

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		
	<b>Type of Water Heater</b>	<b>Rated input Power</b>	<b>Rated Tank Capacity</b>
	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"> <li>- 1 Tick (Low): <math>0.40 \leq \text{UEF} \leq 0.55</math></li> <li>- 2 Tick (Fair): <math>0.55 &lt; \text{UEF} \leq 0.70</math></li> <li>- 3 Tick (Good): <math>0.70 &lt; \text{UEF} \leq 0.85</math></li> <li>- 4 Tick (Very Good): <math>0.85 &lt; \text{UEF} \leq 1.00</math></li> <li>- 5 Tick (Excellent): <math>\text{UEF} &gt; 1.00</math></li> </ul>
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 &amp; 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) <math>\leq 95</math>.</p> <p>ii) Mandatory Energy Labelling Scheme at</p> <ul style="list-style-type: none"> <li>- 1 Tick (Low): <math>80 \leq \text{EEI} \leq 95</math></li> <li>- 2 Tick (Fair): <math>60 \leq \text{EEI} &lt; 80</math></li> <li>- 3 Tick (Good): <math>40 \leq \text{EEI} &lt; 60</math></li> <li>- 4 Tick (Very Good): <math>20 \leq \text{EEI} &lt; 40</math></li> <li>- 5 Tick (Excellent): <math>\text{EEI} &lt; 20</math></li> </ul>
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 &amp; 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](mailto: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

**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"> <li>i) Minimum Energy Performance Standards (MEPS) level at Coefficient of Performance (COP)<sub>100%</sub> ≥ 3.0</li> <li>ii) Mandatory Energy Labelling Scheme (MELS) at <ul style="list-style-type: none"> <li>1-tick (Low): <math>3.0 \leq \text{COP}_{100\%} &lt; 3.25</math></li> <li>2-tick (Fair): <math>\text{COP}_{100\%} \geq 3.25</math></li> </ul> </li> </ul>

Types of Televisions	Televisions with resolution less than 33,177,600 pixels [non-8K TV]
Requirements	<p>Revised MEPS:  <math>P \leq 0.30 \times (20 + 4.3224 \times A)</math></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 align="center"><u>Ticks</u></p> <p align="center">4</p> <p align="center">3</p> <p align="center">2</p> <p align="center">1</p>	<p align="center"><math>\eta</math></p> <p align="center"><math>\eta \geq 160</math></p> <p align="center"><math>135 \leq \eta &lt; 160</math></p> <p align="center"><math>110 \leq \eta &lt; 135</math></p> <p align="center"><math>\eta &lt; 110</math></p>