

# **Policy Instruments to Promote Energy Efficiency in Mauritius**

**Presented by**

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# The Energy Efficiency Management Office (EEMO)

- It is the national regulator for energy efficiency.
- Office was set up under the Energy Efficiency Act 2011 (“the Act”).
- It is an office within the Ministry of Energy and Public Utilities (s.4).
- Currently located on 3rd Floor, Atchia Building, Cnr Eugene Laurent & Suffren Streets, Port Louis.
- The supervising officer designates such officers as may be necessary to assist the Office in the proper discharge of its functions (s.14).
  - ❖ Current personnel: one Ag. Director, two Engineers, 3 Technical Officers and 2 administrative support staff.



# The Energy Efficiency Management Office

## (EEMO) *cont'd*

- The Office is administered and managed by the Energy Efficiency Committee (s.8)
  - ❖ The Committee comprises of representatives with diverse backgrounds, namely, Environment, Energy, Industry, Local Government, National Infrastructure, Transport, Institution of Engineers, Business Mauritius, Association of Architects, as well as a technical expert from the UoM.
  - ❖ The Committee sets up technical committees to assist it in the discharge of its functions and the exercise of its powers (s.11(1))
- Provision has been made in the Act for a Director who shall:
  - ❖ be responsible for the execution of the policy of the office on energy efficiency and conservation (s.12(2)(a))
  - ❖ act in accordance with directions he receives from the Energy Efficiency Committee (s.12(2)(c))
- For legal proceedings, the Office shall act, sue and be sued in its name (s.17(1)).

# Vision and Mission of EEMO

- **Vision**

*"To achieve greater prosperity and sustainability through energy efficiency in the country."*

- **Missions**

- ❖ to lead the country in Energy Efficiency development and promotion;
- ❖ to facilitate the management of Energy Efficiency in all sectors of the economy including transport, buildings, industry and services, as well as in households; and,
- ❖ to foster a culture of Energy Efficiency through awareness, capacity-building and support of initiatives.

# Purposes of the EEMO

- **Systematise the Government's response to energy management and performing a number of statutory tasks including:**
  - ❖ **serving as the official 'energy observatory'**
  - ❖ **collating a national database on energy usage**
  - ❖ **promoting and raising awareness of energy efficiency**
  - ❖ **developing energy performance standards for buildings, appliances and equipment**
  - ❖ **regulating energy labelling and energy audits**

# Purposes of the EEMO *cont'd*

- Achieve SDG 7 - Ensure access to affordable, reliable, sustainable and modern energy for all, which calls for enhancing our energy security through a progressive shift to energy efficient technologies.
- At the regional level, the EEMO is a focal point for important agencies namely, the African Energy Commission (AFREC) and the SADC Centre for Renewable Energy and Energy Efficiency (SACREEE).
- Contribute in meeting the commitments for a reduction in energy consumption by 10% by 2030 and in achieving 60% Renewable Energy in the energy mix in 2030.

# WORDS OF WISDOM

*“I need results!”*

*The Honourable Minister of Energy and Public Utilities*

## 1. Energy Efficiency (Labelling of Regulated Machinery) Regulations 2017

- It was made for mandatory energy labelling of the following household electrical appliances: electric ovens; refrigerating appliances; and, electric dishwashers.
- The regulations require dealers to register the appliances with the EEMO and to affix energy labels on these appliances in their showrooms.
- As at May 17, 2022, the EEMO had received 774 applications on the Energy Efficiency Information Management System (EEIMS) portal.



## 2. Mandatory Energy Labelling of Air Conditioners and Washing Machines

- The Energy Efficiency (Labelling of Regulated Machinery) Regulations will be amended to include air conditioners and washing machines.
- It will apply to:
  - a) inverter-type (variable speed) air conditioners in a first instance and Seasonal Energy Efficiency Rating (SEER) values would be used as indicator of energy performance for ductless air conditioners;
  - b) all washing machines except those which do not have an electric water heating element.
- Due to absence of testing facilities, compliance to the Mauritian Standards and Energy Efficiency (Labelling of Regulated Machinery) Regulations will be based solely on relevant documentation provided by dealers.

## 3. Levy on energy inefficient appliances

- A 25% levy is applied on energy inefficient appliances at import, under regulations made under the Excise Act by the Customs Department.
- Appliances concerned are: air conditioners, electric ovens, lamps, tumble dryers, dishwashers, refrigerators.
- The thresholds were worked out by EEMO and subsequently reviewed in 2017.

## 4. Enforcement of standards for LED lighting

- EEMO is promoting the shift to more efficient lighting technologies, namely Light Emitting Diodes (LEDs).
- EEMO is working with the MSB and the MRA, to introduce standards on the import of LED lamps to ensure that LEDs sold on the local market are of good quality and affordable.

## 5. Awareness Raising through talks

- Talks on energy saving and the efficient use of energy are held in schools, Community Centres and Social Welfare Centres around the country.
- The primary aim is to sensitize people on how to use energy efficiently.
- Explanation on how to read an energy label is also provided.

## 6. Awareness Raising through Media Campaign

- Media campaigns on TV, radio, newspapers and social media are carried out in key areas to sensitize the public on the efficient use of energy.
- A media plan for energy saving in the land transport sector has been devised wherein the energy saving benefits of adopting hybrid and electric vehicles are highlighted.

## 7. Energy Efficiency Competitions

- Carried out each year in primary and secondary schools so as to sensitize students on energy conservation and energy efficiency.

## 8. Development of an online course on energy management/energy efficiency

- It is intended to promote a culture on energy saving and EE in the Civil Service.

## 9. Introduction of Energy Efficiency in school curricula

- It is a follow up to the awareness campaigns.
- Aim is to increase awareness in EE and to create a lifestyle in the young generation that respects resources.
- The EEMO is currently fine-tuning the content to be added to Grades 5 and 6 before sending to the Ministry of Education, Tertiary Education, Science and Technology . The content for Grade 4 has been finalized.

## 10. Complete Ban of incandescent lamps

- Budget measure B.3.(e) mentioned in the annex to the Budget Speech 2021/22 states that:  
*“the existing ban on importation of incandescent light bulbs of at least 75 watts will be extended to all incandescent light bulbs used for general lighting in order to pave the way for more energy efficient lighting”.*
- The Consumer Protection (Control of Imports) (Amendment No. 2) Regulations 2022 was gazetted on April 20, 2022.

## 11. Minimum Energy Performance Standards (MEPS) for air-conditioners

- EEMO is currently drafting new regulations for the application of MEPS for ACs.
- The import of ACs would be banned for units below the determined energy efficiency threshold.

## 12. 5% Reduction in electricity consumption of public institutions

- Budget measure B.3.(f) mentioned in the annex to the Budget Speech 2021/22 states that:  
*“All public institutions will be required to reduce their electricity consumption by at least 5% of its current electricity consumption. The EEMO will establish procedures to monitor energy efficiency and consumption.”*
- Support is being provided to several departments and Ministries in setting up Energy Management Team and in following guidelines from EEMO.

## 13. Mandatory energy audits

- Energy Efficiency (Energy Consumer and Energy Audits) Regulations 2017
- 21 notifications for mandatory energy audit were issued to large energy consumers in the Government sector by the EEMO in 2017.
- 20 notifications for mandatory energy audit to the largest energy consumers among the parastatal institutions and government-owned/government-controlled bodies in 2019.
- 20 notifications for mandatory energy audit issued to large energy consumers in the private sector organisations by the EEMO in 2021.
- A potential list of large energy consumers to be notified for the year 2022 is forthcoming.

## 14. Registration of Energy Auditors and Energy Audit Firms

- Mandatory energy audits have to be carried out by certified energy auditors.
- The EEMO maintains a register of energy auditors and energy audit firms which is available on EEMO's website.
- Amendments brought to the Energy Efficiency (Registration of Energy Auditors) Regulations 2016 effective as from 16 September 2021. It caters for:
  - An extension in registration period from 2 years to 5 years;
  - Number of audits which an energy auditor need to carry out has been reduced from 3 to 1;
  - Deregistered Energy auditors are now allowed to register anew with the EEMO without waiting for a period of one year.
- 25 energy auditors and 9 energy audit firms are currently registered.



## 15. Framework to promote Energy Performance Contracting (EPC)

- Objective is to facilitate the growth of Energy Service Companies (ESCOs).
- EPC is defined as “a contractual arrangement between the beneficiary and the provider of an energy efficiency improvement measure, verified and monitored during the whole term of the contract, where investments (work, supply or service) in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed energy performance criterion, such as financial savings”.
- The bidding exercise for the procurement of the services of a consultant was launched on April 25, 2022 and will be closed on May 31, 2022.

## 16. Framework for the installation and maintenance of air conditioners

- Objective is to develop a framework for the installation and maintenance of household air conditioners with a rated cooling capacity of  $\leq 12$  kW or with cooling and heating capacity of  $\leq 12$  kW if carried out by same equipment.
- The aim is to ensure that users are guaranteed a high quality of service by AC technicians and ACs operate and are used in the most efficient manner.
- Air conditioners here cover the whole range from window type ACs, non-inverter split type ACs, inverter split type ACs, multi-split ACs, portable ACs as well as heat pump ACs.
- A soft copy of the guidelines has already been sent to the Government Printing Department.

## 17. Development of Guidelines for EE and Energy Conservation in Hotels

- The aim is to provide a pathway to key decision makers and those responsible for maintenance and energy management in the sector towards improvement of energy performance in hotels.
- Dissemination to all the hotels registered with the Tourism Authority is being done on a regional basis by the drivers of the MEPU.

## 18. Development of Guidelines for EE and Energy Conservation in Industries

- Aim is to guide the management and operators in industries to manage energy consumption by standardising the energy performance values of various energy consuming equipment and systems deployed for the manufacturing process.
- Includes the development of benchmarking of standard energy performance values and procedures for establishing target energy performance values for major energy-consuming equipment and systems, such as boiler, air compressor, furnace, thermic fluid heater, waste heat recovery equipment, motor, etc. in industries.

## 19. Development of Guidelines for Energy Efficiency and Energy Conservation in Commercial Sector

- Aim is to raise awareness of commercial building owners/managers on the benchmarking/energy audit/assessment process.
- It should provide them with guidance on the process of identifying and implementing energy savings opportunities that may exist in their buildings.

## 20. Development of Guidelines for Energy Conservation and Energy Efficiency for SMEs

- Guidelines to be developed in-house by the EEMO.
- Presently conducting awareness raising sessions.
- Walk through energy audits are also proposed to those interested.

## 21. Review and update of the Mauritius' Nationally Determined Contributions

- Mauritius published its Intended Nationally Determined Contribution (NDC) in September 2015.
- Objective is to reduce GHG emissions by 30% by 2030.
- EEMO is collaborating with the Ministry of Environment, Solid Waste Management and Climate Change for the project under the Nationally Appropriate Mitigations Actions (NAMA) for Low Carbon Island Development Strategy for Mauritius.
- Component 1 of the NAMA project is to strengthen national capability to identify, prioritise and develop mitigation actions to meet the NDC targets, involves developing GHG mitigation scenarios using numerical analyses for the energy efficiency mitigation actions in Mauritius.
- The EEMO has been working on the mitigation scenarios for the following technologies:
  - a) Lamps, Refrigerating Appliances, Dishwashers - *Completed*
  - b) Boilers, Electric Ovens, Air Conditioners, Washing Machines – *Under Progress*

## 1. Strengths v/s Opportunities

- Increase the pace of the development of the energy efficiency sector.
- Champion energy efficient behaviour as a lifestyle.
- Generate sustainable energy savings by increasing the number of energy efficiency investments in all sectors via the development of an enabling environment, the cooperation of the public sector with the local banks and the provision of targeted financial incentives and technical assistance to project developers.
- Combined policies aiming for synergies between Energy Efficiency and other players in the energy sector.

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## 2. Opportunities v/s Weaknesses

- Focus on the need for cohesion, professionalism, industry knowledge, and the “glue” a sense of community and collective purpose.
- The geopolitics of energy is being closely monitored, as are the impacts of environmental regulations and advancing technologies on national and local politics, and even global energy politics.
- Focus on the need to assist the private sector to acquire information, capacities, experience and implement more energy efficient projects.
- The current Energy Observatory Report has been redesigned to assist in the close monitoring of developments taking place in the energy sector.

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## 3. Strengths v/s Threats

- **Networks, knowledge and relationships among the various players in the energy sector (MEPU, CEB, MARENA, and other institutions) are crucial assets and are being nurtured.**
- **Sensitisation through education, training and awareness raising is continuous.**
- **Focus on the need to develop and contribute to the growth of the market for energy efficiency services and technologies thus, contributing to the creation of employment and economic growth.**
- **Focus on the need to set up project implementation and management committees which also report on projects and bottlenecks.**
- **The Energy Efficiency (Registration of Energy Auditors) Regulations 2016 has been amended to re-instate the de-registered energy auditors on the EEMO list of auditors.**



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## 4. How to minimise the weaknesses and avoid potential threats?

- Requests have been made to the MEPU for critical elements of strategic infrastructure (hard, financial and human infrastructure).
- The MEPU has been informed that the EEMO should be restructured with two distinct units (Planning/Communication/Awareness activities unit and Enforcement of EE Act unit) and provision should be made for additional staff.
- EEMO is advocating for assertive energy efficiency policies which would help to achieve historical levels of energy efficiency improvement.

**THANK YOU FOR YOUR KIND ATTENTION!**