



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



SUSTAINABLE DEVELOPMENT GOAL 9
INDUSTRY, INNOVATION AND INFRASTRUCTURE

Energy Efficient Lighting and Appliances project in Southern and Eastern Africa (EELA)

Short project summary

Energy Efficiency Training Week, 14-17 October 2019



Energy Efficient Lighting and Appliances Project in Southern and East Africa - EELA



The Energy Efficient Lighting and Appliances (EELA) project aims to support the development of vibrant markets for energy efficient lighting and appliances across East and Southern Africa.



- **The EELA approach to change**
 - **promoting a market transformation for energy efficient lighting and appliances in EAC and SADC**
 - **create market and institutional conditions to enable a transformation of the sector to stimulate increased diffusion of efficient lighting products and appliances across all sectors.**



The EELA approach to change

- **Market incentives** will be put in place to stimulate the uptake of energy efficient lighting and appliances. The project will offer supply chain actors technical assistance and financial incentives to deliver efficient and high quality energy services. Particular support will be provided to **Energy Service Companies (ESCOs)**.
- **Policies and regulations** for energy efficient lighting and appliances will be improved through the project, with an eye on making them gender and climate responsive. This will involve developing a regional framework for lighting and harmonised Minimum Energy Performance Standards (MEPS) for various product groups. It will also involve addressing environmental issues such as the safe 'end of life' disposal of lighting and appliances, including disassembly and recycling.
- **Building the capacity** of governments, standards setting and accreditation bodies, as well as testing facilities and the private sector will also be an important part of the programme through workshops, webinars and other events. A network for sharing knowledge within the regions will be established. In particular, the project will offer testing centres support with equipment and capacity building.
- **Raising awareness** about the benefits of efficient technologies amongst market players, policy makers and consumers will be critical. Through the project, public information campaigns using TV, radio, social channels and outreach events

Regional mechanism and platform are established to coordinate actions on market transformation of Energy Efficient appliances including the support of national Code of Conduct Programs and the exchange among the Member States

Establish a regional coordination platform at SACREEE and EACREEE



- SACREEE and EACREEE - **centres of excellence on EELA** are capacitated – **for the project and beyond**
- **Tool kits and best practice guides** developed for governments to integrate EELA into national policy framework
- **Provide support to the national EELA programs** (expert guidelines, facilitation)



Concerted action, outreach and regional Forum activities



- Facilitate **sharing of information** among the national initiatives and to establish a platform
- Organisation of **annual regional workshops** for information exchange among Member States
- **Organise a series of webinars** to provide guidance to the Member States on their national programs
- Support outreach activities

Incentive mechanisms to encourage the uptake of EELA based projects in SADC and EAC established

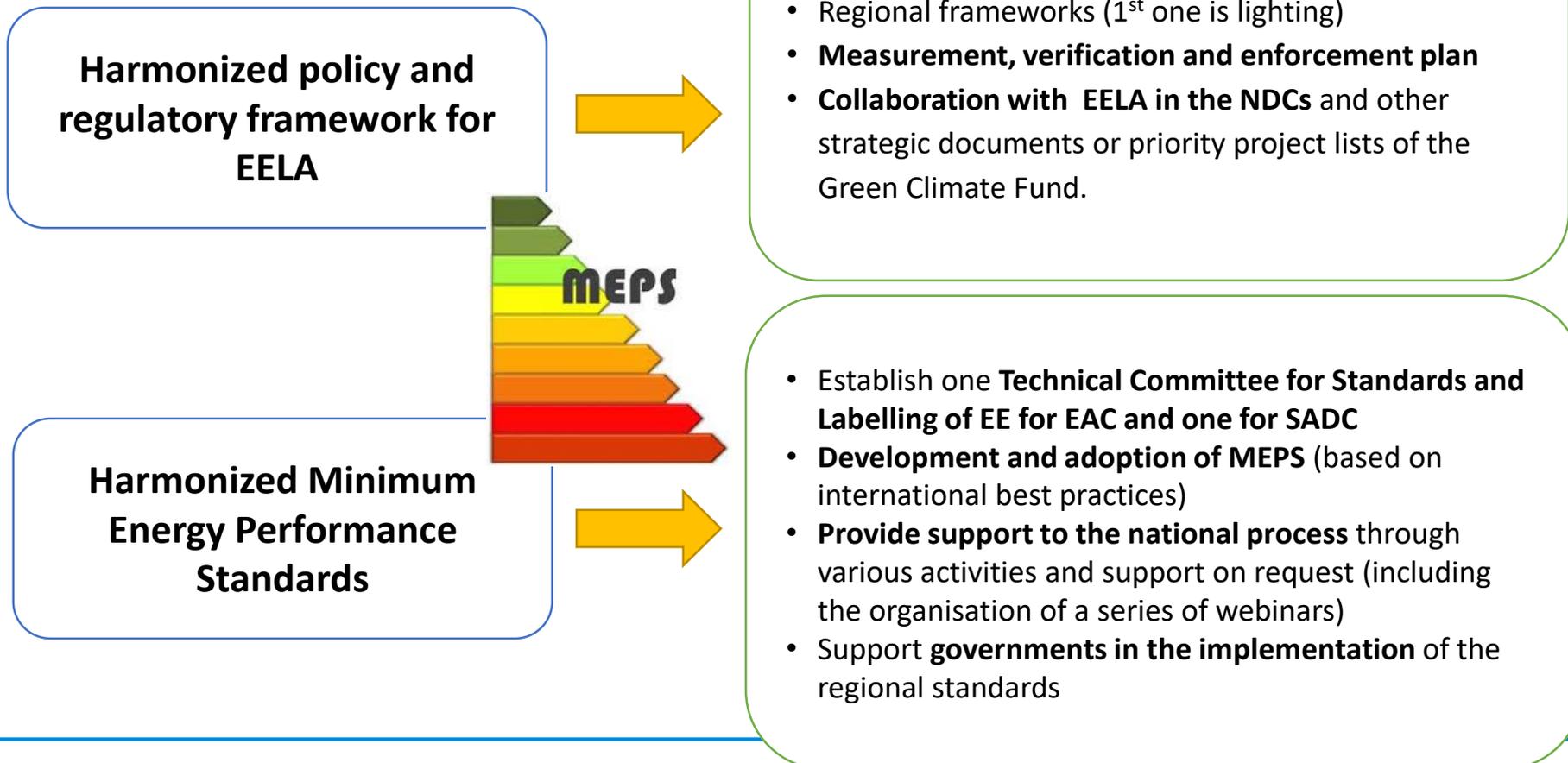
Incentive mechanisms to encourage the uptake of EELA in SADC and EAC regions created



- Identification of **mechanisms and business models supporting** the integration of national and regional players (particularly ESCOs)
- Adapt and promote **incentive mechanisms to assist purchasers to meet the initial costs of products**
- Adapt and promote incentive mechanisms for **local private sector to upgrade local facilities and capacities** in order to enhance capacities of local manufacturers and supporting the conversion of their facilities to produce EELA products
- Organisation of regional **private sector focused workshops**



Regional policy and regulatory environment for energy efficient lighting and appliances in the SADC and EAC region is improved with a view of the climate impact and gender responsiveness.



Awareness among market players and policy makers on EE lighting and appliances is enhanced

**Awareness raising strategy
for EE Appliances is
developed and
implemented**



- **awareness raising strategy**
- awareness raising **campaign** for EELA
- Develop **CoC Best practice publication** and sensitization material
- Workshops and side-events alongside major global and regional energy and climate events
- Maintain an **interactive website** integrated in the SACREEE and EACREEE Website including a document sharing facility on EELA
- **develop a database for EELA products**
- carry out a **competition in cooperation with universities** to develop a smartphone and **online application** to inform about product performance



Capacities of key market enablers, and players in the EELA market strengthened including testing centres



Multi-year capacity building framework established in order to strengthen key institutions, testing centres and stakeholder groups



- Improving the capacity of testing laboratories through trainings and equipment
- Establish a **collaborative network** between the national testing laboratories
- Organise **trainings** for relevant technical staff on testing standards, equipment and accessories.
- Train **Custom bodies** on identification and authentication of imported lighting products
- Setting regional and national criteria for **regulatory control of lighting products** and appliances
- Develop (semi-) commercially based cost-models for testing EELA
- Provide capacity building support for **national institutions, energy service providers** and **financial institutions**



Project partners and regional stakeholders

EELA is implemented **by UNIDO** and funded by **the Swedish International Development Cooperation Agency (Sida)**

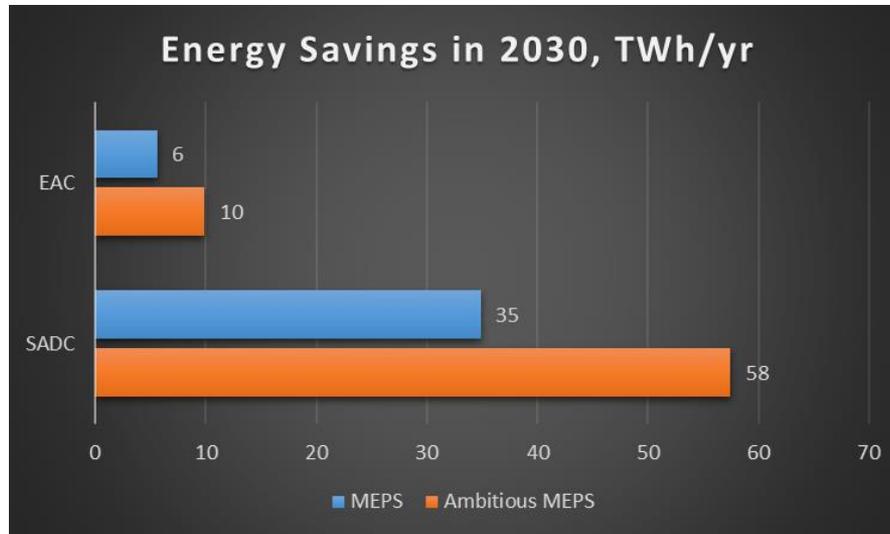
Project partners

- SADC Centre for Renewable Energy and Energy Efficiency (SACREEE) and East African Centre for Renewable Energy and Energy Efficiency (EACREEE)
- Swedish Energy Agency
- CLASP

Regional stakeholders

- SADC and EAC and their subsidiary bodies (Power Pools, Regulators etc)
- Ministries of Energy/ Environment/ Trade
- Standards Bodies and regional coordination mechanisms (SADCSTAN, EASC)
- Testing Facilities/Accreditation Bodies
- Private Sector Associations
- Producers of household and industrial appliances
- Energy Service Companies (ESCOs)

Outcome of the Market Study - The savings potential across East and Southern Africa



Refrigerators



Air
Conditioning



Motors



Lighting



Transformers

- **Savings of 41 – 68 TWh/yr in 2030 across EA and SADC***
- **Equal to 5 - 8 times Kenya's total electricity consumption (IEA, 2016)**
- **Avoids 18 - 30 coal-fired powerplants**, costing US\$22-37 billion to build**

*EA: Burundi, Kenya, Rwanda, South Sudan, Tanzania, Uganda. SADC: Angola, Botswana, DRC, eSwatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Zambia, Zimbabwe.

**Assuming US\$2,500/kW and a 500MW power plant operating at 0.50 availability, producing 2.19 TWh/yr.



Support in the development of national projects

- National implementation of EELA is key!!
- There are multiple resources available
 - Bilateral funding partners
 - GCF Readiness Funds / GEF
 - Multilateral partners such as EU, World Bank etc
- The EELA team can support you to develop a national project and jointly look for funding





Join the EELA – get involved

EACREEE

Fred Ishugah

f.ishugah@eacreee.org

SACREEE

Readlay Makaliki

Readlay.makaliki@sacreee.org

UNIDO

Karin Reiss

k.reiss@unido.org

