

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

Workshop and Partner Meeting on Energy Efficient Lighting and Appliances, 23-24 October 2018, Windhoek













#### **UNIDO's mandate**

UNIDO fosters Inclusive and Sustainable Industrial Development (ISID) by providing technical cooperation, analytical and policy advisory services, standard setting and compliance, and by convening for knowledge transfer, partnerships and networking.

UNIDO services are delivered across three strategic pillars:

> **Advancing Fconomic** Competitiveness

> > Inclusive and Sustainable Industrial **Development**

**Creating** Shared **Prosperity**  **Safeguarding** the **Environment** 















# Global Network of Regional Sustainable Energy Centres (GN-SEC)

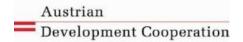


www.se4allnetwork.org

#### Added value of GEN-SEC:

- √ GN-SEC as a regional delivery mechanism for UNIDO's projects;
- ✓ Local network of Sustainable Energy specialists;
- ✓ Network of Hubs for Sustainable Energy for All;
- √ Advocacy Platform for i.e. Climate Change Negotiations, UN Conferences etc.;

















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## **Energy Efficienct lighting**

- 15 per cent of global electricity is used to light our homes, schools and businesses
- The use of lighting is projected to rise by about 50 per cent over the next two decades
- Electricity that powers these lights will be wasted if robust policies are not adopted and enforced
- Developing and emerging economies could reduce annual electricity demand for lighting by 40 to 60 per cent



United for efficiency















UNIDO-Sida cooperation project: **Energy Efficient Lighting and** Appliances project in Southern and Eastern Africa (EELA)



- improve access to sustainable energy for women and men, girls and boys, and mitigate negative externalities of the energy system through
  - 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.
- This project will bring regional support to private sector-led activities that will lead to increased use of energy efficient high quality lighting and appliances through regional regulatory and trade harmonization interventions; while also considering inclusiveness of all project activities to assure socially sustainable project outcomes.













## Geographical coverage of the EELA project

- EELA is implemented in the EAC and SADC region
- Main local execution partners will be















#### **EELA in SADC and EAC**

Both EAC and SADC regions are battling low levels of access to clean and affordable energy services as well as energy insecurity due to low generation capacity and in some parts inefficient grids. Demand-side management (DSM), implemented mainly by state owned utilities and coordinated by the power pools, has been adopted by EAC and SADC as the quickest and cheaper option to mitigate low energy security.

#### The DSM measures adopted include:

- distribution of compact fluorescent lighting (CFL);
- promotion of solar water heating;
- promotion of commercial lighting;
- installation of prepaid meters; and
- implementation of time-of-use tariffs.

SADC agreed to ban the use of incandescent bulbs by December 2019

These measures have been adopted to alleviate the supply constraints faced by the utilities. Experiences from these interventions show the following:

- in many cases, an ad hoc approach has been adopted, that does not create a market environment which will sustain the effort in the long term
- Need to promote private sector involvement in these initiatives / so far mainly led by utilities.
- Stronger need to promote standards of the equipment being promoted















## EELA – addressing barriers on the regional level

Barriers at regional level	Planned interventions
ad hoc versus systematic approach	<ul> <li>✓ Design and implement EE measures through harmonized policies, strategies and regulations</li> <li>✓ Enforce DSM to alleviate the supply constraints faced by the utilities</li> </ul>
Absence of regionally agreed MEPs	✓ Harmonize MEPS regionally
Challenges with enforcement capacity	✓ Strengthen capacity of policy makers and other stakeholders as well as institutions
Lack of motivation to invest in the	✓ Develop and adopt EE standards
sector as standards are not enforced	✓ Enhance testing capacities of the local testing facilities and enhance their collaboration to share the testing facilities
No common policy framework for EELA	✓ Develop, adopt and harmonize standards, regulations and policies at regional level















# EELA – addressing barriers on the NATIONAL level

Barriers at national level	Proposed interventions
Small country focused markets	✓ Create market volumes through regional approaches
	and existing treaties/protocols to attract investments in
	manufacturing, assembly etc.
Challenges on border control	✓ Reinforce common approach to adoption of regulations,
and leakage	standards and MVE
Lack of capacity to develop and	✓ Develop MEPs and adopt standards at regional level
implement regulations such as	through technical committees
MEPs	✓ Harmonize the regulations and standards
	✓ Share practices in regulations and standards
Lack of service providers with	✓ Regional Results Based Funding (RBF)-agreements for
viable business models that can	early starters developing required services through
deliver efficient energy services	viable and sustainable business models













## The project will be implemented in 2 phases:

- 1) 6 months preparatory phase: EELA-PREP
  - **Started in August 2018**
- 2) 5 years implementation phase: EELA















## EELA preparatory phase – 4 outputs

# Output 1: Project execution modalities defined and validated

- Project partner planning meeting
- ToRs for project personnel, PCU, PSC and Execution Partners
- Identification of national focal points
- Regional consultation meeting/validation workshop
- M&E framework for the project
- Gender Assessment/Study

## **Output 2: Market Study on EE lighting conducted**

- Analysis of existing regulations
- Mapping of relevant national and regional initiatives
- Mapping of existing Test-Laboratories

- Output 3: EE lighting standards assessed
- EE lighting standards inventory
- Technical committees of standard bodies in EAC and SADC established
- First technical committee meetings
- Framework for development of standards
- Output 4: Partnership framework and Communication Plan developed
- Communication and Capacity building Plan
- Partnership framework















#### **EELA Implementation Phase - Envisaged project outcomes**

Outcome 1 - Regional mechanism and platform established to coordinate actions on market transformation of EE lighting and appliances including the support of national Code of Conduct Programs and the exchange among the Member States.

Outcome 2 - 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 change impact and gender responsiveness.

Outcome 3 - Capacities of key market enablers, and players in the EELA market are strengthened including testing capacities.

Outcome 4 - Awareness among market players and policy makers on energy efficient lighting and appliances is enhanced.

Outcome 5 - Incentive mechanisms to encourage the uptake of EELA based projects in SADC and EAC established.



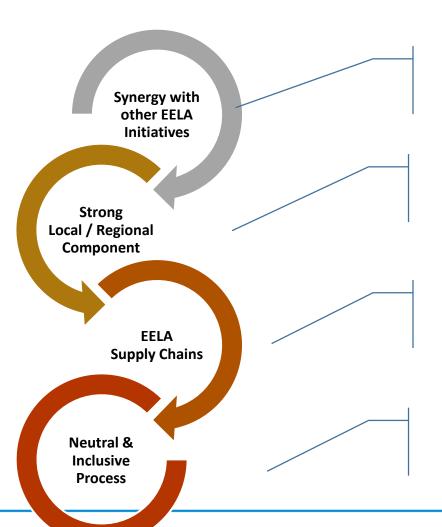








## Partnerships Platform



Liaise with other regional initiatives tackling EELA to ensure synergy with regards to local planning policies, local and national support programmes, regulatory framework and tariff structures

Based on market analysis, design partnerships to provide support services to regional and local product manufacturers, importers, and distributors

Following market studies, define which market players are currently missing for a successful market transformation, and develop regional strategy to attract the right companies to support local and regional businesses

Guarantee neutrality in standards setting to secure trust in the process, and ensure that the Partnerships Platform does not only engage the classic pioneer private sector entities





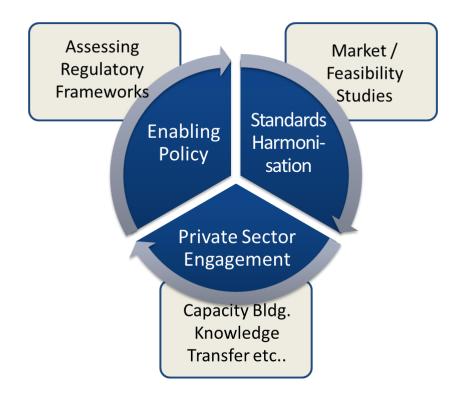








# Following an Integrated Approach to allow Market Transformation

















#### Project partners and regional stakeholders

EELA is developed by UNIDO and is presented to the **Swedish International Development Cooperation Agency** (Sida) for funding

#### **Project partners**

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

#### Regional stakeholders

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















# Thank you!

Contact

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