

Initial translation

1 Name of the party

Mali

2 Please provide the names and locations of existing centres of excellence for sustainable cooling and testing centres for energy efficiency in your country or region

The Centers of Excellence for sustainable cooling in Mali are:

- National Engineering School – Abderhamane Baba TOURE (ENI-ABT): Bamako
- Central School of Industry, Commerce and Administration: Bamako;
- University of Sciences, Techniques and Technologies of Bamako (USTTB).

The energy efficiency testing centers are: There is also a network of Experts for the Promotion of Energy Efficiency (REE-GEM – which is also the Association of Energy Service Companies of Mali). REE-GEM is also a member of the Global ESCO Network.

3 Are there plans to set up a centres of excellence for sustainable cooling and/or testing centres for energy efficiency in your country/region? If yes, please provide more information on these ongoing efforts

The National Agency for Renewable Energies and Bioenergies (ANERB), formerly AER-Mali (Mali's Renewable Energy Agencies), houses an energy efficiency laboratory established with support from the WAEMU through its "PREE" Program.

Also, the National Research and Experimentation Center for Building and Public Works (CNREX-BTP)

To understand the situation of the Energy Efficiency Testing Lab at ANERB (formerly AER-Mali):

The provision of energy performance testing equipment (lamps and refrigerators) to four laboratories: Benin, Burkina Faso, Mali, and Senegal, and one laboratory in Côte d'Ivoire for testing construction materials: In Mali, this initiative is under the auspices of AER-Mali and specifically focuses on testing the energy performance of lamps. The testing equipment is not yet fully operational because the software installation has reportedly not yet been completed. In any case, this initiative is largely unknown to the public and should receive appropriate attention from AER-Mali.

Furthermore, to establish the necessary legal and regulatory framework for the development of the projects (EEA & EEB), the Council of Ministers of the member states adopted the following two Directives on June 26, 2020:

1) Directive No. 04/2020/CM/UEMOA concerning energy labeling of new electric lamps and household appliances in the WAEMU member states;

2) Directive No. 05/2020/CM/UEMOA establishing energy efficiency measures in building construction in the WAEMU member states.

The planned PREE implementation activities for the period 2020–2021 in each member state are:

- a) Establishment of national legal and regulatory tools to ensure the transposition of the two Directives;
- b) Capacity building for key national stakeholders in the implementation of the two projects;
- c) Awareness-raising among the population, public institutions, and the private sector.

4 Please describe policies implemented in your country/region that support the setting up and operations of such centers of excellence for sustainable cooling and testing centers for energy efficiency

- National Energy Policy and a National Energy Efficiency Development Strategy (at the government level);
- Within the framework of the ROCA project, GIZ-Mali has developed: a) a strategy on minimum energy performance standards for air conditioners; b) a draft regulation on energy efficiency development in Mali;
- Energy information system (for the country), the WAEMU, and also ECOWAS (particularly on energy balances);
- With the support of UNEP/CRTC, ongoing technical assistance to REE-IGEM aims to help it develop into a SUPER ESCO in the country.

5 Please describe activities and specific functions of the existing/planned centres of excellence for sustainable cooling and testing centres for energy efficiency

The specific activities and functions of existing centers of excellence are primarily the theoretical and practical training of students. At the university and graduate school level, the centers include research and development, including scientific publications.

6 Please share key lessons learned, including best practices and challenges encountered in establishing or operating the centres of excellence for sustainable cooling and testing centres for energy efficiency
Lessons learned:

Fourth country in the West Africa and Sahel region with an energy savings potential of 11,900 GWh (2024-2040, see AFREC-2024 study report);

Electricity distribution network losses: average annual overall losses of 23% (compared to a contractual 14%);

Average annual growth in peak demand of 30 MW (dominated by the import of waste electrical and electronic equipment, particularly air conditioners and refrigerators);

Between 85% and 90% of electricity is consumed in buildings (services, commerce, and residential). The absence of minimum effective building

standards, coupled with a severe climate causing temperature peaks reaching 50°C;

Inadequate national institutional procedures for energy efficiency certification;

Insufficient relevant incentives and specialized national structures;

An initial project funded by the World Bank (PASEM);

Ongoing process of creating a SUPER ESCO

7 Please provide any supporting documentation (e.g. policy documents, reports, website links etc.)

N/A

8 Any other information

N/A