

Energy Efficient lighting and appliances market in East and Southern Africa

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ENERGY
EFFICIENT
LIGHTING
AND APPLIANCES
in East and Southern Africa

East and Southern Africa AT A GLANCE

21 Countries

450 Million
Inhabitants

Economies
CONTINUE TO GROW

US\$ 803.4 billion
Cumulative GDP in 2017

Very low

ELECTRIFICATION RATES

Averaging **60%**

As well as energy insecurity
due to low generation capacity

Poverty remains

PERSISTENT

**As impacts of climate
change intensify**

EELA OBJECTIVES & APPROACH

EELA seeks to develop vibrant markets for energy efficient lighting and appliances across 21 countries in East and Southern Africa.



The EELA approach to change



Market incentives for the private sector to deliver efficient and high-quality energy services



Minimum Energy Performance Standards (MEPS) for appliances which are harmonized in the region



Capacity building on policy and regulatory framework development, appliances testing and regulatory enforcement



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



Implemented by UNIDO in collaboration with regional regional sustainable energy centres

Funded by the Government of Sweden



EELA Interventions Towards

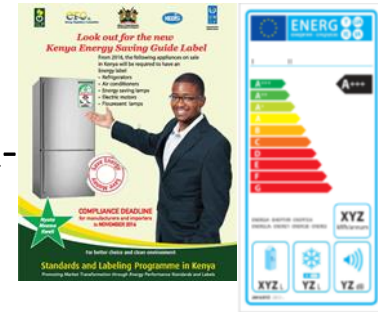
- Development on MEPS for various appliances (GSL, Cooling appliances etc.)
- Development of a Monitoring, Verification and Evaluation (MV&E) Framework
- Development of a private sector intervention strategy
- Capacity building , awareness raising and private sector support actions
- Supporting development of National EE programmes
- Stakeholder engagement to raise awareness of the project and identify focal points
- Environmental Management actions
- Development of Regional EAC Energy Efficiency Policy

Barriers Hindering Market Transformation

- Import oriented markets with no common policy framework for energy efficient lighting and appliances – absence of MEPS in most countries
- Significant barriers still exist around awareness, access to finance and skills
- Ad hoc versus systematic approach – need for transformation
- Lack of capacity to develop and implement regulations such as MEPS
- Challenges with enforcement capacity including local testing facilities
- Challenges on border control and leakage
- Lack of motivation for the private sector to invest as standards are not enforced - Small country focused markets
- Lack of service providers with viable business models that can deliver efficient energy services

Benefits of Transforming to EE product Markets

- Household savings - reduce household energy bills
- Grid reliability – reduce electricity shortages (brown-outs / black-outs); reduces peak power demand
- Save national investment – reduce capital and loans tied up in power stations and grid upgrades; slows new demand growth
- Market protection - avoid becoming dumping-ground for technologies banned elsewhere
- Energy imports – reduce capital out-flow for fuel purchases / electricity imports; strengthen national energy security
- Climate change



Why anchoring on private sector

- Opportunity to leverage private sector technical skills and finance
- Free up resources of central/local governments and state utilities for other priority areas
- Take advantage of advances in business models
- More sustainable in the medium to long term than government or donor funded handouts of EE appliances
- Help overcome challenges related to accessing EE appliances including
 - High upfront cost of appliances
 - Lack of affordable funding for EE projects
 - Limited technical skills for designing, implementing, operating and maintaining EE appliance projects

Private sector led initiatives key to ensuring sustainable access to energy efficient appliances and services

Example of Target Projects



→ Municipality

- LED Street Lighting,
- EE in public buildings

→ Manufacturing

- Economic growth through industrialization being promoted
- The outdated stock of appliances and equipment in most countries offers opportunities for energy service providers
- Energy deficits, particularly in SADC, is forcing many industries to depend on expensive fossil fuel powered back-up generators

→ Agriculture is a key sector in most of the countries

- High levels of inefficiency from production, processing, transportation and storage
- High post harvest losses leading to food insecurity, high poverty levels, malnutrition, food wastage
- Significant opportunities for private sector involvement in both on-grid and off-grid agriculture value chain activities

→ Commercial sectors include

- Hospitality – cold chain management, lighting, heating
- Retail – cold chain management, lighting
- Office buildings – lighting, cooling

EELA Technical assistance and Co-financing Facility

- Private Sector Support Facility will assist both the energy service providers and their potential clients. The scheme has three windows:
- **First Window: Technical Assistance for the design of Energy Service business Models**
 - The Facility will identify, and support municipalities, industries and other large energy users that would be interested in collaborating with energy service providers in addressing energy efficiency barriers through appropriate energy service business models.
 - The EELA project will support the design of the right energy efficiency service business models and in engaging relevant energy service providers.

A standing Call for EoI on the UNIDO, EACREEE and SACREEE websites and applications will be screened and processed on an on-going basis

EELA Technical assistance and Co-financing Facility (Cont...)

→ **Second Window: Co-financing Window**

- The Window will partially cover the upfront costs of EE equipment
- Energy services providers who would have entered an energy service provision arrangement with a client are eligible to apply for support from this financial support window.
- The financial support will target reducing the upfront cost of investing in energy efficient equipment. The EELA project will provide partial grant funding to successful applicants who would be required to provide co-financing.
- The initially targeted projects include those focusing on lighting, cooling, and appliances for the productive sector.

→ **Third Window: Technology transition support for manufacturers**

- This will target manufacturers of energy appliances in a SADC or EAC member state requiring upgrading of their production to meet the newly adopted regional MEPS for lighting and cooling appliances are eligible to apply for this technical assistance support.

TA and Co-Financing Facility Summary

	Window 1	Window 2	Window 3
Applicants	Energy users	Energy service providers	Manufacturers
Support offered	Technical assistance to design an Energy Efficiency project applying an energy service business model	Non- repayable grant to cover upfront costs for equipment Max. 200,000 EUR	Non- repayable grant to support technology upgrade Max. 100,000 EUR
Required own contribution	Demonstrated commitment to implement the project	Signed contract with a client. At least 25% demonstrated co-financing	Demonstrated need for upgrade of manufacturing At least 25% demonstrated co-financing

Target Business Models

- Energy providers assisted to deploy business models that will enable increased access to energy efficient lighting, appliances and services including the following models: -
 - Energy efficient appliance/equipment leasing
 - Energy Performance Contracts/Energy Service Contracts
 - Lighting as a Service
 - Cooling as a Service
 - Tailor made energy efficient lighting and appliance business models
- Energy service providers capacitated to develop track record, visibility and credibility
- Energy users assisted to overcome barriers towards accessing energy efficient lighting, appliances and services through TA support
- Opportunity to partner with experienced, local, regional and international energy service providers
- At least five projects to be supported in the first year of the project

Available Funding and required Co-financing

- The maximum amount available under the of Co-financing and the Technology Transition support Windows is 200.000 euros and 100.000 euros per project respectively.
- The provided EELA funding shall not exceed 75% of the total project costs
- The level of the applicants' own contribution is a factor that will be used in evaluating projects
- In kind contribution cannot be used in determining project promoters' contribution
- Applicants cannot access funding from the same Window more than once
- The following activities and products can be funded under the project: -
 - Procurement of energy efficient lighting and appliances to be used in implementing energy efficiency projects
 - Procurement of other hardware and software relevant for the implementation of the project
- EELA funding cannot be applied towards working capital finance
- Under the Co-financing and Technology Transition Window EELA funding cannot be applied towards project preparation costs



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THANK YOU

