

## COP29

### Side event concept note template

Concept notes shall not exceed 2 pages and be prepared based on the following outline:

**Nature of the event: Technical meeting/High level event**

**Title of event:**

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**Venue: Africa Pavilion, Baku, Azerbaijan**

**Date: November 19 time: 3.30 – 5pm**

#### **Organisers**

**Lead Partner:** UNECA (United Nations Economic Commission for Africa)

**Contributing partners:** Climate Compatible Growth (CCG) Programme, UNDESA

CCG is a pioneering UK Aid-funded project which aims to support investment in sustainable energy and transport systems to meet development priorities in the Global South. The programme brings together some of the UK's leading universities including Oxford, Cambridge, University College London, Imperial College and the Open University, with the Centre for Global Equality, KTH Royal Institute of Technology, Sustain 2030, and Climate Parliament. It is directed from the Centre for Sustainable Transitions: Energy, Environment, and Resilience (STEER), at Loughborough University.

#### **Background and Context**

The **Energy Modelling Platform for Africa (EMP-A)**, now in its fifth round since starting in 2018, plays a vital role in building capacity across Africa for energy planning and long-term investment. EMP-A is designed to equip professionals with the tools needed to develop energy models that support national planning, aligning with global frameworks like the **Sustainable Development Goals (SDGs)**, the **Paris Agreement**, and **Africa's Agenda 2063**. A key component of EMP-A is the "*train the trainers*" approach, which ensures that participants not only gain expertise but also acquire the skills to teach others, fostering sustainable and scalable capacity-building across the continent.

Furthermore, EMP-A is linked with the **Flatpack initiative**, which spreads the benefits of capacity building into the next generation. By partnering with local universities, EMP-A and CCG materials are institutionally embedded, creating a sustainable **long-term capacity-building ecosystem** in each participating country. This includes the design and implementation of **graduate courses**, supporting the professional development of academics, and providing scholarships to students, thereby ensuring a continuous transfer of knowledge and skills.

Long-term strategic energy planning is a complex task, particularly for **low- and middle-income countries (LMICs)** like those in Africa. These nations face a range of competing priorities, such as energy reliability, economic growth, and social development, all while striving to decarbonize energy systems. Capacity development in energy modelling helps to empower national governments, allowing them to independently plan and coordinate long-term energy investments that reflect local realities and build local ownership ([MDPI](#)).

One of the critical tools professionals can learn through EMP-A is the **CLEWs (Climate, Land, Energy, and Water systems)** framework, which is essential for understanding and managing the interdependencies between these systems. This tool is especially important in the context of Africa's food and water security, making it highly relevant to the **thematic focus of COP29 on November 19**.

In addition to the training on CLEWs as part of the EMP-A programme, UNECA and UNDESA, in collaboration with UN Country Offices in pilot countries (including Cameroon, Ethiopia, and Namibia), have been implementing CLEWs to support countries with strengthened capacities for policy coherence and integrated climate, land, energy and water sectors nexus modelling to support implementation of the SDGs and the Paris Agreement.

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The event will showcase the **Energy Modelling Community for Africa (EMC)**, a recently launched network of professionals who have completed training through the **Energy Modelling Platform for Africa (EMP-A)**. EMC fosters collaboration, knowledge sharing, and skill enhancement among EMP alumni. In addition to providing a platform for ongoing engagement, EMC serves as a vehicle for maintaining and upgrading skills in energy modelling.

Through the EMC, several alumni have contributed to special issues of academic journals and published papers that focus on using open-source modelling tools like **CLEWs** and **OSeMOSYS** to address Africa's unique energy challenges. These publications cover key topics such as renewable energy integration, climate resilience, and long-term energy investment strategies. By highlighting these outputs, the event will demonstrate how the capacity-building efforts of EMP-A are translating into actionable, high-impact research and solutions. The event will also showcase experiences of implementing CLEWs in the pilot countries, while exploring opportunities for upscaling in more countries.

A key feature for the event will be focus on the **role of women** in energy modelling, showcasing their contributions within the EMC and beyond. Women alumni of EMP-A have been pivotal in advancing energy planning efforts and driving critical research initiatives. Highlighting their achievements not only reinforces the importance of gender inclusivity in technical fields like energy modelling but also aligns with broader goals of empowering women in leadership roles across Africa's energy transition.

### **Objectives of the event**

These specific objectives are to:

- **Showcase the impact of capacity building in energy modelling** for Africa's long-term energy investment, highlighting how tools like **CLEWs** are used to support policy coherence and address complex challenges in food, agriculture, and water systems, and support sustainable development aligned with global goals.
- **Present the achievements of the Energy Modelling Platform for Africa (EMP-A)** in training professionals across Africa, equipping them with the skills needed to

design locally relevant energy systems and strategies and train the future generations of trainers.

- **Highlight the work of the Energy Modelling Community for Africa (EMC)**, including key publications by EMP-A alumni that demonstrate real-world solutions in renewable energy integration and climate resilience.
- **Emphasize the contributions of women in energy modelling**, showcasing their leadership and the importance of gender inclusivity in Africa's energy transition.
- **Announce new initiatives and partnerships** aimed at expanding the use of energy modelling tools across Africa to enhance sustainable energy investment and planning.
- Identify and discuss **best practice principles for designing capacity-building programs**, drawing upon the lessons learned as articulated in the CCG capacity-building COP29 brief. These principles will provide guidance on how to create effective, sustainable programs that are tailored to regional contexts and foster long-term impact.

#### **Alignment with COP 29 Priorities**

This event aligns with the **Food, Agriculture, and Water** thematic day (November 19) by linking the CLEWs framework to sustainable solutions for Africa's food and water systems through energy modelling and long-term investment strategies.

#### **Draft Programme**

Panel gender balance (50 % male/50 % female)

Moderator: Mekalia Paulos (UNECA representative)

Opening remarks: Linus Mofor (UNECA) and Mark Howells (CCG)

- Speaker 1: EMP-A representative, discussing the role of capacity building in energy modeling and its impact on long-term energy investment in Africa's food and water systems.
- Speaker 2: Energy Modelling Community for Africa (EMC/EMP-A) representative, presenting key outcomes of the capacity-building initiatives and their real-world application.
- Speaker 3: EMP-A alumni, sharing insights from published papers and special issues, with a focus on gender inclusivity and leadership.
- Speaker 4: Expert on long-term energy investment, addressing sustainable food and water systems in Africa.
- Speaker 5: CLEWs pilot country implementation.

*Questions to be addressed during the panel discussion:*

- **What are the key outcomes of EMP-A's capacity-building efforts** in supporting long-term energy investment and planning in Africa?

- **How can energy modelling tools**, such as those taught at EMP-A, be scaled across Africa to address sustainable development challenges in sectors like food and water systems?
- **What role do women play in driving energy modelling efforts** within the Energy Modelling Community for Africa (EMC), and how does their involvement contribute to the continent’s energy transition?
- **What new initiatives or partnerships** can further enhance Africa’s ability to independently manage and plan for its long-term energy investments?
- What are the **best practice principles for designing effective capacity-building programs**, and how can the lessons learned from EMP-A’s experience inform future programs aimed at strengthening local expertise in energy modelling?
- What are some of the lessons learned in supporting policy coherence through implementation of integrated modelling approaches in Africa?

end of event

--- Coffee and tea break: yes

### Key messages

## Key Messages

- **Capacity building in energy modelling** is critical for supporting long-term energy investment strategies across Africa, ensuring that energy plans address the continent’s specific challenges, including food and water security.
- **EMP-A has been instrumental in training African professionals**, equipping them with the skills to design and implement sustainable energy models. The platform has also placed a strong emphasis on inclusivity, particularly in empowering women to take leading roles in the energy sector.
- **Energy modelling and strategic investment planning** are key drivers for achieving Africa’s sustainable development goals and ensuring resilience in critical sectors like agriculture and water systems.
- **Best practice principles for designing effective capacity-building programs**, drawn from EMP-A’s experience and the lessons learned, are essential for creating sustainable, context-specific programs that can be scaled across Africa.
- **The Energy Modelling Community for Africa (EMC)** provides a critical platform for maintaining and upgrading skills, fostering collaboration, and ensuring that knowledge-sharing continues beyond initial training. This network is key to supporting the continent's ongoing energy transition.
- There is urgent need to support countries with tools and capacities for ensuring policy coherence and integrated implementation of the SDGs, Paris Agreement, and Agenda 2063 aligned with nation development priorities.

### Links to background documentation:

- [EMP-A Overview](#)
- [EMP-A 2024 Event](#)



**Contact event organisers:**

Main Organizer: UNECA  
Co-organizer: CCG, UNDESA