



MEPS Promotion and Labelling Process for Appliances

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المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

A413: MEPS Promotion and Labeling Process for Appliances with a Special Focus on Air-Conditioning

Objective

This activity aims at informing policy makers and stakeholders involved in energy efficiency field about the best energy efficiency schemes for appliances at national and regional level. It also attempts to **address the current challenges facing the enforcement of MEPS and labeling schemes**

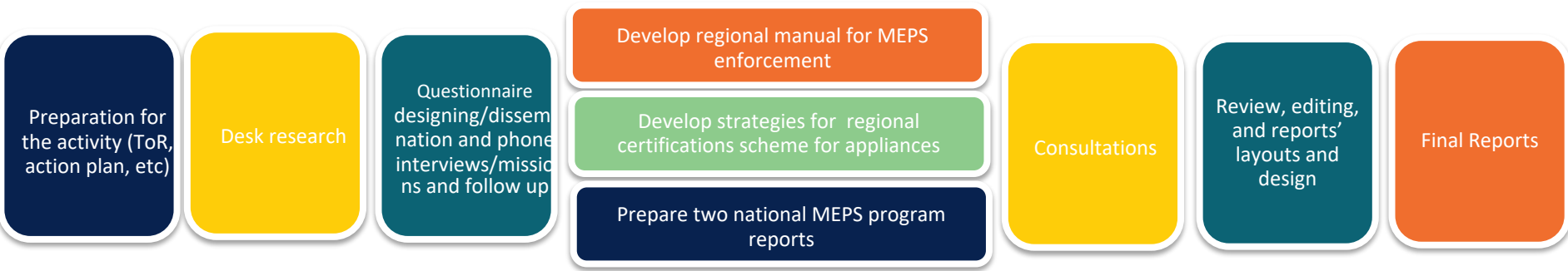
- **Expected outputs**

Manual procedure for MEPS
Implementation and
enforcement (Regional)

Regional certification
mechanism for MEPS

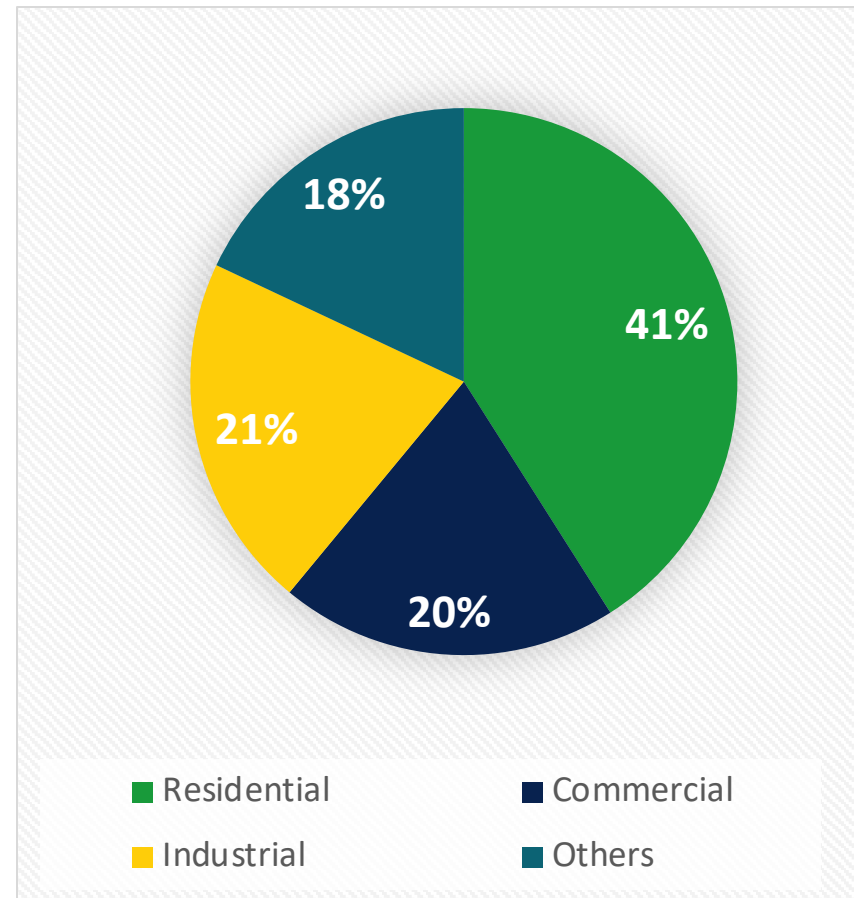
Two national MEPS
program reports

3. Project main activities



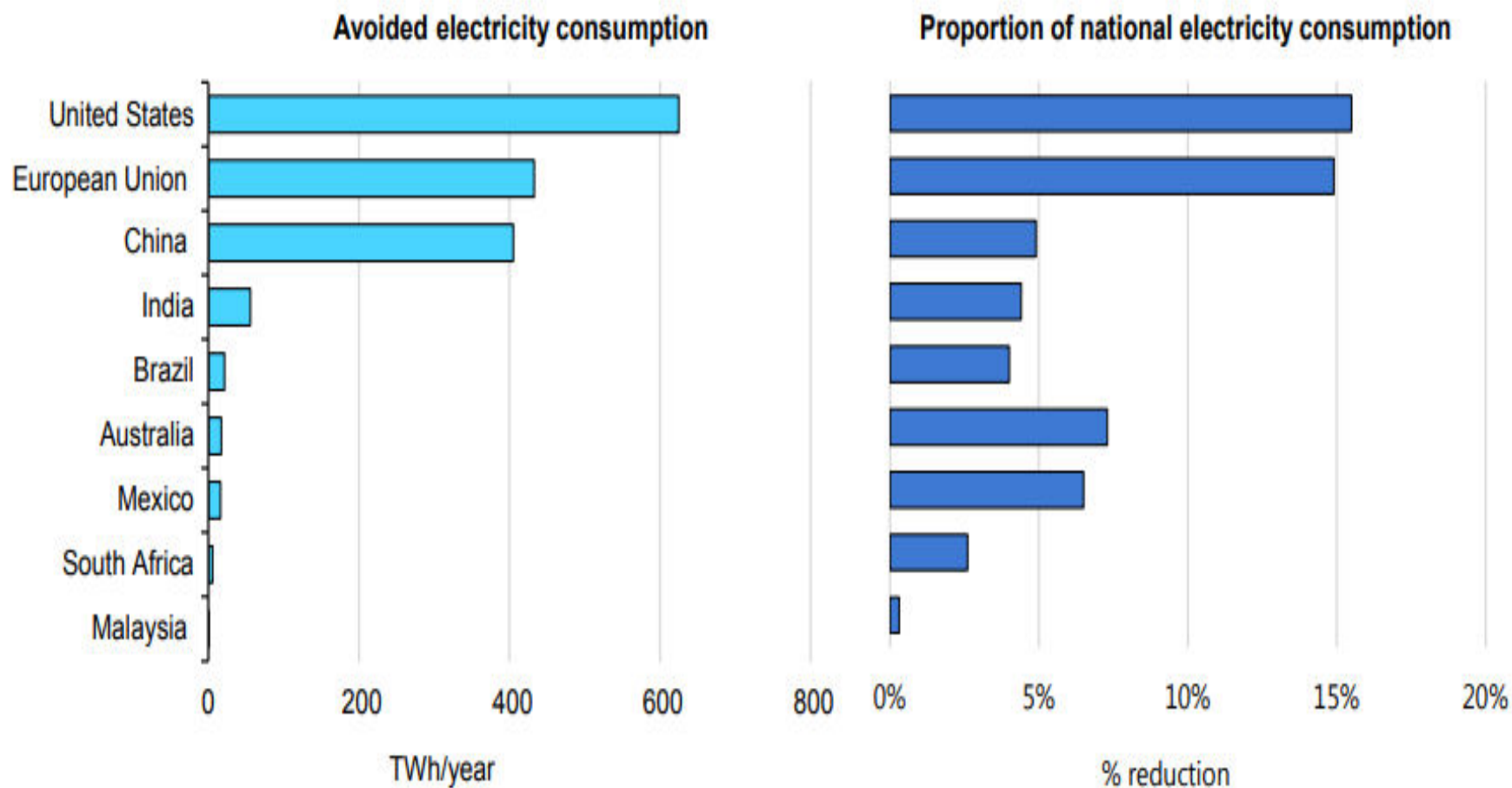
Electricity consumptions per sector in the Arab region

- **41%** (248 TWh) consumed by residential sector
- Large share of the energy is consumed for **heating and cooling purposes**
- Majority of the electricity generation produced by **fossil fuel-based sources**.
Less than 5% of the electricity generated from renewable energy resources, in 2028



Source: AUE, 2018

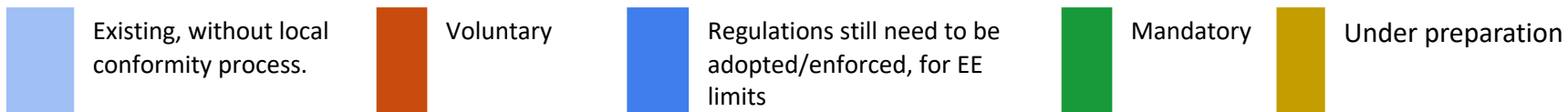
Examples of MEPS Impact in other countries



Source: IEA, 2018

Status of MEPS and Labels in the Countries

Countries		Lighting	Fridges and freezers	ACs	Washing Machine	Dishwasher	Solar Water Heater	TVs	Electric Oven	Vacuum cleaner	Electric heaters	Laundry dryer	Fans
Algeria	MEPS	Existing, without local conformity process.											
	Labels	Existing, without local conformity process.											
Egypt	MEPS	Mandatory											
	Labels	Mandatory										Mandatory	
Jordan	MEPS	Mandatory							Mandatory			Mandatory	
	Labels	Mandatory							Mandatory			Mandatory	
Lebanon	MEPS	Regulations still need to be adopted/enforced, for EE limits											
	Labels	Voluntary											
Libya	MEPS												
	Labels												
Morocco	MEPS		Regulations still need to be adopted/enforced, for EE limits								Regulations still need to be adopted/enforced, for EE limits		
	Labels	Voluntary						Voluntary			Voluntary		
Palestine	MEPS												
	Labels												
Tunisia	MEPS	Under preparation	Mandatory					Under preparation					
	Labels	Under preparation	Mandatory					Under preparation					



Key topics will be addressed by A413 deliverables

National MEPS Programs

- Appliances Energy consumption
- Appliances Market
 - Appliances Supply Chain (Appliances Origins, Distribution, Sales, ..)
 - Appliances EE level
 - Awareness level
- MEPS and Labels Programs Components
 - Policies and Regulations
 - Testing and labeling process
 - Compliances
 - Implementation Plan
 - Monitoring and Evaluation

Regional Certification

- Best Practices on the Regional Certifications and MEPS and Labels Harmonizing
- Current procedures on Testing and Labeling in the target countries
- Possible strategies for regional harmonization and alignment for MEPS IN the target countries

Reginal Manual for MEPS Implementation and enforcement

- Assessment of the status of MEPS and Labels in the counties
- Possible Strategies for MEPS and Labels Implementation and enforcement
- Procedures for EE Testing for Appliances
- Labeling Program Design
- Market surveillance
- Monitoring and Evaluation

Questionnaire

- General questions
- Regulations
- Market-related questions
- MEPS implementation plan
- Labeling policy
- Energy related question

A4.1.3: MEPS Promotion and Labeling Process for Appliances with a Special Focus on Air-Conditioning

General

What is the number of dwellings in the country with and without electricity access? In urban and rural areas?
 What is the electricity consumption in the country? What is the share of the residential area?
 Is there any data or study that shows the electricity consumption per each type of appliances? E.g. ACs, Fridge
 How many ACs in the typical household?

Regulations

What are the adopted energy efficiency policies/measures for the appliances in your country?
 Is there any decrees or legal documents aim at implementing or enforcing the MEPS?
 In which year the MEPS and labeling policy introduced?
 Is the MEPS and labels mandatory?
 What are the appliances that have MEPS and labels in you country?
 Is there a plan to pass regulation to ban the importation of un-labelled appliances?

Market-related Questions

What is the Market structure? i.e., How many manufacturers, importers, and distribution channels, etc.
 What is the present age of households that have ACs?
 What is the range of common energy consumption for existing products, especially ACs? E.g., 8000 Btu, 1000 Btu, 12,000 Btu, ...
 What is the historical annual shipments of the appliances that are imported to the county, specifically ACs?
 What is the average lifetime of the appliances products, especially ACs?
 What is the cost of more efficient models appliances compared to the common appliances, especially ACs? E.g., traditional AC and AC with inverter technology
 What is the electricity cost per kWh for households? E.g., average block
 What are the appliances that are being manufactured locally? Please specify
 What is the market share of energy efficient appliances after the implementation of the MEPSs/labeling?
 What was the number of factories involved in the production of energy efficient appliances?
 Are there private-sector laboratories testing products? If so, are they certified?

MEPS implementation plan

Is there any survey has been conducted to evaluate the market share of appliances based on energy performance?
 If so, have the targeted appliances been identified?
 Provide a brief description of the implementation plan?
 Is there a local testing facility and is it equipped for the measure implementation?
 Is there an entity in charge of printing and distributing labels? Or are the manufacturers and suppliers in charge of printing their own labels?
 Is there any tracking system created to keep tracking of sold appliances?
 What is the time-frame for the implementation of the energy standards and labeling system?
 What are the barriers that affect the implantation of MEPS? (e.g., technical, legal, structural, institutional barriers)
 Is the MEPS applicable for the imported and locally manufactured for ACs?
 Which entity are responsible for enforcing the MEPS for ACs?
 What are the main barriers for implementing the MEPS for ACs?

Labeling policy

What are the appliances that have labeling policy in the countries?
 Is the labeling policy mandatory?
 What is the name of the body that leads the overall labeling program?
 Which entity manage product testing?
 Which body issues the labels?
 How are the monitoring and enforcement process work?
 What are the type of labels? i.e., endorsement and comparative
 Is it locally designed or in alignment with other countries' labels?
 Is the labeling policy applicable for the imported and locally manufactured for ACs?
 Which entity (s) are responsible for enforcing the labeling policy for ACs?
 What are the main barriers for implementing the labeling policy for ACs ?

Energy related Questions

What is the average annual energy consumption of targeted appliances before the implementation of the MEPS and after the implementation?
 How many labelled appliances have been sold since the implementation of the measure, especially ACs?
 What is the average annual energy consumption of the sold appliances, especially ACs?

Testing Procedures

NO.	Product	Energy Efficiency Standards	Testing Labs	EE Metric S/EER, COP	MEPS Value	Product Range capacities (e.g., AC Btu/h)	Allowable number of Tests	Number of samples per test	Regular Updates of MEPS	Indoor testing Temperature	Outdoor testing Temperature
1	AC Fixed Speed										
2	AC Inverter										
3	AC Ducted, etc										

Key Challenges for MEPS and Labeling Implementation

- Lack of regulations and dedicated entities for energy efficiency
- Lack of data and expertise in EE field, especially in appliances
- Some countries still provide high subsidy for fuel and electricity
- The difficulty for local manufacturers to upgrade their production lines due to its high costs.
- Market resistance to the new regulations and changes
- High costs of efficient appliances compared to conventional ones
- Lack of incentives schemes or financing mechanisms
- The lack of testing labs in some countries
- Lack of public awareness of MEPS and labeling programs

Key steps to be considered by the countries

- Establish legal and regulatory framework
- Enhance the capacities of the energy efficiency entities
- Assess the current situation of appliances e.g., EE level, expected savings, ..
- Adopt the suitable minimum energy performance standards
- Create database with the relevant indicators
- Reform energy subsidies
- Engage stakeholders e.g., concerned public authorities, industries, consumers, etc
- Raise awareness and encourage the use of high-efficiency appliances
- Monitor, verify and enforce standards

.. let us hear your perspectives!

In your opinion, what is the main challenge that faces MEPS implementation and enforcement in your country, and how can this challenge be tackled?

THANK YOU

Contact us!



Mitigation Enabling Energy Transition in the MEDiterranean region
Together We Switch to Clean Energy - Phase II

For any inquires or comments,
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