

Ref: NEA-LSD-CIRCULAR-ECA-00002-2024

Date: 08-Mar-24

Designated Company Representatives, Water Heaters, Commercial Storage Refrigerators
Portable Air-Conditioners, Lamps and Televisions Suppliers

Dear Sir / Madam,

**KEY AMENDMENTS TO THE MANDATORY ENERGY LABELLING SCHEME (MELS) AND
MINIMUM ENERGY PERFORMANCE STANDARD (MEPS) REQUIREMENTS UNDER THE
ENERGY CONSERVATION ACT (ECA)**

1 This circular is to inform all relevant professional institutions, associations, statutory boards, government organisations, developers, suppliers, testing laboratories, etc. on the following:

A. Introduction of Minimum Energy Performance Standard (MEPS) and Mandatory Energy Labelling Scheme (MELS) for Water Heaters

2 With effect from **1 April 2025**, all water heaters sold in Singapore shall comply with the following requirements:

Type of water heaters covered	Instantaneous Water Heaters, Electric Storage Water Heaters and Electric Heat Pump Water Heaters		
	Type of Water Heater	Rated input Power	Rated Tank Capacity
	Electric Storage Water Heater	≤12kW	≤500L
	Electric Instantaneous Water Heater	≤12kW	NA
	Gas Instantaneous Water Heater	≤59kW	NA
	Heat Pump Water Heater	≤6kW	≤500L
Energy Efficiency Requirements	Household water heaters are rated based on: i) Minimum Energy Performance Standards level at Uniform Energy Factor (UEF) ≥ 0.40		

	<p>ii) Mandatory Energy Labelling Scheme at</p> <ul style="list-style-type: none"> - 1 Tick (Low): $0.40 \leq \text{UEF} \leq 0.55$ - 2 Tick (Fair): $0.55 < \text{UEF} \leq 0.70$ - 3 Tick (Good): $0.70 < \text{UEF} \leq 0.85$ - 4 Tick (Very Good): $0.85 < \text{UEF} \leq 1.00$ - 5 Tick (Excellent): $\text{UEF} > 1.00$
Applicable test standard	SS646
Display of Energy Label	<p>a) Energy label to be affixed or displayed on the units.</p> <p>b) Energy label to be displayed in all locally circulated publicity materials (digital & non-digital) such as local websites, newspapers advertisements and promotional flyers.</p>
Registration Requirement	To be registered with NEA. Registration details (such as registration fees, templates of test reports, etc.) shall be communicated subsequently

B. Introduction of Minimum Energy Performance Standard (MEPS) and Mandatory Energy Labelling Scheme (MELS) for Commercial Storage Refrigerators (“CSR”)

3 With effect from **1 April 2025**, all commercial storage refrigerators sold in Singapore shall comply with the following requirements:

Type of commercial storage refrigerator covered	All capacities of chillers, freezers, and combinations type CSR
Energy Efficiency Requirements	<p>Commercial storage refrigerators are rated based on:</p> <p>i) Minimum Energy Performance Standards level at Energy Efficiency Index (EEI) ≤ 95.</p> <p>ii) Mandatory Energy Labelling Scheme at</p> <ul style="list-style-type: none"> - 1 Tick (Low): $80 \leq \text{EEI} \leq 95$ - 2 Tick (Fair): $60 \leq \text{EEI} < 80$ - 3 Tick (Good): $40 \leq \text{EEI} < 60$ - 4 Tick (Very Good): $20 \leq \text{EEI} < 40$ - 5 Tick (Excellent): $\text{EEI} < 20$
Applicable test standard	ISO 22041

Display of Energy Label	<p>a) Energy label to be affixed or displayed on the units.</p> <p>b) Energy label to be displayed in all locally circulated publicity materials (digital & non-digital) such as local websites, newspapers advertisements and promotional flyers.</p>
Registration Requirements	To be registered with NEA. Registration details (such as registration fees, templates of test reports, etc.) shall be communicated subsequently

C. Key Amendments to MEPS and MELS that will come into effect on 1 April 2024 affecting portable air-conditioners, lamps and televisions.

4 NEA would also like to remind all on the legislative requirements for all portable air-conditioners, lamps and televisions which will be implemented on **1 April 2024**. This was communicated in an earlier circular NEA-LSD-CIRCULAR-ECA-00002-2023. Key amendments are summarised in Annex A attached.

5 Compliances to the requirements under the ECA are mandatory. Any non-compliance to the supply of regulated goods in Singapore is an offence under Section 12 of the ECA. Companies that are found to be non-compliant shall be liable on conviction to a fine not exceeding \$10,000.

6 Please disseminate the information in this circular to your relevant distributors, stakeholders, retailers, manufacturers and other industry partners for their information and compliance. A copy of this circular is also downloadable from NEA's website at <https://www.nea.gov.sg/corporate-functions/resources/circulars/climate-change-energy-efficiency-circulars>. If you have any queries concerning this circular or need further clarification or assistance, please contact us at Tel: 6731-9952 or email: nea_energylabel@nea.gov.sg. Thank you.

Yours faithfully
(Transmitted via email)



Suresh K
Director (Carbon Mitigation Division)
For Director-General (Environmental Protection)
National Environment Agency

ANNEX A

Key Amendments to MEPS and MELS for Portable Air-conditioners, Television and Lamps as of 1 April 2024

Type of portable air-conditioners	Single-phase portable air conditioners having a single exhaust duct (12kW or lower)
Requirements	<p>Portable air-conditioners are rated based on:</p> <ul style="list-style-type: none"> i) Minimum Energy Performance Standards (MEPS) level at Coefficient of Performance (COP)_{100%} ≥ 3.0 ii) Mandatory Energy Labelling Scheme (MELS) at <ul style="list-style-type: none"> 1-tick (Low): $3.0 \leq \text{COP}_{100\%} < 3.25$ 2-tick (Fair): $\text{COP}_{100\%} \geq 3.25$

Types of Televisions	Televisions with resolution less than 33,177,600 pixels [non-8K TV]
Requirements	<p>Revised MEPS: $P \leq 0.30 \times (20 + 4.3224 \times A)$</p> <p>Passive standby power ≤ 0.50W</p>

“A” refers to screen area as expressed in square decimeters

Type of Lamps	Incandescent, CFLi, LEDi, CFLni, LEDni, T8/T5 LED (500-1500mm)	T8/T5 LFL (500-1500mm)
MEPS Requirements	$\eta_{\text{min.}} = 100 \text{ lm/W}$	$\eta_{\text{min.}} = 75 \text{ lm/W}$
MELS Requirements	<p><u>Ticks</u></p> <p>4</p> <p>3</p> <p>2</p> <p>1</p>	<p>η</p> <p>$\eta \geq 160$</p> <p>$135 \leq \eta < 160$</p> <p>$110 \leq \eta < 135$</p> <p>$\eta < 110$</p>