

EELA Stakeholder Forum – EmPowering Efficient Appliances for Greater Livelihoods in EAC and SADC

Introduction of the Energy Efficient Lighting and Appliances (EELA) Program in East and Southern Africa

29 March 2023

Ms. Karin Reiss-Haimbala, Program Coordinator, UNIDO





**ENERGY
EFFICIENT
LIGHTING
AND APPLIANCES**
in East and Southern Africa

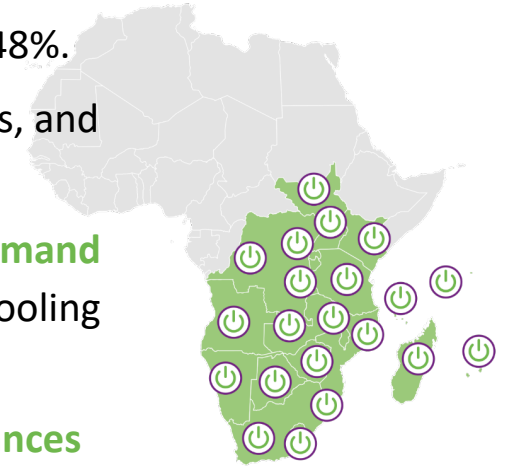


Appliances deliver **important energy services** such as **lighting, refrigeration, communication or cooling** which are all crucial to serve households and contribute to **income generation** of people in the EAC and SADC region.



Background and rationale for the EELA project

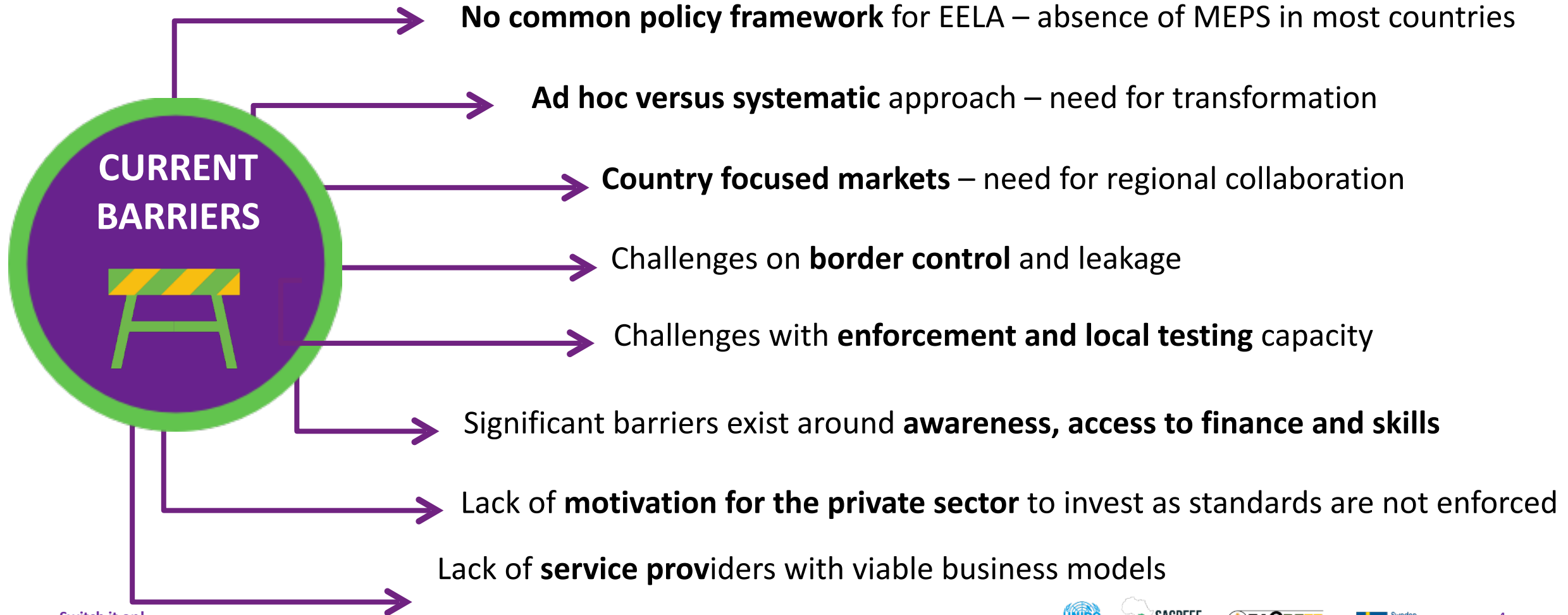
- The EAC and SADC regions are facing **very low electrification rates** with regional averages of 22% and 48%.
- **Lighting** accounts for approximately 15% of global power consumption and 5% of global GHG emissions, and a much higher share in the regions where electricity access and consumption are low.
- Growing populations, urbanization, Climate Change impacts and rising living standards **increase the demand for cooling services** and without a transformational change of the market, the electricity demand for cooling appliances is expected to more than double in the next decades.
- Besides Household appliances, high performing, energy-efficient and affordable **Productive Use Appliances** are important enablers for poverty reduction and sustainable economic development.



Switch it on!



Challenges



Switch it on!



Supporting COVID 19

recovery efforts – health, business opportunities, improved competitiveness of industries, household savings etc.



Household savings and health **BENEFITS FOR PEOPLE**



Countries will benefit from greater **ENERGY SECURITY**



GRID RELIABILITY– reduce electricity shortages (brown-outs / black-outs); reduces peak power demand



Less power use means fewer CO₂ emissions, **BENEFITING**

Switch it on!

THE ENVIRONMENT



MARKET PROTECTION- avoid becoming dumping-ground for technologies banned elsewhere



New business opportunities for local and regional companies; alongside cheaper running costs for business using EE products will **BOOST THE ECONOMY**

Why Regional Collaboration?

- Eliminates **trade barriers** for EE products
- Unlocks **economies of scale**
- Increase **affordability**
- Common monitoring, verification and **enforcement**
- Supports coordinated **compliance** planning and efficient use of resources when a regional market shares similar products
- Great potential to **avoid duplication** of compliance efforts



Regional Sustainable Energy Centres play a pioneering role in regional harmonisation

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

EELA has a transformational approach towards the development of vibrant markets where suppliers are delivering high-quality services and products for energy efficient lighting and appliances to increased aware households, businesses and public facilities across East and Southern Africa. EELA stimulates local manufacturing and private sector investments.

The EELA approach to change



Market development and Business support for the private sector to deliver efficient and high quality energy services; higher climate resilience and creation of green jobs



Conducive policy environment through harmonised Minimum Energy Performance Standards (MEPS) for appliances, compliance frameworks, waste management, public procurement guidelines

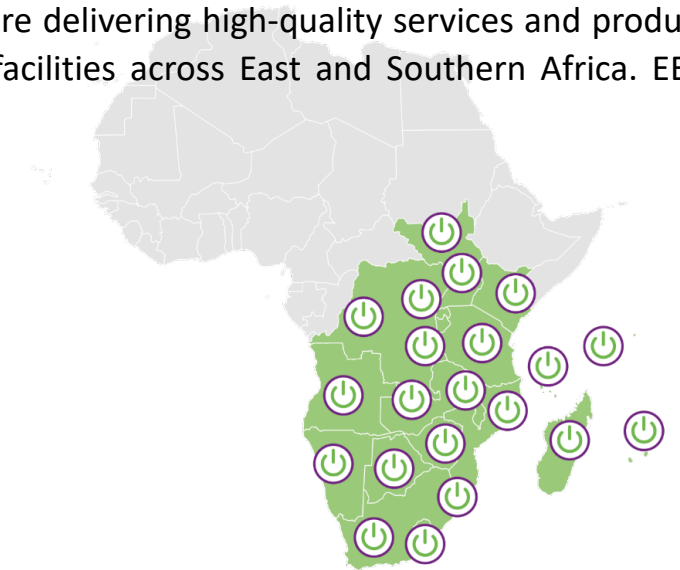


Capacity building on policy and regulatory framework development, appliances testing and regulatory enforcement and on Energy Service Business Models



Awareness raising on the benefits of adopting efficient technologies across all stakeholders

EELA contributes to a low-carbon, climate-resilient and environmentally sustainable economy and responds to the priorities of the countries national NDCs and development goals.



A coordinated regional effort through RECS and regional sustainable energy centres



Implemented by UNIDO with financial support

from the government of Sweden



EELA key 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)



Regional Centres provide a platform for multi-stakeholder engagement on EELA

The multiple benefits of Energy Efficient Lighting and Appliances

SUSTAINABLE DEVELOPMENT GOALS



Achieved Milestones - Policy and standard development

- **Regional MEPS adopted for**
 - General lighting
 - Service lighting
 - Off-grid lighting
- **Advanced MEPS process for**
 - Refrigerators*
 - Air-conditioners*



- **Regional Technical Committees** established
- **Regional Compliance Framework** developed
- **Green Procurement Guidelines** developed
- Direct TA for national implementation
- Supporting the **regional Energy Efficiency policy** for the EAC region
- Strong support and local ownership through the **established EELA network** in the participating countries
- Regional centres become **the Go-To organisations** for national support



* In collaboration with U4E

Achieved Milestones - Testing capacity strengthened through equipment and capacity building activities

- Capacitating **Regional Reference Laboratories** in Zambia, Uganda and Mozambique through training and procurement of laboratory equipment to test lighting products and strengthen compliance in regional market.
- **Market Surveillance** for lighting products enabled through purchase of Portable goniometers for screening quality of lighting products in markets procured for each 21 member states.
- Establishing a **network of testing labs** in the region



Capacity Building of key Stakeholders

- Portable Lighting Test Equipment being purchased for 21 Member States
- For use in Market surveillance and conformity checks

MEASURE IN 30 SECONDS

- Lumen
- Peak candela value
- Color temperature, CCT
- Spectrum, CRI, TM30, CQS
- Beam angle
- Detailed light distribution
- Power and power factor
- Lumen per Watt



Measure any type of Light Source

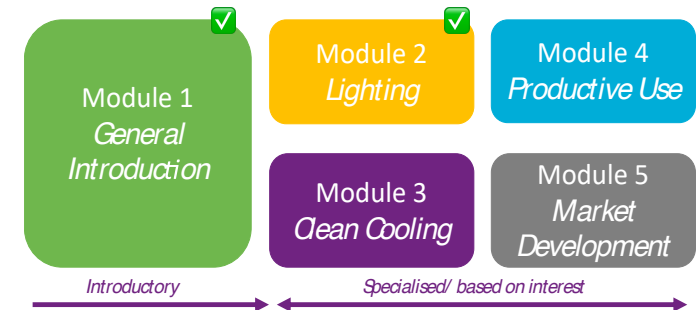
Measures a variety of parameters
No expert Knowledge required to use the equipment

Achieved Milestones – Launch of the EELA E-learning Platform

Holistic set of capacity building activities carried out with high participation - partnerships with AU, IEA, SEAD, COMESA, U4E and others)

EELA E-Learning platform

- Launched on 22 October 2021 with Modules 1 and 2
- Course open to all stakeholders with guided training for change agents
- EELA Project is collaborating with Kafue Gorge Regional Training Centre (KGRTC) in Zambia
- **Next Steps:** Maintain and enrich the online training course with modules 3, 4 and 5



REGISTER!

<https://training.eela-project.org>

Change Agents

- **Core Group** per Member State shall act as **change agents and will participate in a special training cycle.**
- **Change Agents** include Policy makers, TC members, NSBs, Lab technicians, ESCOs, Manufacturers, Retailers, Importers, Market surveillance actors, Public and private procurers, Consumer organisations, Customs bodies, Academia. No request yet

Achieved Milestones – 3 Market Studies: lighting, cooling and productive use appliances

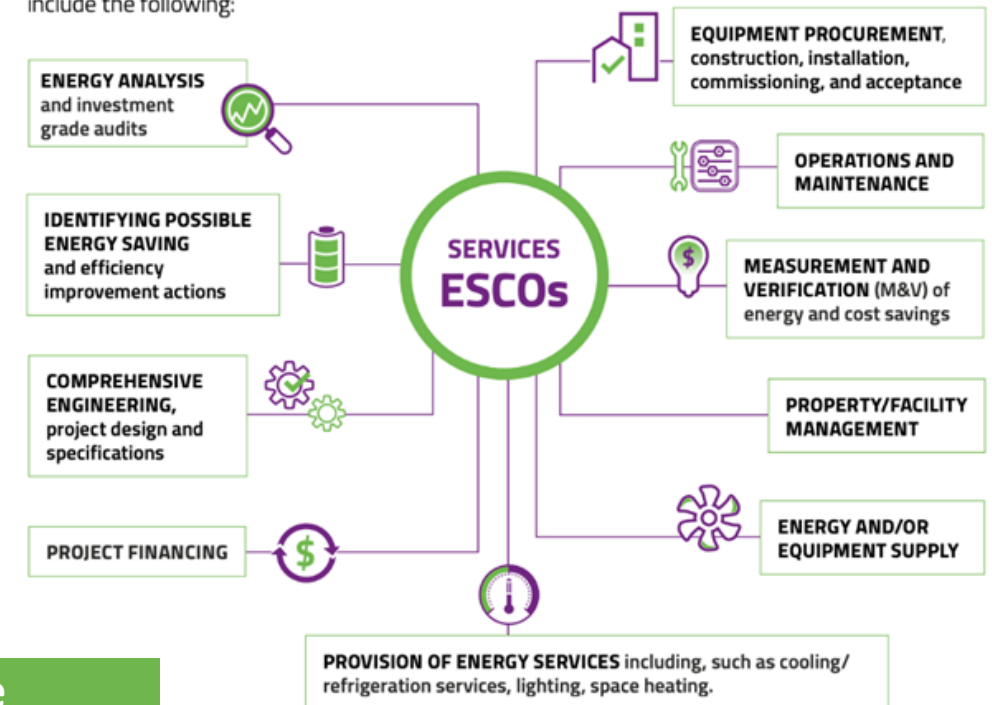
- **EELA carried out three market studies which are guiding the implementation strategy**
- **The most recent market study and supply chain analysis was carried out on Productive Use Appliances**
 - Generate data and in-depth knowledge on the status of on-and off-grid productive use appliances (PUA) in the EAC and SADC regions
 - Identified high potential value chains and PUA in EAC and SADC
 - Identified most relevant on- and off-grid PUA
 - Guides the EELA intervention strategy to accelerate the uptake of EE PUA and to strengthen value chains

Highlighted the need for a special EELA Off-Grid PUE component

Achieved Milestones - Business support and market development

- **Private Sector Support strategy developed**
- **Private sector awareness raising sessions on energy service business models held in many countries**
- **EELA TA and Co-financing facility launched, supporting**
 - Energy As a Service (lighting, cooling etc)
 - Energy Supply/Performance Contracting
 - Leasing models
- **First set of projects selected for co-financing through an call for EoI – first Energy Service Business Models in most target countries!**

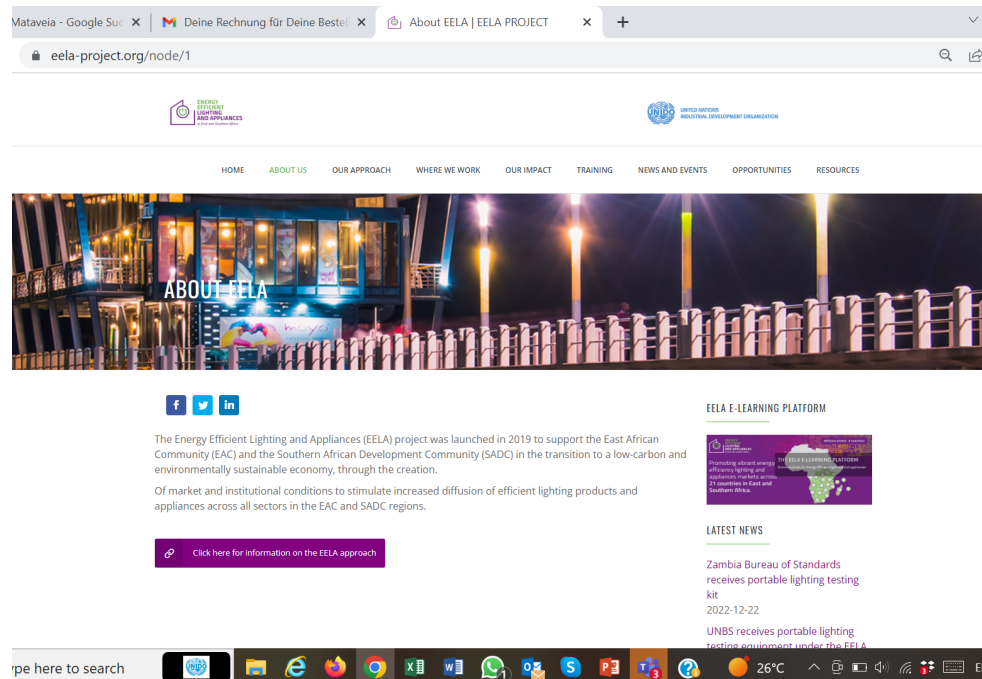
The **ranges of services ESCOs provide** include the following:



Holistic information activities for private sector carried out to raise awareness on the business opportunities!!

Communication and awareness raising

- Launch of the EELA website as a resource for information, tools and guidelines to support countries on advancing with energy efficient appliances.
- Several awareness raising activities conducted including a webinar series on key EELA topics – high attendance!



Switch it on!



The image shows a registration page for the EELA webinar series. It features the EELA logo at the top left. A prominent green button says 'REGISTRATION'. The main heading is 'Join the EELA webinar series!'. Below this, a paragraph explains that the EAC and SADC regions are taking steps towards adopting EELA and that the webinar series is organized by EELA partners to showcase opportunities and lessons learned. It notes that participation is free but requires registration. A list of three webinars is provided:

- Enabling policies for a market transformation towards EELA**: 29 September @ 10:00 am – 12:30 pm CAT
- Opportunities for private sector participation in EELA**: 21 October 2020 @ 10:00 am – 12:30 pm CAT
- Putting a gender lens on EELA**: 11 November 2020 @ 10:00 am – 12:30 pm CAT

 A fourth topic, 'Monitoring, Verification and Enforcement', is listed with a date of 4 December 2020 @ 10:00 am – 12:30 pm CAT. On the right side, there is a map of Africa with several green power button icons overlaid on it. At the bottom, there are logos for UNIDO, SACREEE, EACREEE, and Sweden/Sverige.

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EELA Stakeholder Forum

EmPowering Efficient Appliances for greater livelihoods in EAC and SADC

29 – 30 March 2023 Nairobi, Kenya

The annual **EELA Stakeholder Forum** is a multi-stake holder platform with this year's focus being to **track progress** on the uptake of energy-efficient appliances, to **raise awareness** on new EELA policies in the regions, **showcase trends and new initiatives**, and explore the market potential for Energy Service Companies (**ESCOs**).

<https://eela-project.org/event/eela-stakeholder-forum>



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THANK YOU

UNIDO

Ms. Karin Reiss-Haimbala, email: K.REISS@unido.org

Ms. Evita Moawad, email: E.MOAWAD@unido.org

Mr. Ndivhuho Tshikovhi: N.TSHIKOVHI@unido.org

EACREEE

Mr. Denis Ariho, email: d.ariho@eacreee.org

Ms. Mary Bwabye, email: m.bwabye@unido.org

SACREEE

Mr. Readlay Makaliki, email: readlay.Makaliki@sacreee.org

Ms. Asteria Markus, email: Asteria.markus@sacreee.org

For further information, visit the EELA website
www.eela-project.org

