Showcasing good experiences in Africa

29 March 2021
10:20-10:50
Content

- Country Savings assessment
- Market transformation approach
- Regional projects in Africa
- Communications and Outreach
Cooling regulation overview

- Minimum Energy Performance Standards (MEPS)
- Financial Mechanism
- Product registration System
- Labelling System
- Awareness and capacity Building
- Recycling
- Energy Efficiency
- Environment Protection
Country Savings Assessments

Objective

Analysis on potential impact of Model Regulations for products that use >50% of electricity.

Gain commitment of important stakeholders to pursue energy-efficiency opportunities.

Savings of all **156** assessed countries by product

- Distribution Transformers
- Industrial Motors
- Room Air Conditioners
- Refrigerating Appliances
- Lighting

Updated in October 2020

Available in English, Spanish and French

Resource: https://united4efficiency.org/countries/country-assessments/
Electricity consumption growth by 2040

- Business As Usual Scenario (BAU): 121% 71%
- With Minimum Ambition Scenario (MEPS): 77% 20%
- With High Ambition Scenario (HEPS): 39% (32%)

Annual Savings in 2040*

- Electric Savings (TWh): 560 189
  - equivalent to:
    - Power Stations [500 MW]: 256 86
    - Millions of CO₂: 486 153
    - Billions of USD in electricity bills: 51 18

* Graph refers to the 156 developing countries and emerging economies that had been assessed for the U4E Country Saving Assessments.
High savings potential for Utilities

Positive financial impacts for EUCL (Rwanda)

- Cumulative loss of revenues due to decrease in electricity consumption (million USD)
- Cumulative new revenues due to management of the on-bill financing (million USD)
- Cumulative desinvestment in avoided new generation capacity (million USD)
<table>
<thead>
<tr>
<th>Regulation</th>
<th>Information</th>
<th>Incentives</th>
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<tbody>
<tr>
<td>MEPS</td>
<td>Labels + Awareness</td>
<td>Financial Mechanism</td>
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</table>

**Cooling Strategy approach**

- **Regulation**: MEPS
- **Information**: Labels + Awareness
- **Incentives**: Financial Mechanism
### MINIMUM ENERGY PERFORMANCE STANDARDS (MEPS)

- The role of MEPS of the National Cooling Strategy is to constrain inefficient energy consuming cooling equipment market growth and to accelerate Rwanda's Green Economy vision.

<table>
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<tr>
<th>Grade</th>
<th>Rated Cooling Capacity ≤ 4.5 kW</th>
<th>4.5 kW &lt; Rated Cooling Capacity ≤ 9.5 kW</th>
<th>9.5 kW &lt; Rated Cooling Capacity ≤ 16.0 kW</th>
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<tbody>
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<td>6.40 ≤ SEER</td>
<td>5.90 ≤ SEER</td>
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Financial Mechanism

- On-bill financing mechanism – payment through the energy utility bill
- Coolease: Leasing product for the commercial sector
Product Registration Systems

Objective

Tool for capturing key information on products to underpin policies or programmes:

- Provides a data resource
- Enables MV&E activities
- Facilitates the transformation of markets

U4E Work

- Development of an open-source software in a regional and national version
- Development of general information material
- Technical assistance to countries and regions
- Capacity building trainings
Ensuring Compliance with MEPS And Labels

Conformity Assessment (by producers):
- Establish protocols
- Test products
- Certify products or self-assess
- Declare performance
- Register products

Market Surveillance (by authorities):
- Monitor
- Screen
- Verify/Test

Enforcement (by authorities):
- Assess
- Enforce
- Deter

Guidance on Labelling, and Compliance

Energy Labelling Guidance for Lighting and Appliances

- **Theory and Characteristics of Energy Labels**
  - Energy labelling and market transformation
  - Types of energy labeling

- **Designing Energy Labels**
  - Step-by-step guidance to design energy labels
  - Placement of labels
  - Generating labels
  - Online labels
  - Raising awareness

- Excel-based labelling tools for refrigerating appliances and room air conditioners for release in Q1 2021 that help with setting the efficiency tiers

Resource: https://united4efficiency.org/resources/energy-labelling-guidance-for-lighting-and-appliances
Regional Project

**U4E Activities**

- Conduct **Regional Market Assessment**
- Engage with **Technical Committee (TC)** and organise TC meetings
- Develop **technical notes** on refrigerating appliances and ACs
- Develop **MEPS and Labels** draft standards
- Provide **technical assistance** on implementation by subset of countries

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Rwanda Project

Main components

- Conduct Market Assessment
- Draft a National Cooling Strategy and facilitate MEPS and Labels adoption
- Develop financial mechanisms - Coolease (commercial) and on-utility bill financing (residential)
- Develop and implement Communication Campaign
- Create a toolkit on Rwanda’s approach and provide capacity building in EAC

Recent achievements

- National Cooling Strategy adopted by Cabinet – implementation underway
- Financial mechanisms near-ready for implementation
- MEPS and Labels entry into force in 2021
- Communication Campaign developed and will be launched next month
National Project – Nigeria

Main components

- Conduct a **Market Assessment** with a focus on ACs
- Review and strengthen **MEPS** and **Labels** draft for adoption
- Develop and implement an **Awareness Campaign** to promote compliance with vendors and labels to consumers
- Inform the inclusion of cooling targets in the **NDC update**
- Draft a **Space Cooling chapter** for the National Cooling Action Plan
- Deliver **Capacity Building** on market monitoring, verification and enforcement
- Deliver **training** on installation and service for practitioners
Communications and Outreach

Main components

- Communications campaign development
- Content for different platforms
- More successful when led by a government agency
Existing Model Regulation Guidelines deployment

Objective

Guidance to help inform regulatory authorities and policy makers

Sets a minimum efficiency floor to prohibit future sales of inefficient products from the market.

Over 60 technical experts from around the world contributed data, analysis, expert reviews

References global technology and policy trends

Directly by U4E

- **National Projects**
  - MEPS & Labels: Rwanda, Dominican Republic, Pakistan, Chile
  - Financial Mechanisms: Ghana, Senegal, Rwanda, Costa Rica; SPP schemes in pilot countries in 2021

- **Regional Projects**
  - MEPS & Labels: ASEAN; East Africa; Southern Africa

- **Global**
  - MOP & COP
  - Cool Coalition Working Group on regional policy alignment
  - Webinars (English, Chinese, French, Spanish)
  - Twinning participants email blast; social media; press releases

By Partners

- LBNL, NRDC, CLASP, IIEC, Development Banks, Regional Centres, etc.
Thank you!
TRANSFORMING MARKETS TO ENERGY-EFFICIENT PRODUCTS

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