



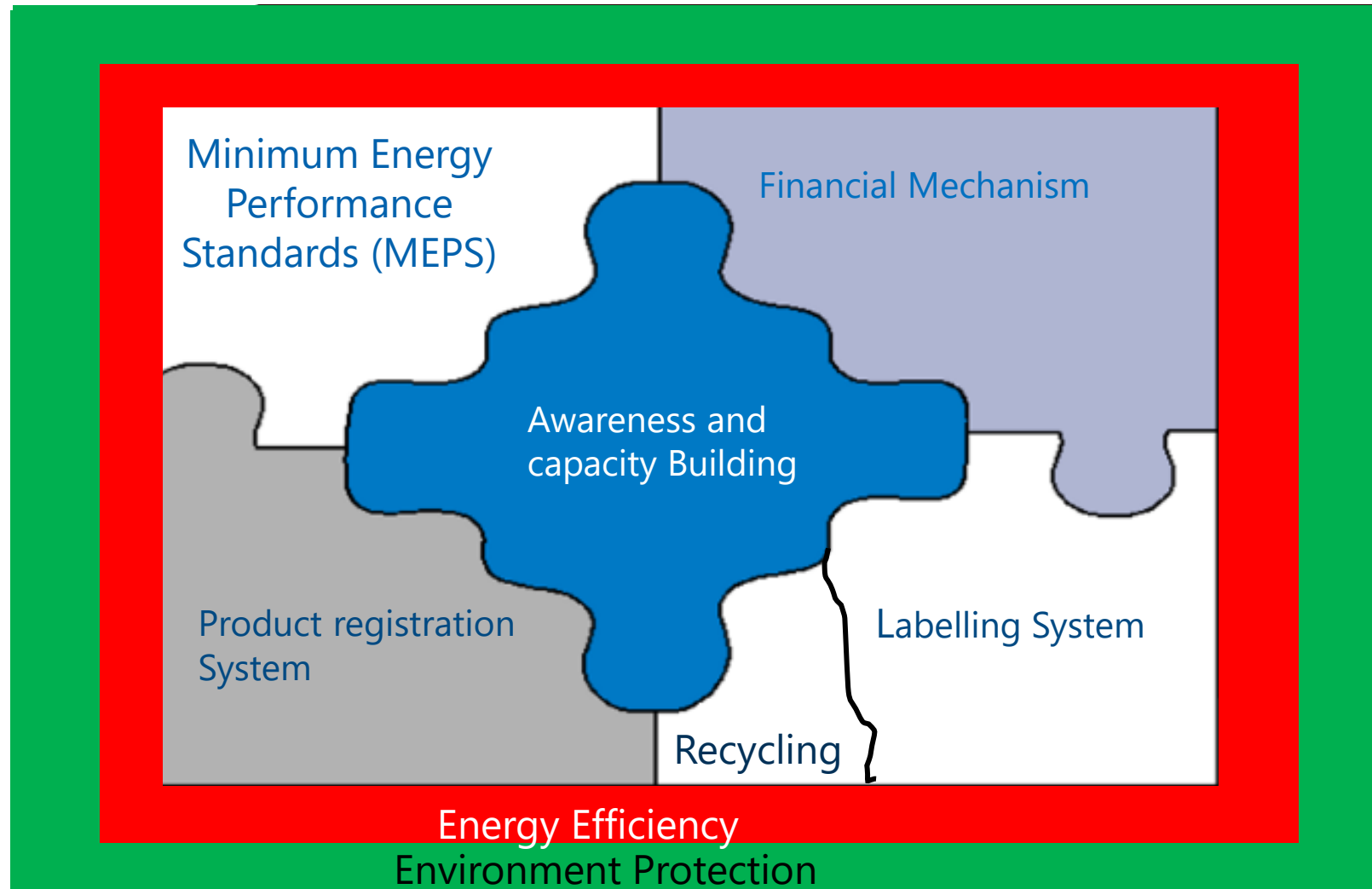
Showcasing good experiences in Africa

29 March 2021
10:20-10:50

CONTENT

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

Cooling regulation overview



Country Savings Assessments

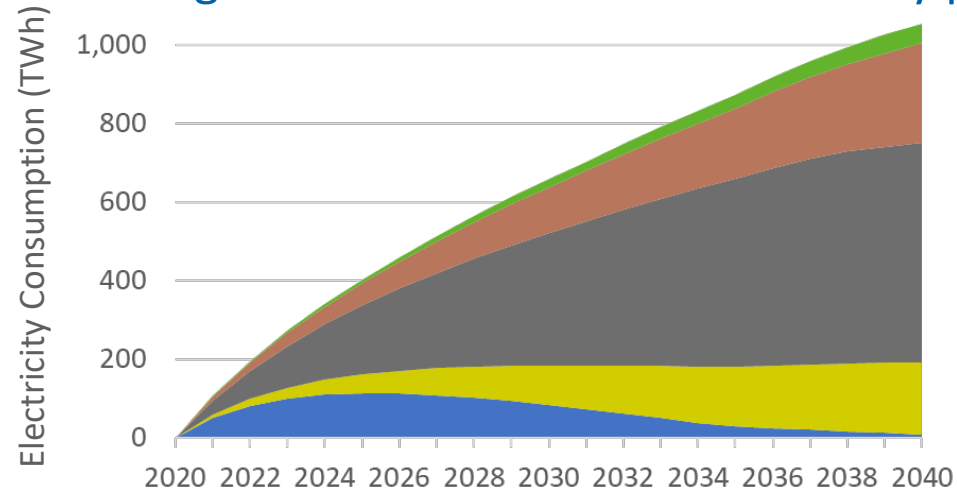






Objective

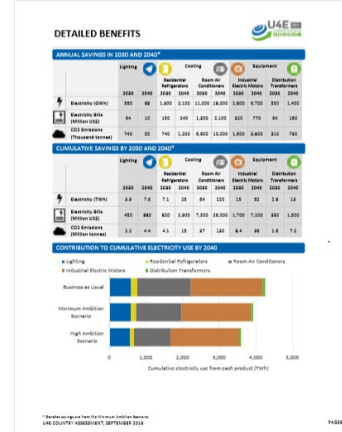
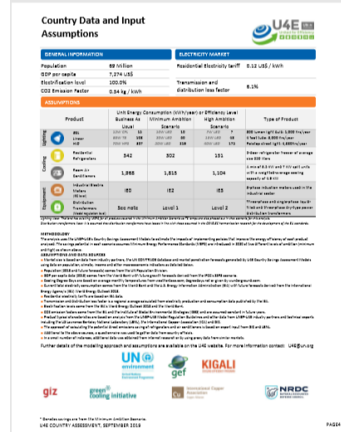
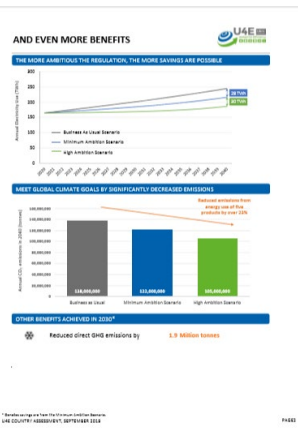
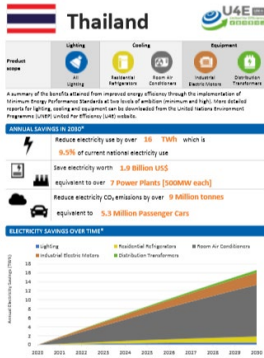
Analysis on potential impact of Model Regulations for products that use >50% of electricity.

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

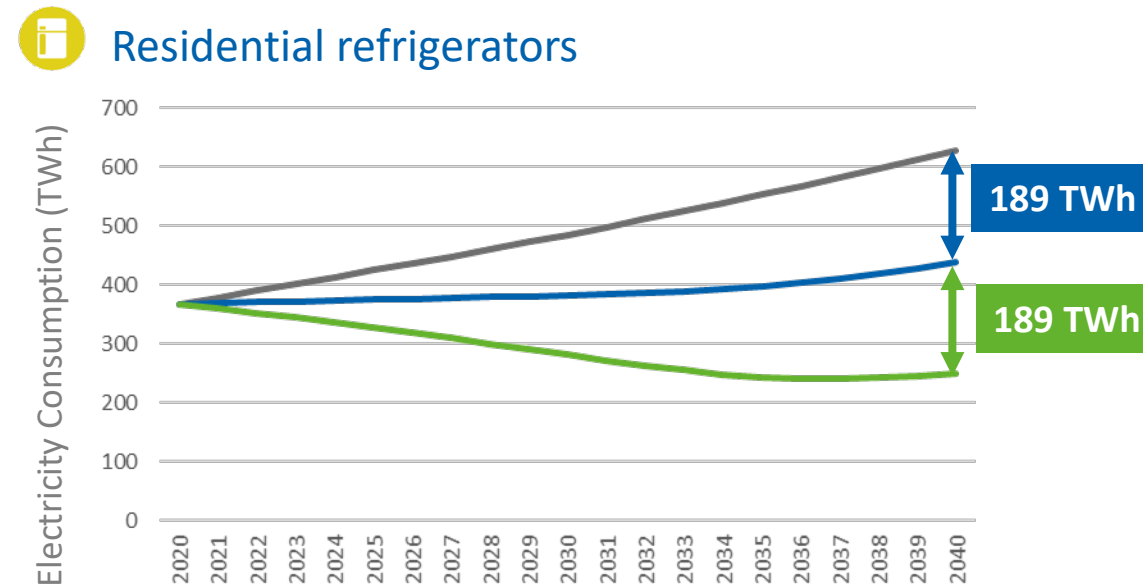
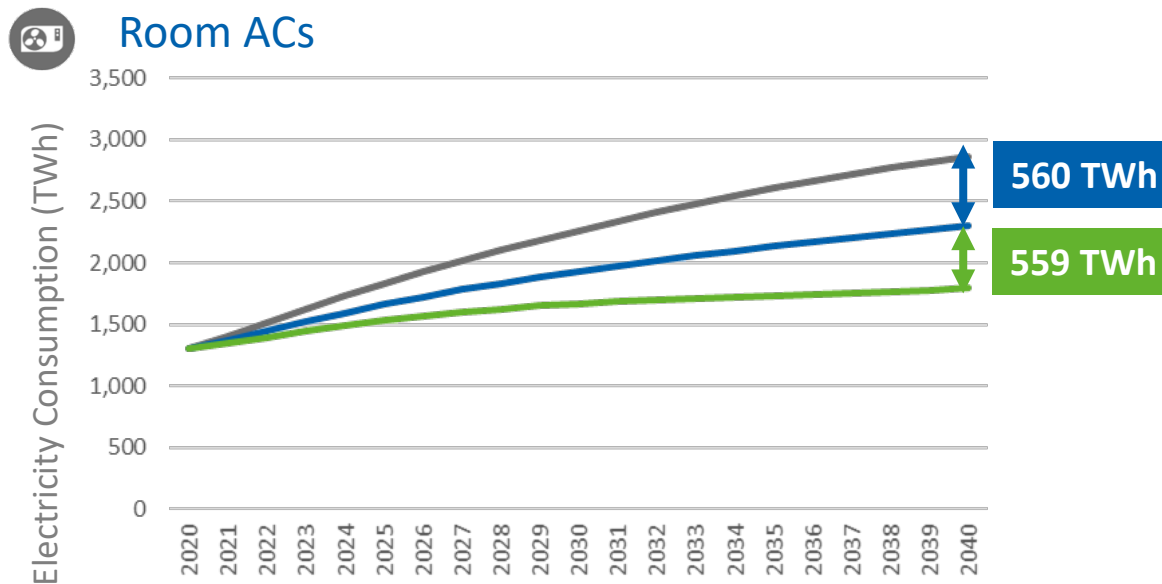


Updated in October 2020

Available in English, Spanish and French



Savings potential of room ACs and residential refrigerators by 2040*



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%)

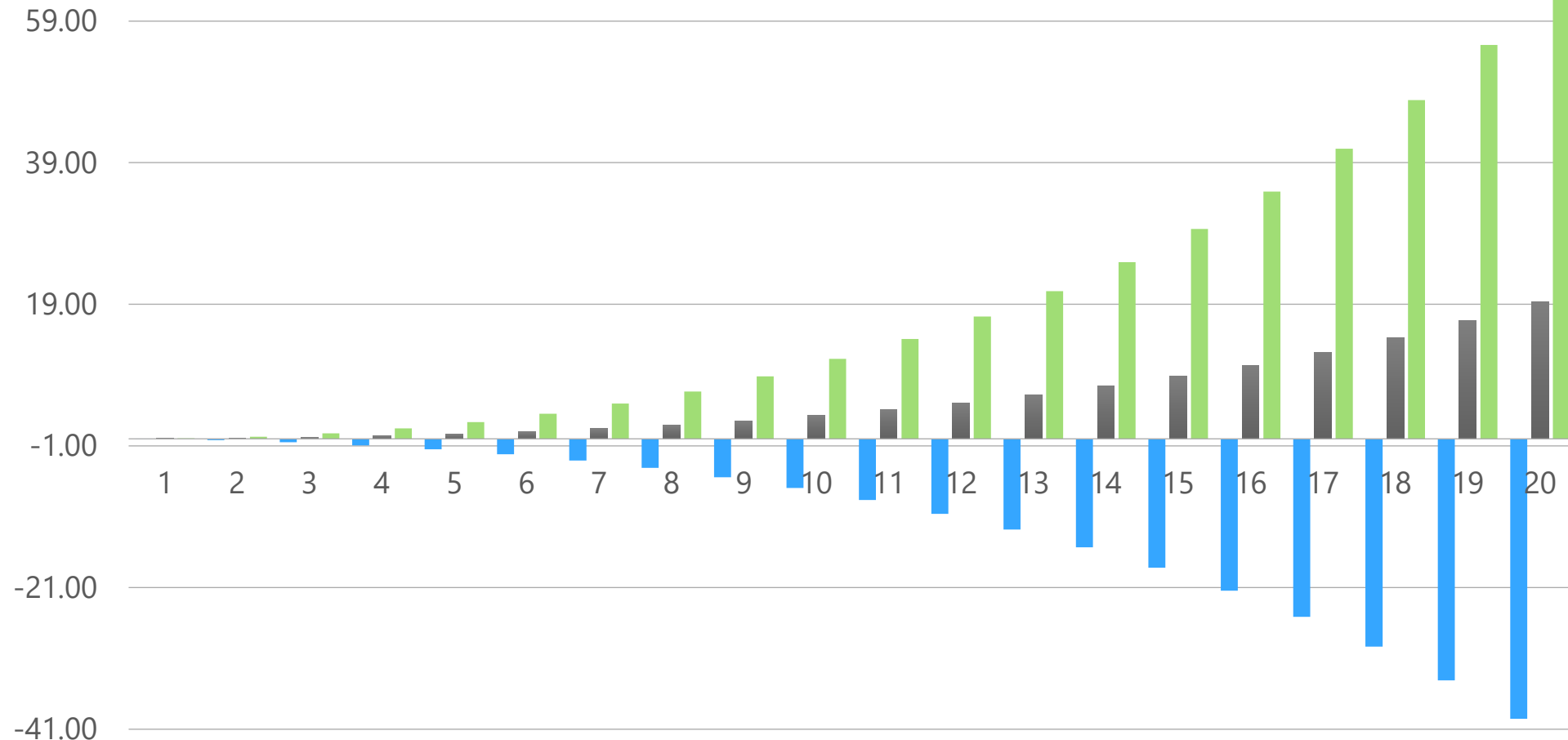
Annual Savings in 2040**		
Electricity Savings (TWh)	560	189
<i>equivalent to:</i>		
Power Stations [500 MW]	256	86
Millions of CO ₂	486	153
billions of USD in electricity bills	51	18

- Business As Usual Scenario
- Minimum Ambition Scenario
- High Ambition Scenario

* 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)

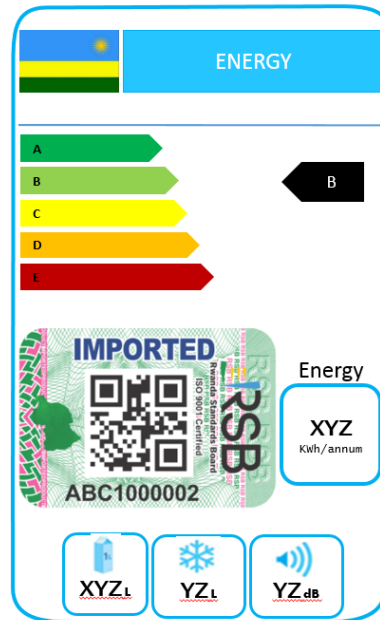
Regulation

MEPS



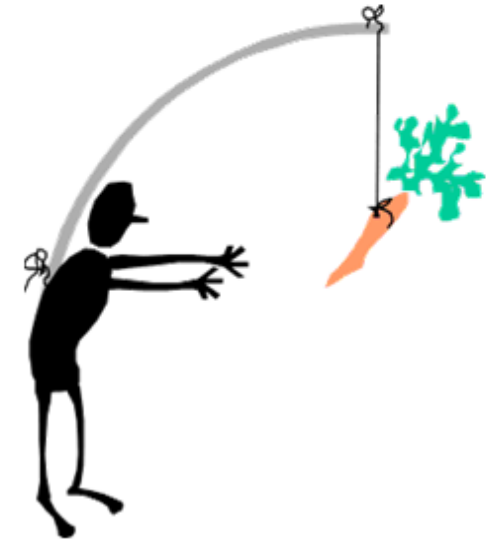
Information

Labels + Awareness



Incentives

Financial Mechanism



MINIMUM ENERGY PERFORMANCE STANDARDS (MEPS)

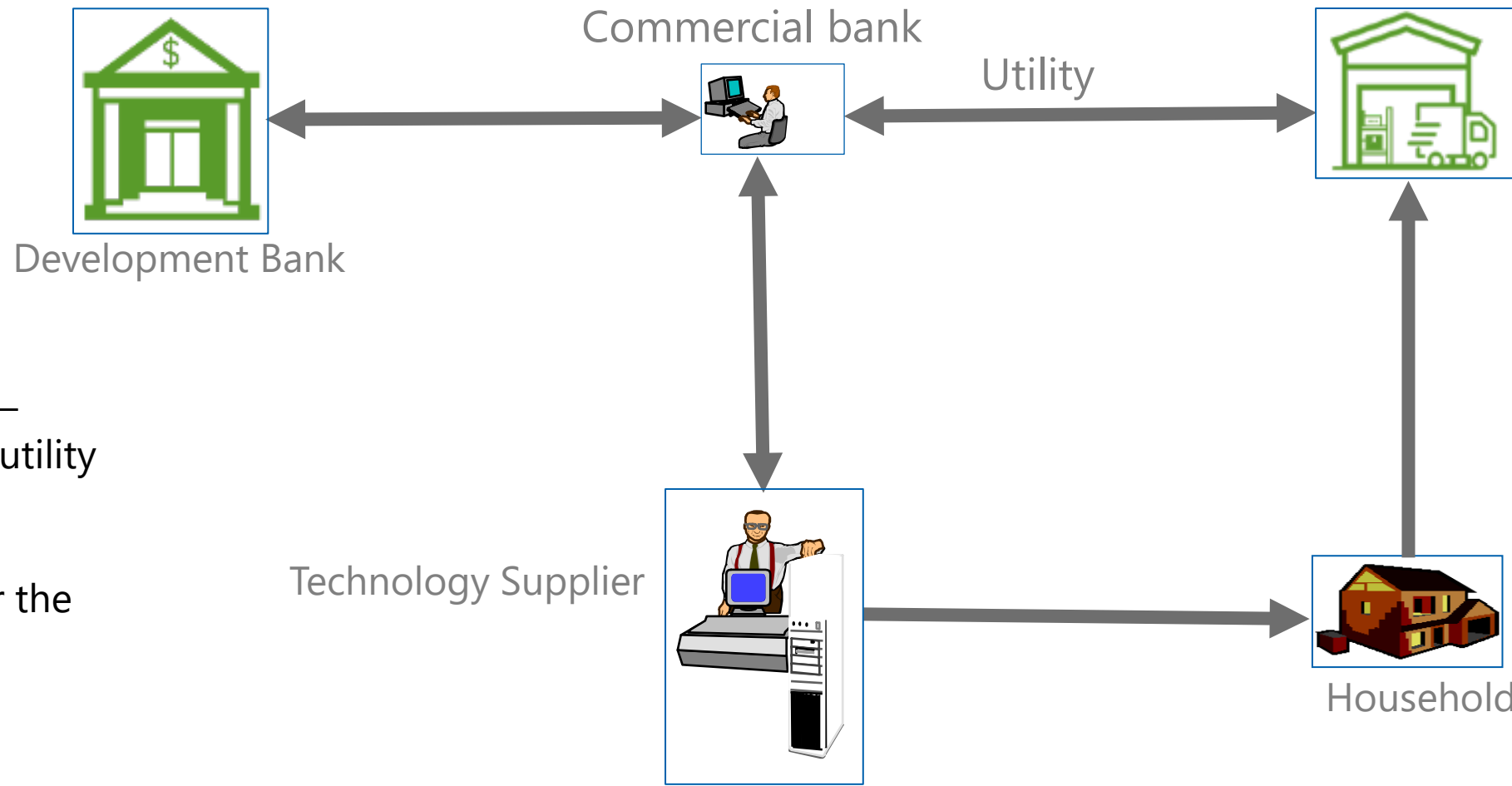
- The role of MEPS of the National Cooling Strategy is to constrain inefficient energy consuming cooling equipment market growth and to accelerate Rwanda's Green Economy vision.

ISO 16358-1

Grade		Rated Cooling Capacity ≤ 4.5 kW	4.5 kW < Rated Cooling Capacity ≤ 9.5 KW	9.5 kW < Rated Cooling Capacity ≤ 16.0 KW
A		6.90 ≤ SEER	6.40 ≤ SEER	5.90 ≤ SEER
B		6.33 ≤ SEER < 6.90	5.91 ≤ SEER < 6.40	5.36 ≤ SEER < 5.90
C		5.75 ≤ SEER < 6.33	5.38 ≤ SEER < 5.91	4.88 ≤ SEER < 5.36
D		5.18 ≤ SEER < 5.75	4.84 ≤ SEER < 5.38	4.39 ≤ SEER < 4.88
E	Variable (split)	4.60 ≤ SEER < 5.18	4.30 ≤ SEER < 4.84	3.90 ≤ SEER < 4.39
	Fixed (split)	3.80 ≤ SEER < 5.18	3.50 ≤ SEER < 4.84	3.20 ≤ SEER < 4.39
	Variable (unitary)	4.00 ≤ SEER < 5.18	4.00 ≤ SEER < 4.84	4.00 ≤ SEER < 4.39
E	Fixed (unitary)	3.50 ≤ SEER < 5.18	3.50 ≤ SEER < 4.84	3.50 ≤ SEER < 4.39
F				

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:

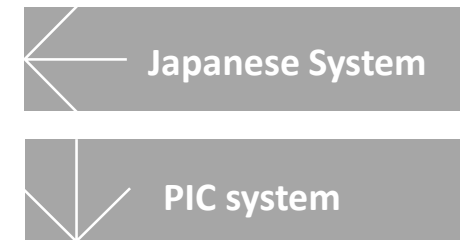
- Provides a data resource
- Enables MV&E activities
- Facilitates the transformation of markets

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



Example:



PAD Registrations

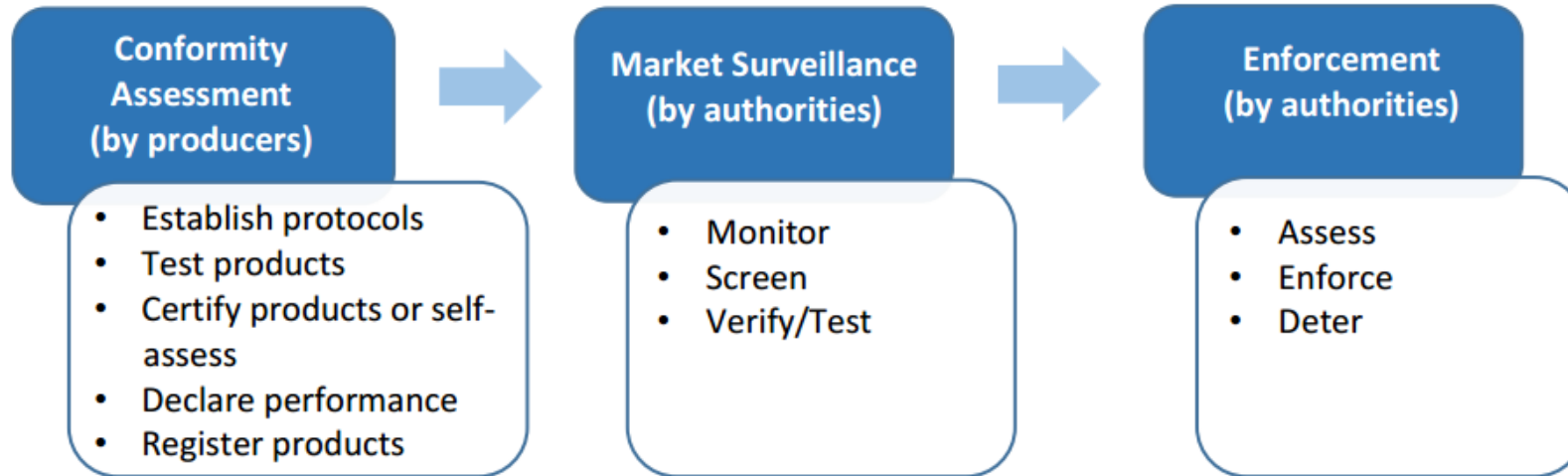
Record ID/Registration No	Brand	Model	Product Type	Jurisdiction
<input type="text"/>	<input type="text"/>	<input type="text"/>	Air-conditioners	- Any -

Registration No.	Product Type	Brand	Model No.	Standard	Status	Country	Record ID
WSM-AC-000006	Air-conditioners	FUJITSU	AOTG30LBTA4	AS/NZS 3823.1.4:2012	APPROVED	Samoa	WSM-PR-000185
WSM-AC-000007	Air-conditioners	FUJITSU	AOTG24LAT3	AS/NZS 3823.1.4:2012	APPROVED	Samoa	WSM-PR-000184
WSM-AC-000005	Air-conditioners	FUJITSU	ASTG12KMCA/AOTG12KMCA	AS/NZS 3823.1.1:2012	APPROVED	Samoa	WSM-PR-000174



Labelling and Compliance

Ensuring Compliance with MEPS And Labels

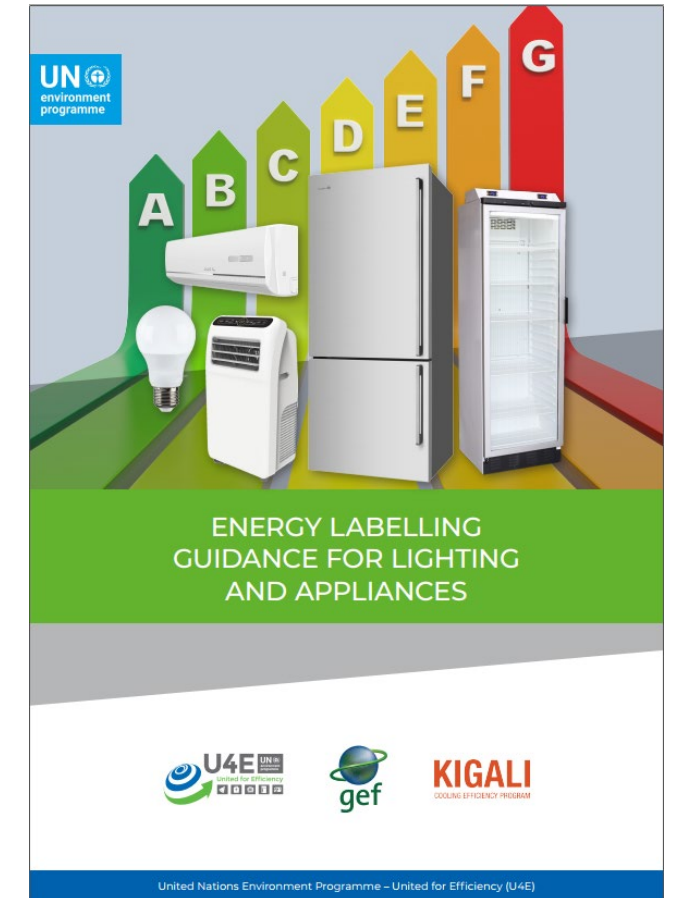


Resource: <https://united4efficiency.org/resources/ensuring-compliance-with-meps-and-energy-labels/>

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



Burundi, Kenya, Rwanda, South Sudan, Tanzania, Uganda, Angola, Botswana, Comoros, Dem. Rep of the Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Eswatini, Zambia, Zimbabwe

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 develop
- Content for different platforms
- More successful when led by a government agency



SAVE AS YOU COOL

Does your refrigerator help you save on electricity bill?
Do the math and upgrade to Energy saving cooling.

@REMA_Rwanda     
#SaveasUcool | #KonjeshuUzigama

Existing Model Regulation Guidelines deployment

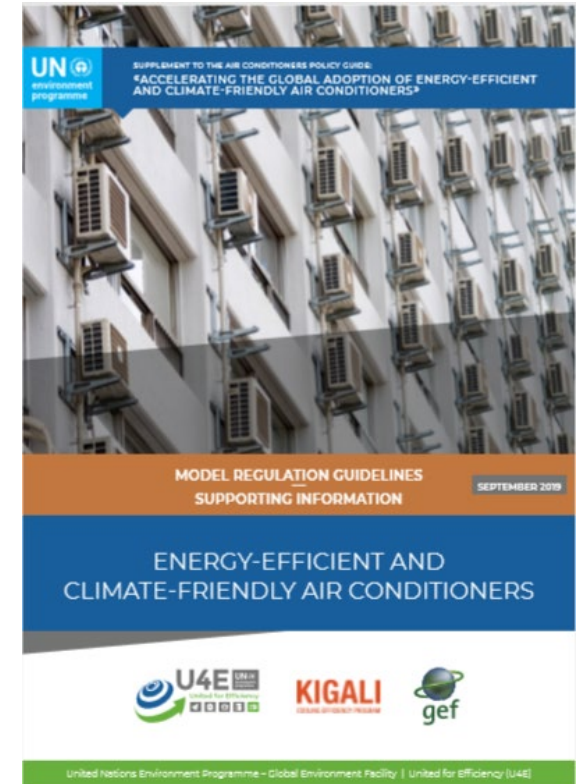
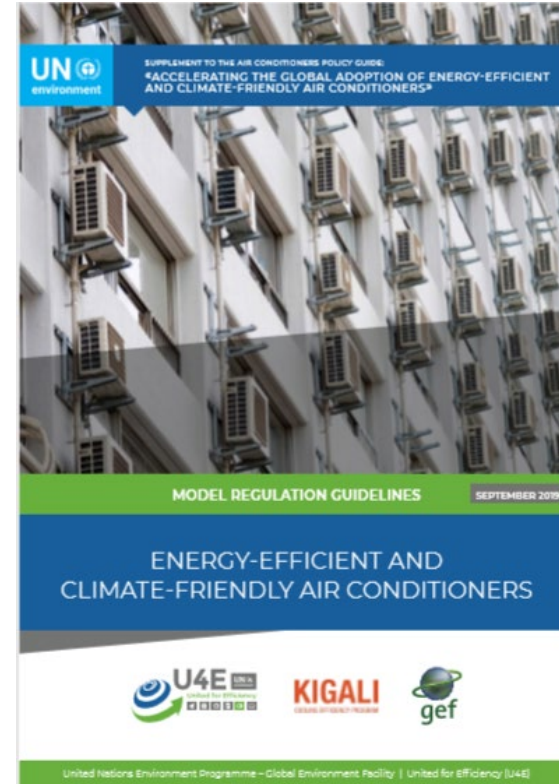
Objective

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



Resources: <https://united4efficiency.org/resources/model-regulation-guidelines-for-energy-efficient-and-climate-friendly-air-conditioners/>

<https://united4efficiency.org/resources/model-regulation-guidelines-for-energy-efficient-and-climate-friendly-refrigerating-appliances/>

Existing Model Regulation Guidelines deployment



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



PHONE

+33 1 44 37 19 86



EMAIL

u4e@unep.org



WEBSITE

united4efficiency.org