

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION



EDERGY EFFICIENCY FOR SUSTAINABLE LIVELIHOODS IN AFRICA

Accelerating Investments, Promoting Innovative Business Models and Strengthening Technology Cooperation











Key Program Details

The Energy Efficiency for Sustainable Livelihoods in Africa (EELA) Program is funded by the Government of Sweden through the Swedish International Development Cooperation Agency (Sida) and implemented by the United Nations Industrial Development Organization (UNIDO) with regional and international partners. It aims to drive market transformation by promoting high-performing, affordable, and energy-efficient appliances, increasing industrial sector investments, and fostering sustainable local value chains for energy-efficient products and services in East, West and Southern Africa.











What is EELA?

The Energy Efficiency for Sustainable Livelihoods in Africa (EELA) Program seeks to promote inclusive and sustainable economic growth through integrated energy efficiency interventions. Building on its achievements since 2019, the EELA Program now includes regional interventions in the Economic Community of West African States (ECOWAS), the East African Community (EAC) and the Southern African Development Community (SADC) region through the EELA Regional Program. The Program has now been scaled up to include multiple EELA Country Windows such as EELA KENYA, EELA ZAMBIA and EELA ZIMBABWE.

Program Rationale

One-third of global greenhouse gas emissions originate from the industrial sector. More energy-efficient manufacturing practices, among other measures, are needed to drastically reduce industrial emissions and put the world on track to net zero. In Africa, access to modern energy-efficient technologies remains limited, and many industries rely on outdated, inefficient equipment that drives up energy costs, harms the environment, and undermines competitiveness. Simultaneously, markets are being supplied with low-quality, inefficient products and appliances -such as lighting, refrigerators, and air conditioners-that consume excessive energy. This not only increases household and business expenses but also exacerbates environmental challenges.

The Energy Efficiency for Sustainable Livelihoods in Africa (EELA) Program addresses these challenges in a holistic way through policy and regulatory interventions, capacity building and skills development and concrete technology demonstration with opportunities for business partnerships. EELA aims to achieve a market transformation towards high performing and efficient appliances and to boost energy efficiency and renewable energy investments in the industrial sector to enhance competitiveness of local industries while at the same time lower their carbon footprint. Well elaborated and proven UNIDO approaches will be applied for the introduction of Energy Management Systems and Energy System Optimizations. An EELA Industry Clean-Tech Platform Energy efficiency is one of the quickiest and most cost-effective pathways to accelerating sustainable development in Africa's growing regions.

> Karin Reiss-Haimbala EELA Program Manager, UNIDO

is being established in the partner countries to facilitate private sector investments for sustainable energy interventions in industries. The platform creates demand for low carbon technologies and solutions, facilitates technology transfer and access to financing through partnerships with the financial sector.

Additional financial streams are being explored through the Article 6 of the Paris Agreement, which allows countries to voluntarily cooperate with each other to achieve emission reduction targets set out in their NDCs.

EELA is a key Program under the UNIDO Africa Regional Strategy and contributes strongly to the African Union's (AU) Agenda 2063 as well as to the African Continental Free Trade Area (AfCFTA) Agreement.

Achieved Milestones

Since its inception in 2019, the EELA Project has successfully accomplished the following milestones:

Adoption of Six Regionally Harmonized MEPS for lighting and cooling across the SADC and EAC regions.

Adoption of Regional MEPS in 10 countries as national standards.

Two Regional Compliance Frameworks developed, one for SADC (2023) and another for EAC (2024).

Regional Energy Efficiency Policy for EAC developed and validated, providing a framework for coordinated energy efficiency efforts.

Supply Chain and Market Studies developed to better understand the markets for on-grid and off-grid lighting, refrigerating appliances, and productive-use appliances.

Public Procurement Guidelines developed, covering MEPS, recycling, and gender-responsive procurement processes.

E-Waste Guidelines developed to ensure the sustainable disposal and recycling of energy products.

Regional Energy Efficiency Labelling options developed to help consumers make informed purchasing decisions.

Two Capacity Building and Regional Coordination Platforms set up to support implementation of energy efficiency initiatives.

Appliance Testing and Monitoring strengthened through regional laboratories in Mozambique and Uganda.

Portable Equipment deployed in 21 countries and 102 staff trained.

Private Sector Engagement supported by connecting ESCOs with policymakers and financiers, securing energy service contracts in Kenya, Malawi, and Rwanda.

Raising Awareness and Advancing Knowledge through digital platforms, publications, global events, and a five-module E-Learning platform.

Technical Assistance and Co-Financing provided through EELA to support some of the first ESCO projects in the region.

EELA Impact at One Glance

480.000 tonnes of CO2 saved

10,827 reached

now with increased awareness of energy efficiency **160 M** lives impacted

through access to energy efficiency products

173 job created through access to energy efficiency products ENERGY and COST SAVINGS of CO2 saved

600,000 MWh

of energy saved

USD 59M saved in electricity cost

Continuing the Success Story

Upscaling EELA's Impact



The EELA project has been scaled up into a comprehensive Program, implementing regional interventions across the ECOWAS, SADC, and EAC regions, along with dedicated Country Windows for Kenya, Zambia, and Zimbabwe. With an ambition to expand further into new countries and regions in Africa from 2025 onwards, the Program aims to promote sustainable energy efficiency and economic growth, fostering long-term sustainable livelihoods.

EELA Regional Program

The EELA Regional Program aims to create the market and institutional conditions necessary for a sustainable and inclusive energy sector transformation. This involves enhancing regional policy harmonization and regulatory frameworks, building the capacities of key stakeholders, and supporting local energy efficiency markets through private sector development.

EELA Country Windows

The EELA Country Windows in Kenya, Zimbabwe, and Zambia are designed to accelerate the adoption of energy efficient appliances and promote low-carbon transformation in key industrial sectors in the respective countries, while also addressing e-waste management and capacity building. While all Country Windows share EELA's overarching mission of enhancing energy efficiency to improve sustainable livelihoods in Africa, each is uniquely tailored to address local challenges and prioritie2. Given the distinct energy demands, policy landscapes, and market conditions in each country, targeted interventions are essential.

Through the EELA Country Windows, EELA drives:

- Deployment of energy efficiency technologies suited for local markets
- Development of regulatory frameworks to support sustainable policies
- Strengthening of public-private partnerships to enhance investment and innovation
- Localization of energy efficient standards and best practices, boosting regional harmonization efforts

By overcoming barriers such as low awareness, limited technical expertise, and restricted access to finance, the EELA Country Windows help unlock economic opportunities, reduce poverty, and support long-term sustainable development across Africa.

EELA Industry Clean-Tech Platform (ICTP)

A one-stop-shop for advancing sustainable industrial innovation through energy efficiency solutions

All three Country Windows will pilot the EELA Industry Clean-Tech Platform (ICTP). The ICTP will be launched in multiple countries to facilitate private sector investments in sustainable energy solutions for industries. The platform will provide services to stimulate demand for low-carbon technologies and solutions, supporting technology transfer, demonstrations, and access to financing. The ICTP is designed to accelerate the adoption of low-carbon technologies and enhance energy efficiency in key industries. It serves as a central hub offering industries access to resources such as technology transfer, training, and financing to support the shift toward cleaner production methods. The platform addresses industry challenges in energy management, including outdated technologies, inefficient processes, and limited access to advanced clean technology solutions. By offering a comprehensive "one-stop-shop" for industrial energy needs, the ICTP aims to boost competitiveness, reduce greenhouse gas emissions, and promote sustainable economic growth. Its implementation in the pilot countries will establish replicable demonstration projects, driving a wider transformation toward cleaner and more resilient industrial sectors across Africa.

This following graphic illustrates how the Industrial Clean-Tech Platform operates to facilitate access to sustainable technologies and services:



Fig.1 - Framework of the Industry Clean-Tech Platform

How Does the EELA Program Support Livelihood in Africa?

Lowering Energy Costs – MEPS and labels reduce electricity bills, boosting affordability and competitiveness.

Job Creation & Business Growth – Industrial EE and Productive Use drive employment and economic opportunities.

Market Transformation & Sustainable Supply Chains EELA reduces costs, drives economic growth, fosters innovation, and strengthens sustainable energy supply chains.

Enhancing Energy Access & Reliability – Efficient appliances reduce grid strain, ensuring stable power for key sectors.

Reducing Energy Poverty – Sustainable energy access lowers household costs, boosts productivity, and supports livelihoods.

Reducing Pollution & E-Waste – Efficient appliances

cut emissions, improve air quality, use resources responsibly and minimize electronic waste.

Health Benefits – Cleaner energy reduces pollution, while efficient cooling ensures vaccine and medicine storage.

Improving Livelihoods – Energy-efficiency boosts productivity, reduces food losses, and stabilizes income.

Enhancing Food Security – Efficient equipment preserves food supplies and increases farmers' incomes.

Empowering Women – Gender-responsive policies and affordable energy solutions create opportunities in the energy sector.

Strengthening Local Skills – Training, e-learning, and awareness initiatives equip stakeholders with energy efficiency expertise.

EELA Impact on SDGs





Contact Details

UNIDO, Energy and Climate Action Division

Ms. Karin Reiss-Haimbala EELA Program Manager Email: k.reiss@unido.org

Ms. Valeria Arroyave Cardozo *Coordination EELA Regional Windows* Email: v.arroyavecardozo@unido.org

Ms. Elin Karlsson, Mr. Alaeldin Mohamed Coordination EELA National Windows Email: e.karlsson@unido.org a.mohamed2@unido.org

For Further Information



Website



LinkedIn









