

The EU Technical Assistance Facility (TAF) for the Sustainable Energy – Central and Western Africa

Towards Africa Single Electricity Market (AfSEM) and Continental Master Plan (CMP)

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One grid for one continent



- AU and EU are joining forces to forge a **continental approach** to electricity markets in Africa.
- **Fully integrated, competitive and harmonized market** will accelerate the development of the continent and improve energy access.
- **High level and collaborative planning** is crucial to address the future surge in electricity demand.

Key figures

- Electricity demand from the continent will more than triple in 2040 (IEA).
- 600 million Africans with no access to electricity and 150 million with unstable connection.
- 170 power cuts per year on average in West Africa region.



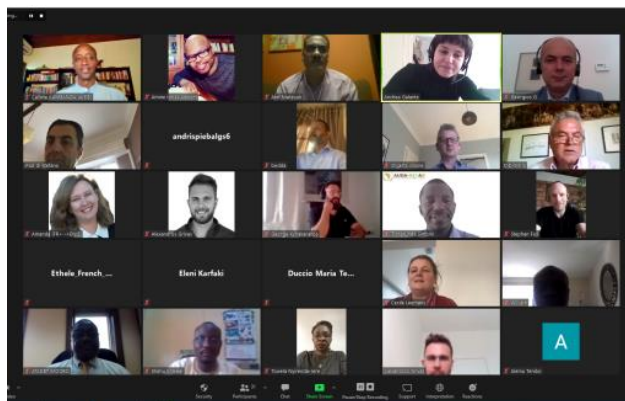
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Lessons from the EU Energy Union integration experience



- **Drawing from EU 30-year experience** and the success of building the European Energy Market.
- **New AU-EU energy partnership** to harmonise and unify the regional electricity markets fitted to Africa's needs and realities.
- Forming part of a larger international cooperation program designed as a **partnership of equals**.



Ongoing African-European initiatives

Africa-Europe alliance for Sustainable Investment and Jobs: support African/European investments and the creation of 10 million jobs in Africa over the next 5 years.

Green Energy Initiative: boost AU-EU cooperation through energy policy dialogue, capacity building, technical assistance and investments.

Mediterranean Electric Ring: interconnect the Euro-Med electric power systems around the basin.



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Africa's potential to become green energy leader

- Volume of green energy investments in Africa and socio-economic impacts in the continent could **influence the global economy** and makes it an upcoming worldwide growth objective.
- Global cooperation and **regional integration** offer the best guarantees for sustainable international stability and economic growth.
- Initiative under the **African leadership and ownership** to bring together over **100 African energy stakeholders** to rethink Africa's energy planning and co-create solution to tackle energy poverty.

Key stakeholders involved:



AU & agencies



EU



*Power Pools &
APUA*



Regulators



THE WORLD BANK



IRENA
International Renewable Energy Agency

*International
institutions*



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Towards a single electricity market in Africa

By serving more than 1.3 Billion African, the new **Single African Electricity Market** (AfSEM) will turn into the **largest electricity market in the world**.

Energy security and quality as a cost-efficient response to the increasing electricity demand and **accelerates the path to universal access**.

Fully-integrated energy market to enable energy to flow freely for **cross-border electricity trade** and increase access for people with no connections.

Africa becoming a major player in the global green energy market thanks to **energy transition** and the **huge potential for renewable electricity**.

Harmonizing the institutional and legal - technical framework together with the investment settings at the continental level and **establishing common rules**.



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The formulation of AfSEM

Objective: facilitate the sustainable development of the African electricity sector through **integrated continental electricity market** on the basis of the 2019 AfCFTA Agreement.

Common policies for the organization and functioning of the AfSEM based on the ones governing the regional markets under RECs and the national markets within the AU members.

Roadmap

- **2020-2025:** preparation, institutional strengthening and governance.
- **2026-2030:** legal and regulatory development at the regional level.
- **2031-2040:** continental electricity market opening.

Governance - Institutional Framework

Institutional implementation carried out by modalities within the AUC through consultative and **participatory processes** presided over by EU-TAF team and AUC in a secretarial role.

The secretary body: assist and provide administrative & strategic support for all the AU related bodies.

The ministerial council: provide general policy guidelines, take strategic decisions, and adopt procedural acts.

The permanent high-level group: ensure the follow-up of decisions and prepare the work of Ministerial Council. Give assent to technical assistance requests made by partners and institutions,

The electricity forum: plenary meeting body for progress review, task attribution and issues related to stakeholders.

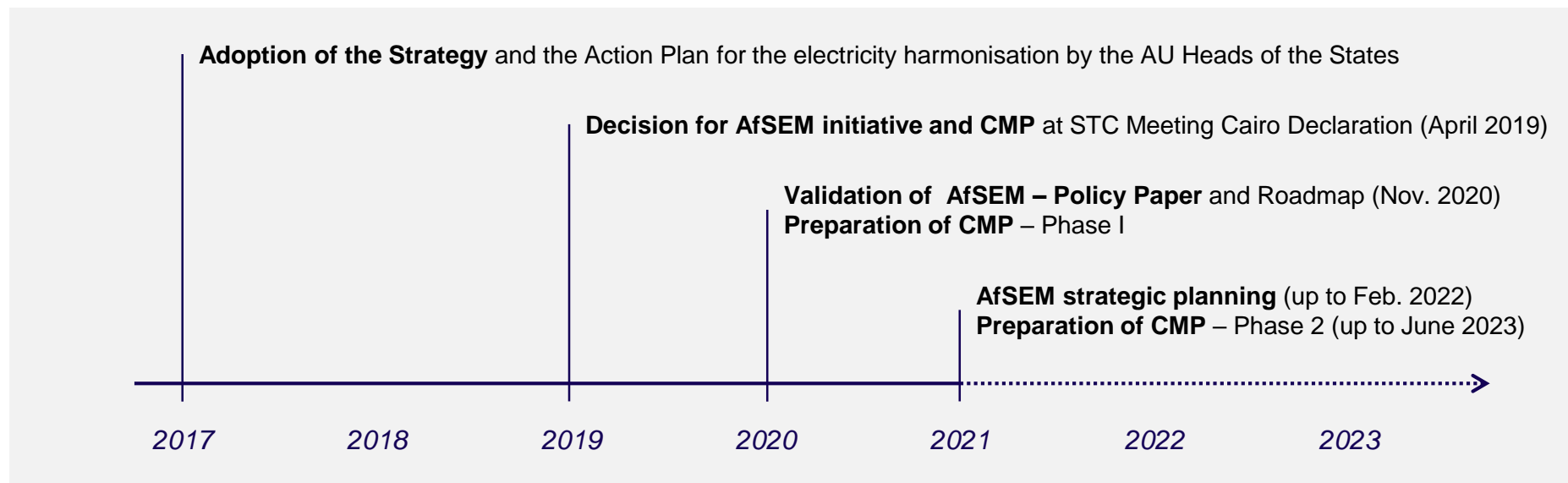


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The Continental Master Plan

- **Blueprint of the African Single Electricity Market** acting as the central pillar to solve Africa's energy challenges. It links existing generation & transmission plans among the regional Power Pools and the AU Member States to **identify Africa's energy priority infrastructure based on a common planning tool** and help channel energy to regions with deficits.
- **Decision support** for the AUC, AUDA-NEPAD, RECs, and MS in the execution of PIDA PAP 2. It also helps Power Pools see their regional master plans in the wider (continental) context and make the necessary adjustments to benefit from the **continental integration and power trade opportunities**.



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The Continental Master Plan: scope, status & approach

Scope

Phase I:

- Establishment of a baseline identification of priority generation and transmission projects.
- Assessment of options and formulation of recommendations regarding Phase II study.

Phase II:

Development of the continental master plan (generation and transmission) and several related studies. Major activities under the CMP proper include the following:

- Setting up of the institutional arrangement to carry out the study (AUDA NEPAD, PPs, EU TAF, Modelling Partner)
- Definition of scenarios and resource assessment
- Supply demand analysis
- Development of models, optimization analysis, and identification the most economic expansion plan
- Simulations and contingency analysis to select the most operationally robust economic plan.

Status & next steps

- **Phase I completed** in October 2020 and deliverables validated during the Steering Committee Meeting (October 15th, 2020).
- *Next steps:* preparation of the terms of reference for the associated studies, securing finance, finalizing acquisition of the modelling partner and operationalizing the cooperation framework with the power pools and RECs for the study. **Start up last week Jan 2021**

The approach

- Participative and inclusive approach is central in the implementation of the study.
- CMP designed to be implemented by the power pools themselves with the assistance of a modelling partner and coordination by AUDA-NEPAD.
- Study supported by 15 high level experts from the EU TAF team up to 2023.



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