes, development partners in enhancing the scenario-based planning capacity? How are the gaps from differing national capacities addressed in the process of the regional LTES development considering that the regional master plans are developed from bottom-up?*

4) Lessons for the continental planning process

- **Africa Continental Power System Master Plan (CMP):** Tasked by the Africa Energy Ministers, the African Union Development Agency (AUDA-NEPAD) is currently leading the development of the CMP in cooperation with the power pools. Which lessons can be drawn from Power Pool-level LTES planning for the CMP, in defining LTES and LTES development process effectively? How can the different experiences of the power pools in their regional LTES processes be used to build synergy for the continental level?

## Agenda (Gulf Standard Time)

14:00 – 14:05	<b>Welcome remarks by Dolf Gielen (IRENA)</b>
<b>Session A: Power Pools</b>	
<b>Moderator: Simbini Tichakunda, Energy Infrastructure Expert, AUDA-NEPAD</b>	
14:05 – 14:10	<b>Introduction of the session by the moderator</b>
14:10 – 14:50	<b>Presentations from power pools on the development and use of LTES in each power pool</b> <ul style="list-style-type: none"> <li>▪ <b>WAPP:</b> Bernard Hessou, Head of Division, Studies, Planning and Projects Financing</li> <li>▪ <b>EAPP:</b> Patrice Manirakiza, Senior Planning Engineer</li> <li>▪ <b>MED-TSO:</b> Emmanuel Bué, Convener of Technical Committee Economic Studies and Scenarios</li> </ul> <p>The governance structures around the development and the use of LTES to plan the energy transition within the regional masterplan</p>
14:50 – 15:20	<b>Moderated discussion</b> <ul style="list-style-type: none"> <li>- Efforts to enhance institutional capacity for the LTES development and use as a power pool and at their utility member level</li> <li>- Coordination between the plans of member utilities and the regional master plan</li> <li>- Role of LTES in assuring the just transition in Africa</li> <li>- Lessons for the CMP</li> </ul>
<b>Session B: Regional Economic Communities</b>	
<b>Moderator: Peter Kinuthia, Senior Energy Advisor, African Union Commission</b>	
15:20 – 15:25	<b>Introduction of the session by the moderator</b>
15:25 – 15:55	<b>Panel discussion with REC representatives</b> <ul style="list-style-type: none"> <li>▪ <b>ECOWAS:</b> Bayaornibe Dabire, Director for Energy</li> <li>▪ <b>SADC:</b> Moses Ntlamelle, Senior Programme Officer - Energy Directorate of Infrastructure and Services</li> <li>▪ <b>EAC:</b> Elsam Turyahabwe, Energy Expert</li> </ul> <ul style="list-style-type: none"> <li>- Coordination process between utility level long-term planning and government level energy planning</li> <li>- Articulation of the just transition in regional energy policy and LTES</li> <li>- Lessons for the CMP</li> </ul>
15:55 – 16:00	<b>Conclusion and closing remarks by Asami Miketa (IRENA)</b>

## Implementation partners of the LTES Africa series



- **African Union Commission**  
The AUC provides the overall policy oversight and leadership for the African Single Electricity Market (AfSEM).
- **AUDA-NEPAD**  
AUDA-NEPAD leads the development of the African Continental Electricity Master Plan (CMP).

- **African Development Bank**  
AfDB is a partner in the CMP development.
- **GET.transform under GIZ**  
GET.transform is a technical partner of the LTES Network and supports CMP development.
- **Government of Kenya**  
The government of Kenya, through the Ministry of Energy, is a member of the LTES Network.
- **United Nations Economic Commission for Africa**  
UNECA is hosting the Energy Modelling Platform for Africa.

## Further information

For more information, please get in touch with IRENA at [LTES@irena.org](mailto:LTES@irena.org).

More information on the structure and findings of IRENA's LTES Network can be found in the report "[Scenarios for the Energy Transition: Global experience and best practices](#)," and the network website [here](#).

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