REGIONAL HARMONIZATION OF ENERGY-EFFICIENT AND CLIMATE-FRIENDLY COOLING IN EAST AND SOUTHERN AFRICA

PROJECT AT-A-GLANCE

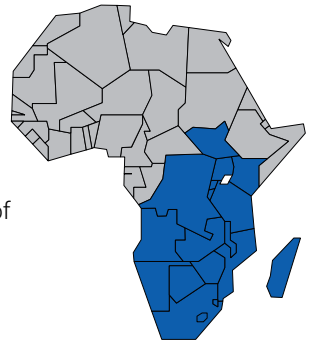
Harmonization of Minimum Energy Performance Standards (MEPS) for energy-efficient and climate-friendly room air conditioners and residential refrigerators

Supported by Clean Cooling COLLABORATIVE, gef, Department for Environment Food & Rural Affairs

GEOGRAPHICAL SCOPE

Regional project: 21 countries of East and Southern Africa

Republic of Angola, Republic of Botswana, Republic of Burundi, Union of the Comoros, Democratic Republic of Congo, Kingdom of Eswatini, Kingdom of Lesotho, Republic of Kenya, Republic of Madagascar, Republic of Malawi, Republic of Mauritius, Republic of Mozambique, Republic of Namibia, Republic of Rwanda, Republic of Seychelles, Republic of South Africa, Republic of South Sudan, Republic of Uganda, United Republic of Tanzania, Republic of Zambia and Republic of Zimbabwe.



For more information, please visit:
www.united4efficiency.org

TARGETED PRODUCTS

STATUS **ACTIVE**

STARTING DATE **Q2 2020**

CLOSING DATE **Q1 2022**

IMPLEMENTING ORGANIZATON

UNEP-U4E

FOCAL PERSON

Patrick Blake patrick.blake@un.org

IMPLEMENTING PARTNERS

EAST AFRICAN CENTRE OF EXCELLENCE FOR RENEWABLE ENERGY AND EFFICIENCY (EACREEE)

SADC CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (SACREEE)

EXPECTED KEY ACHIEVEMENTS

Based on U4E Country Saving Assessment data and experience of tackling current energy efficiency barriers, the potential reduction in electricity consumption, monetary savings, and GHG emissions mitigation as a result of a market transformation to energy efficient cooling appliances –compared with current values, with a Best MEPS Scenario– is very significant and by 2040 could achieve:

Annual Savings:

12 TWh on annual electricity savings (avoided investment costs for 5 power plants of 500MW)

$1.1 billion savings in annual electricity costs

9.2 million tonnes of CO_2 avoided annually (equivalent to more than 5 Million cars)

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THE CHALLENGE

Growing populations, urbanization and rising living standards in the regions of the East African Community (EAC) and Southern African Development Community (SADC) will drive increased demand for cooling services. If policies are not implemented, it is expected that the electricity consumption used for room air conditioners and residential refrigerators in 2040 will increase by 2.5 times compared to today in the regions. In most countries of the regions, inefficient air conditioners and refrigerators with a high global warming potential (GWP) are common. Therefore, an increase in the energy demand for these products comes hand- in-hand with a rise in CO_2 emissions and a large impact on the environment, and therefore action is needed.

EACREEE, SACREEE and the United Nations Environment Programme's (UNEP) United for Efficiency (U4E) initiative are therefore collaborating to adopt approaches that provide the cooling needed without causing undue harm to the planet.

WHAT WE DO

EACREEE and SACREEE have partnered with UNEP's U4E initiative to develop harmonized MEPS and labelling for residential refrigerators and room air conditioners. Harmonizing policies at the wider regional level has a much larger impact than implementing different policies within the individual sub-regions. In this way, the project aims to create a leveraging effect through regional collaboration.

The overall programme goal is to accelerate the transition to climate-friendly (low-GWP refrigerant) and energy-efficient room air conditioners and residential refrigerators through:

- Analysis of the markets on cooling through a market assessment.
- Technical recommendations based on the market analysis, taking into account global trends on cooling.
- Engagement with Technical Committees of both regions to develop a tailored regulatory framework, including the development of procedures for the implementation at the national level.
- Development of harmonized MEPS and labels, as well as the provision of technical assistance for implementation.

UN ENVIRONMENT'S ROLE

Through their in-house experts and specialized partners, United for Efficiency provides developing and emerging economies with tailored technical support to transform their markets by accelerating the adoption of energy-efficient lighting, appliances, and equipment. Currently it is present in more than 30 countries worldwide. Based on each country's circumstances, United for Efficiency works with any of the following products: lighting, refrigerators, room air conditioners, motors and transformers - five products that together consume over half of the world's electricity.

By following United for Efficiency's Integrated Policy Approach and covering crucial elements from the transformational pathway, such as Standards and Regulations; Labelling and Communication strategies; Financial Mechanisms; Monitoring, Verification and Enforcement; and Environmental Sound Management, countries achieve a lasting market transformation, allowing monetary savings on their utility bills, helping businesses thrive through greater productivity, enabling utilities to meet growing demand for electricity, and assist governments in reaching their economic and environmental ambitions. Such support is available at three levels: Global, regional and national providing several tools and resources to support committed countries in their efforts, such as Policy Guides, multiple assessments (country level, street lighting, etc.), regional policy roadmaps and harmonization process recommendations, development of training for policymakers and practitioners and National action plan implementation support.