

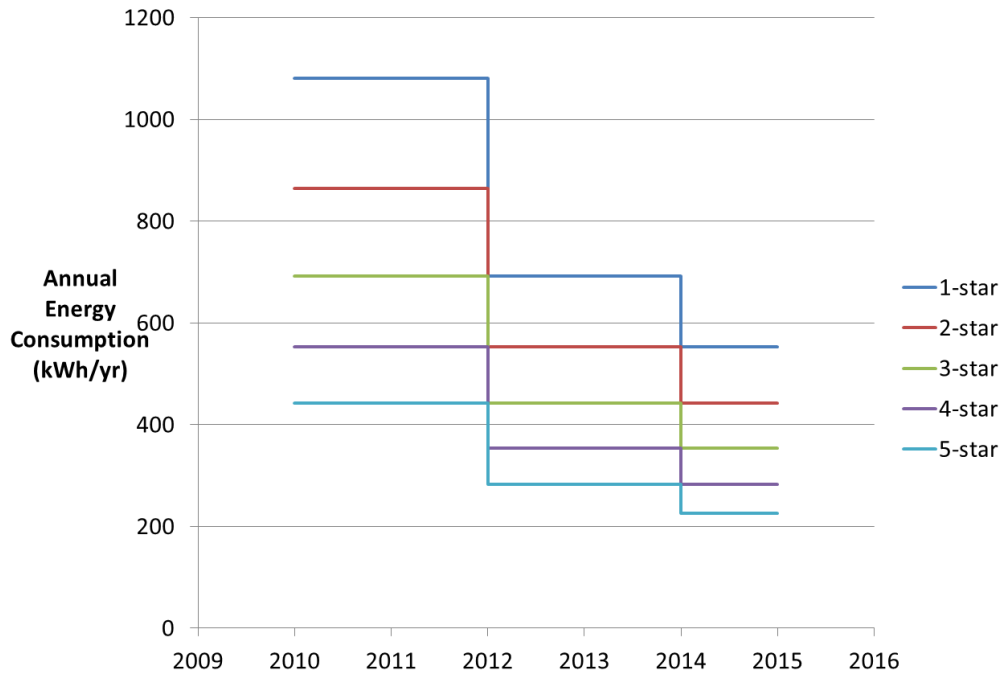
**Africa Climate Week 2021**  
**CTCN Regional Forum for NDEs**  
**Session: Enabling Environment and Collaboration  
and Outreach**

Case: Minimum Energy Performance Standards (MEPS) for Appliances

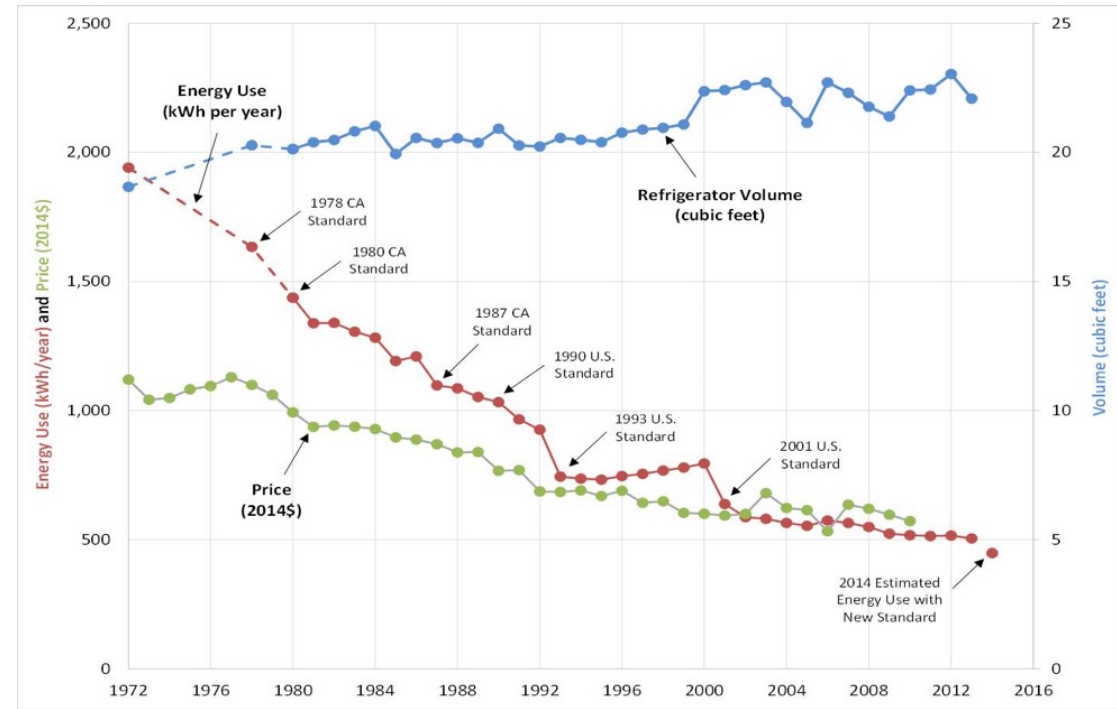
28 September 2021



## From MEPS recommendations to successful market transformation



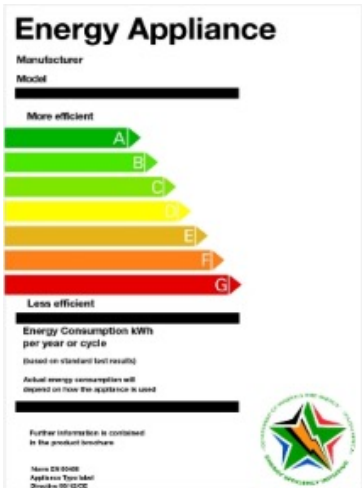
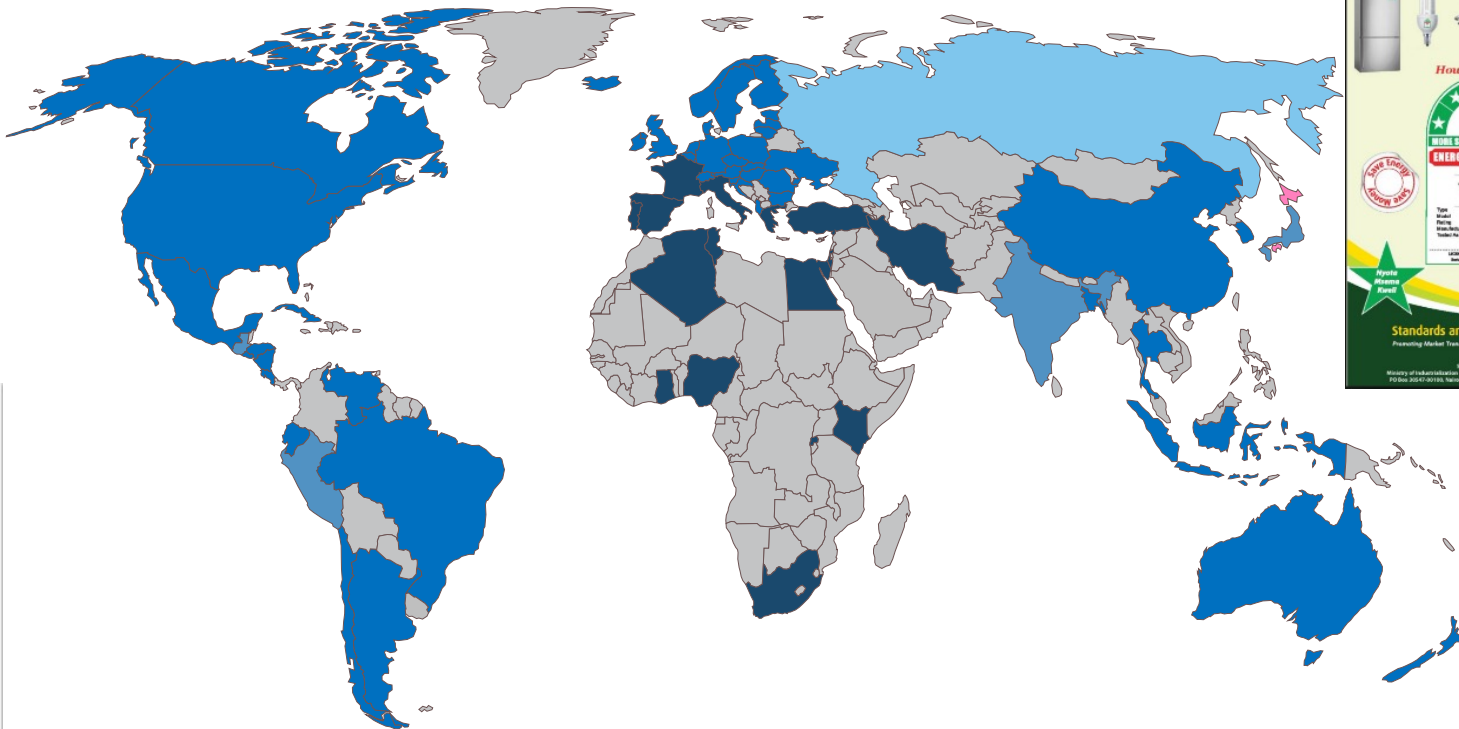
Source: UNEP U4E



Source: NRDC & UNEP U4E

**Minimum Energy Performance Standards (MEPS) and energy labels, if well-designed and implemented, are some of the fastest and most effective approaches to transition markets toward more energy-efficient appliances and equipment.**

# Yet we are still far from harmonized adoption of Mandatory MEPS and/or Labels for residential refrigerators in the region



Source: UNEP U4E

# *Leapfrogging to Energy Efficient Appliances and Equipment (Refrigerators and Distribution Transformers) through regulatory and financing mechanism*

## **Objective:**

To support **market transformation** in favor of energy-efficient domestic refrigerators and distribution transformers and ultimately **reduce the strain on the electricity grid**, increase disposable income and **reduce GHG**

**Timeline:** Project completion in June 2022

**Geography:** Botswana, Eswatini, Lesotho, Malawi, Namibia, Tanzania, Zambia, Zimbabwe

**Funders & Partners:** GCF with CTCN through UNEP, BASE – Basel Agency for Sustainable Energy, International Copper Association, and SACREEE

## **Approach:**




- Putting in place **MEPS** and a **labeling scheme** creating an enabling policy and regulatory environment for energy-efficient domestic refrigerators and distribution transformers
- Developing and adopting **National Policy Roadmaps** including:
  - Strengthening and adoption of national standards (**MEPS – HEPS**) and **labelling** scheme
  - Appropriate **financing mechanisms** and strategies
  - Strengthening national capacity (**consumer awareness**, end-users' education, capacity building for custom officials and procurement officers, **MV&E framework**)

## Resulting in large expected energy efficiency benefits from residential refrigerators with the implementation of MEPS

### Malawi

#### CUMULATIVE SAVINGS BY 2030 AND 2040\*




##### Residential Refrigerators

|   |                                  | 2030 | 2040 |
|---|----------------------------------|------|------|
|  | Electricity (GWh)                | 87   | 360  |
|  | Electricity Bills (Million US\$) | 7.8  | 32   |
|  | CO2 Emissions (Thousand tonnes)  | 27   | 110  |

### Zambia

#### CUMULATIVE SAVINGS BY 2030 AND 2040\*




##### Residential Refrigerators

|   |                                  | 2030 | 2040 |
|---|----------------------------------|------|------|
|  | Electricity (TWh)                | 0,3  | 1,4  |
|  | Electricity Bills (Million US\$) | 15   | 64   |
|  | CO2 Emissions (Million tonnes)   | 0,4  | 1,7  |

### Namibia

#### CUMULATIVE SAVINGS BY 2030 AND 2040\*




##### Residential Refrigerators

|   |                                  | 2030 | 2040 |
|---|----------------------------------|------|------|
|  | Electricity (GWh)                | 110  | 440  |
|  | Electricity Bills (Million US\$) | 10   | 40   |
|  | CO2 Emissions (Thousand tonnes)  | 150  | 620  |

### Zimbabwe

#### CUMULATIVE SAVINGS BY 2030 AND 2040\*

##### Residential Refrigerators

|   |                                  | 2030 | 2040 |
|---|----------------------------------|------|------|
|  | Electricity (TWh)                | 0.6  | 2.5  |
|  | Electricity Bills (Million US\$) | 55   | 250  |
|  | CO2 Emissions (Million tonnes)   | 0.2  | 1.1  |

Source: UNEP U4E Country Savings Assessment & Model Regulation Guidelines.



# THANK YOU FOR YOUR ATTENTION

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