

Opportunities for the private sector in the EE lighting and appliances (EELA) market in East and Southern Africa

Fungai Alphonse Matura – Private Sector Specialist - EELA Project



EE Appliances – Market Situation

- Great diversity in the markets for EE appliances in the 21 EAC & SADC countries however in general:-
 - Influx of non-EE appliances due to lack of policies promoting EE appliances, non-enforcement of existing policies and porous borders
 - Inefficient equipment use in industry, commerce and household sectors is the norm in most countries
 - Push by both EAC and SADC for countries to adopt low carbon emission industrialization strategies
 - Growing list of countries adopting EE policies and regulations and putting in place institutional framework to support and enforce
 - Government, development partners and private sector led initiatives creating both demand and supply of EE appliances and services
 - Markets for EE appliances and services emerging in some countries on the back of government, development partner and commercial/private sector initiatives
 - Significant barriers still exist primarily around awareness, access to finance and skills

Market Players

Government/dev. partners

- Political buy in
- Policy formulation (creation of a conducive environment)
- Enforcement
- Financing – concessionary funding/grants/blended finance
- Capacity development and awareness raising

Energy Suppliers

- Project development and execution
- Financing (Energy Service Providers and FIs providing commercial and blended finance)
- Awareness raising
- Lobbying

Energy users

- Demand generation
- Compliance – adopted policies and terms of energy services agreements

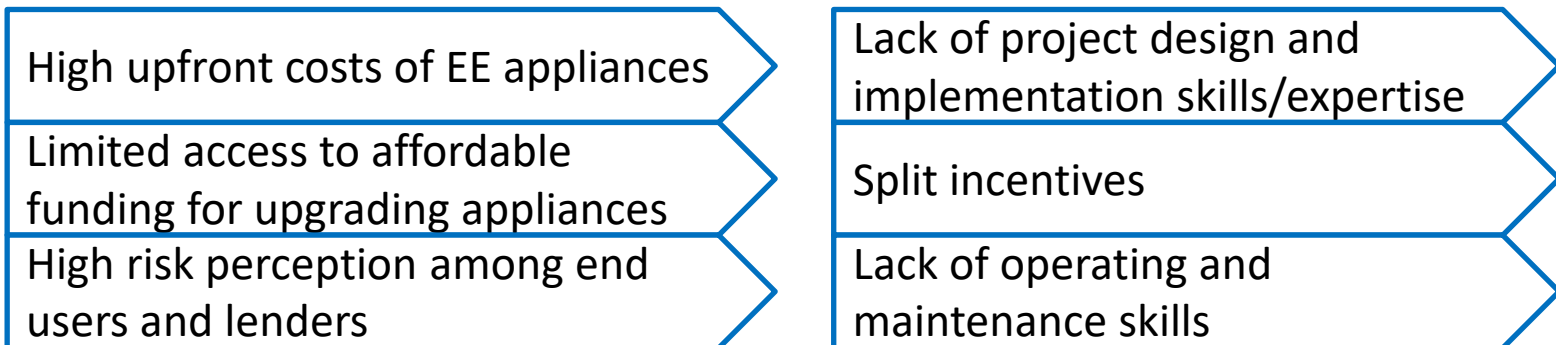
Why anchoring on private sector

- 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

Rationale for promoting Energy Service Business Models

- Different models promoted by ESCOs offering EPC, Lighting as a Service, EE equipment leasing, Cooling as a Service services in place
- Through these models, energy service providers can design and implement energy efficiency appliance projects and mobilize financing.
- Help address barriers to accessing energy efficient appliances and services including



- Models highly flexible and can be adapted to fit client needs

Opportunities in EAC & SADC

- Government/utility led initiatives targeting high intensity energy users and households including
 - Municipality energy efficiency,
 - Building Energy Efficiency,
 - Industrial Energy Efficiency,
 - Residential Energy Efficiency
- Development partner led initiatives like the Rwanda Cooling initiative introducing models targeting specific market segments like CaaS
- Full service and boutique ESCOs offering energy services on commercial or semi commercial terms – even in the absence of clear policy/regulatory environment – targeting sectors like
 - Hospitality sector,
 - Agriculture sector
 - Retail sector
 - Industry
- Regional and local development financial institutions funded programs

EELA Opportunities - Municipalities



- Several countries in the two regions are promoting municipality EE projects targeting
 - LED Street Lighting,
 - EE in public buildings
- These initiatives are funded/subsidized either by governments or development partners - reducing the risk of failure to pay for energy services by the municipality
- Backing allows energy service providers to source co-finance from commercial sources
- Private sector can offer covered appliances and services with the aid of technical and financial support from the government entity/development partner
- Offers private sector opportunity to develop track record, visibility and credibility
- Potential to develop project pipeline beyond municipalities
- Private sector has the flexibility to utilize different business models including EPC, LaaS
- Opportunity to partner with experienced, local, regional and international energy service providers
- Allows countries to develop supportive ecosystem including – training, financing, accreditation, awareness raising, establishment of ESCO associations

EELA Opportunities - Industries

- Both EAC and SADC are promoting economic growth through industrialization
- 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
- Countries are also increasingly moving towards the adoption of cost reflective tariffs
- Many countries have embarked on government/development partner funded energy audits in partnership with associations representing highly intensive energy users and manufacturers – databases of commercially viable EE projects exist and energy service providers can tap into these.
- Given the diverse economic landscape in the countries it might not be possible to identify specific sectors with high potential however a starting point would be to engage respective representatives of energy users
- In some countries concessionary funding from governments, DFIs and development partners exist
- Energy service providers can deploy different business models

EELA Opportunities - Agriculture



- 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
- Potential areas include
 - Supportive cold chains in the dairy, fisheries, meat processing, horticulture and related sectors
 - Agro-processing including milling
 - Irrigation
- Most end-users are small scale energy users that do not need to own the appliance providing the energy service but can access service through district cooling/lighting business models
- EE equipment leasing type business models can also be applicable in the sector
- Need to develop standard templates and bulking of projects to reduce costs and increase project viability
- Bringing on board produce off-takers to reduce risk and increase ability to pay

EELA Opportunities - Commercial Sector

- Full service and boutique ESCOs are offering energy services on commercial or semi commercial terms to the sector
- This is taking place even in the absence of clear policy/regulatory environment
- Targeted sectors include
 - Hospitality – cold chain management, lighting, heating
 - Retail – cold chain management, lighting
 - Office buildings – lighting, cooling
- Energy service providers can offer services with or without ties to international energy service providers
- In addition to cost savings some players in the commercial sector implement EE projects to enhance their market appeal amongst environmentally conscious clientele
- Many players in the hospitality and retail sectors are familiar with equipment leases as many tend to lease the appliances and equipment, they use
- Energy service providers can introduce additional business models like EPC, CaaS and LaaS to the sector

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 increase awareness for households, businesses and public facilities across East and Southern Africa. EELA stimulates local manufacturing and private sector investments.

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



A coordinated regional effort through RECS and regional sustainable energy centres



Implemented by UNIDO with financial support from the government of Sweden



EELA OBJECTIVE

The Energy Efficient Lighting and Appliances (EELA) project seeks to stimulate vibrant markets for energy efficient appliances and equipment in EAC and SADC Member States.

Focus on private sector led energy service business models



Leasing Models

Energy Procurement Contracting

Lighting/Cooling/Heating as a Service

Way Forward - EELA Technical assistance and Co-financing Facility

- Call for EoI will be launched soon
- To support market participants, EELA will put in place an EELA Private Sector Support Facility that 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 will be published on the 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

- Co-financing will be provided to 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 energy service business models focusing on lighting, cooling, and appliances for the productive sector.

→ Third Window: Technology transition support for manufacturer

- This will target manufacturers of energy efficient 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.

In Conclusion.....

- Many challenges
 - Poor infrastructure
 - Weak institutions
 - Policy/regulatory
- Opportunities for EE appliances and services exist across all sectors
 - Municipal – service delivery – rural urban migration
 - Agriculture – wastages/inefficiencies – food poverty – climate change
 - Industrial – antiquated equipment – push for value addition/industrialization
 - Commercial – cost reduction
- Business models – adaptation - simple – communication – MNOs/M. money – big data – AI
- A2F – green loan targets – project structuring
- Private sector? – flexibility/agility – experience from other sectors – ability/willingness to take risk
- Support – governments – development partners – EELA/Sida/Unido/EACREEE/SACREEE



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

THANK YOU

CONTACT UNIDO

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

EACREEE

Mr. Fungai Matura, email: info@eacreee.org

Mr. Denis Ariho, email: info@eacreee.org

SACREEE

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

For further information, visit:

www.eacreee.org | www.sacreee.org | www.unido.org

