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No. S 113

ENERGY CONSERVATION ACT 2012

ENERGY CONSERVATION (REGULATED GOODS AND REGISTERED SUPPLIERS) (AMENDMENT) REGULATIONS 2025

In exercise of the powers conferred by section 78 of the Energy Conservation Act 2012, the Minister for Sustainability and the Environment makes the following Regulations:

Citation and commencement

1. These Regulations are the Energy Conservation (Regulated Goods and Registered Suppliers) (Amendment) Regulations 2025 and come into operation on 1 April 2025.

Amendment of regulation 2

2. In the Energy Conservation (Regulated Goods and Registered Suppliers) Regulations 2017 (G.N. No. S 748/2017) (called in these Regulations the principal Regulations), in regulation 2(1) —

(a) in the definition of “energy efficiency”, in paragraph (d), after “refrigerator”, insert “described in item 1 of Part 1 of the Fourth Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017 (G.N. No. S 747/2017)”;

(b) in the definition of “energy efficiency”, after paragraph (d), insert —

“(da) in relation to a refrigerator described in item 2 of Part 1 of the Fourth Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017, means the Energy Efficiency Index as defined in the First Schedule;”;

- (c) in the definition of “energy efficiency”, in paragraph (f), delete “and” at the end;
- (d) in the definition of “energy efficiency”, in paragraph (g), insert “and” at the end;
- (e) in the definition of “energy efficiency”, after paragraph (g), insert —
 - “(h) in relation to a water heater, means the Uniform Energy Factor as defined in the First Schedule;”;
- (f) in the definition of “regulated air-conditioner”, delete “(G.N. No. S 747/2017)”; and
- (g) after the definition of “regulated television”, insert —
 - ““regulated water heater” means any water heater described in Part 1 of the Eighth Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017;”.

Amendment of regulation 3

3. In the principal Regulations, in regulation 3 —

- (a) in paragraph (g)(ii), replace the full-stop at the end with a semi-colon; and
- (b) after paragraph (g), insert —
 - “(h) a regulated water heater —
 - (i) must be registered under regulation 4;
 - (ii) must comply with the applicable energy efficiency standards under regulation 5; and
 - (iii) must be labelled with an Energy Label in accordance with regulation 6.”.

Amendment of First Schedule

4. In the principal Regulations, in the First Schedule —

- (a) in paragraph 1, after the definition of “casement or window type air-conditioner”, insert —

““chilled”, in relation to a commercial storage refrigerator, means that the storage temperature of foodstuffs in the refrigerator is continuously maintained at a temperature at or above -1°C and at or below 5°C ;”;

- (b) in paragraph 1, after the definition of “Coefficient of Performance” or “COP”, insert —

““commercial storage refrigerator” has the meaning given by Part 2 of the Fourth Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017;”;

- (c) in paragraph 1, after the definition of “compact fluorescent lamp without integrated ballast” or “CFLni”, insert —

““counter”, in relation to a commercial storage refrigerator, means that the refrigerator is lower than 1,050 mm in height with one or more doors or drawers accessing the same compartment;”;

- (d) in paragraph 1, after the definition of “Energy Consumption” or “EC”, insert —

““Energy Efficiency Index” or “EEI”, in relation to a commercial storage refrigerator, means the number determined in accordance with the following formula:

$$\text{EEI} = \frac{\text{AEC}}{\text{SAEC}} \times 100;$$

“frozen”, in relation to a commercial storage refrigerator, means that the storage temperature of foodstuffs in the refrigerator is continuously maintained at a temperature at or below -15°C ;”;

- (e) in paragraph 1, after the definition of “N”, insert —

““net volume”, in relation to a commercial storage refrigerator, means the volume containing foodstuffs within the load limit of the refrigerator;”;

- (f) in paragraph 1, after the definition of “split type (non-inverter) air-conditioner”, insert —

““SS” means the Singapore Standards;

“Standard Annual Energy Consumption” or “SAEC” means the standard annual energy consumption in kWh/year determined in accordance with the following formula:

$$\text{SAEC} = A \times V_n + B,$$

where —

- (a) V_n is the net volume, which is the sum of the net volumes of all compartments of the refrigerator, expressed in litres;
 - (b) if the refrigerator is a vertical chilled type refrigerator — A is 1.643 and B is 609;
 - (c) if the refrigerator is a vertical frozen type refrigerator — A is 4.928 and B is 1472;
 - (d) if the refrigerator is a counter chilled type refrigerator — A is 2.555 and B is 1790; and
 - (e) if the refrigerator is a counter frozen type refrigerator — A is 5.840 and B is 2380;”;
- (g) in paragraph 1, after the definition of “tungsten halogen lamp”, insert —

““Uniform Energy Factor” or “UEF”, in relation to a water heater, means the measure of the overall efficiency of the water heater, as specified in the test report;

“vertical”, in relation to a commercial storage refrigerator, means that the refrigerator is equal to or higher than 1,050 mm in height with one or more doors or drawers accessing the same compartment;

“water heater” has the meaning given by Part 2 of the Eighth Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017;”;

- (h) in paragraph 2, in item 2, in the second column, replace “4.04” with “4.86 and standby power ≤ 18 ”;
- (i) in paragraph 2, in item 3, in the second column, replace “4.04” with “5.50 and standby power $\leq 7 \times N$ ”;

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- (j) in paragraph 2, in item 4, in the second column, replace “4.04 and $\text{COP} \geq 3.34$ ” with “4.86 and standby power ≤ 18 ”;
- (k) in paragraph 2, in item 5, in the second column, replace “4.04 and $\text{COP} \geq 3.34$ ” with “5.50 and standby power $\leq 7 \times N$ ”;
- (l) in paragraph 2, in item 6, in the second column, replace “0.461” with “0.332”;
- (m) in paragraph 2, in item 7, in the second column, replace “0.427” with “0.312”;
- (n) in paragraph 2, in item 9, in the second column, replace “0.409” with “0.298”;
- (o) in paragraph 2, after item 9, insert —
- | | |
|--------------------------------------|-------------------------|
| “9A. Commercial storage refrigerator | $\text{EEI} \leq 95$ ”; |
|--------------------------------------|-------------------------|
- (p) in paragraph 2, after item 18, insert —
- | | |
|--|---|
| “19. Television with resolution of 33,177,600 pixels | $P \leq 0.42 \times (20 + 4.3224 \times \text{screen area})$ and passive standby power $\leq 0.50\text{W}$ ”; |
|--|---|
- (q) in paragraph 2, after item 19 (as inserted by paragraph (p)), insert —
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|-------------------|--------------------------|
| “20. Water heater | $\text{UEF} \geq 0.4$ ”; |
|-------------------|--------------------------|
- (r) in paragraph 3(d) and (e), delete “and $\text{COP} \geq 3.34$ ”;
- (s) in paragraph 3(d) and (e), delete “, $\text{COP} \geq 3.78$ ”;
- (t) in paragraph 3(d) and (e), delete “, $\text{COP} \geq 4.29$ ”;
- (u) in paragraph 3(d) and (e), delete “, $\text{COP} \geq 4.86$ ”;
- (v) in paragraph 3(f), after “refrigerators”, insert “(other than commercial storage refrigerators)”;

(w) in paragraph 3, after sub-paragraph (f), insert —

“(fa) for commercial storage refrigerators —

<i>Ticks</i>	<i>Energy efficiency rating</i>	<i>Energy Efficiency Index (EEI)</i>
1	Low	$80 \leq \text{EEI} \leq 95$
2	Fair	$60 \leq \text{EEI} < 80$
3	Good	$40 \leq \text{EEI} < 60$
4	Very Good	$20 \leq \text{EEI} < 40$
5	Excellent	$\text{EEI} < 20$

”;

(x) in paragraph 3, after sub-paragraph (i), insert —

“(j) for water heaters —

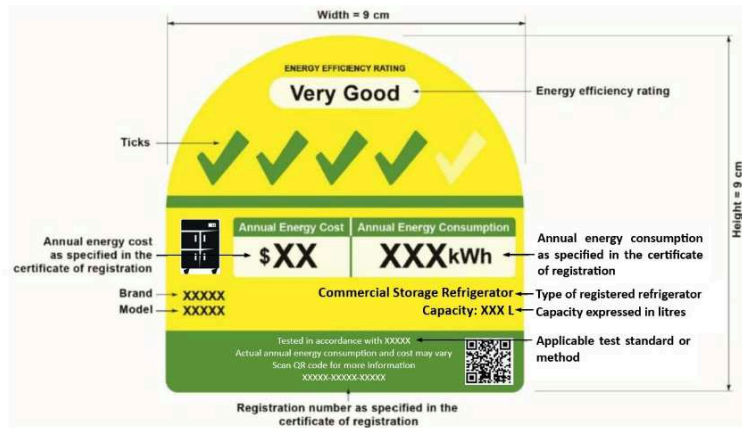
<i>Ticks</i>	<i>Energy efficiency rating</i>	<i>Uniform Energy Factor (UEF)</i>
1	Low	$0.4 \leq \text{UEF} \leq 0.55$
2	Fair	$0.55 < \text{UEF} \leq 0.7$
3	Good	$0.7 < \text{UEF} \leq 0.85$
4	Very Good	$0.85 < \text{UEF} \leq 1.0$
5	Excellent	$\text{UEF} > 1.0$

”;

(y) in paragraph 4(d), after “refrigerators”, insert “(other than commercial storage refrigerators)”;

(z) in paragraph 4, after sub-paragraph (d), insert —

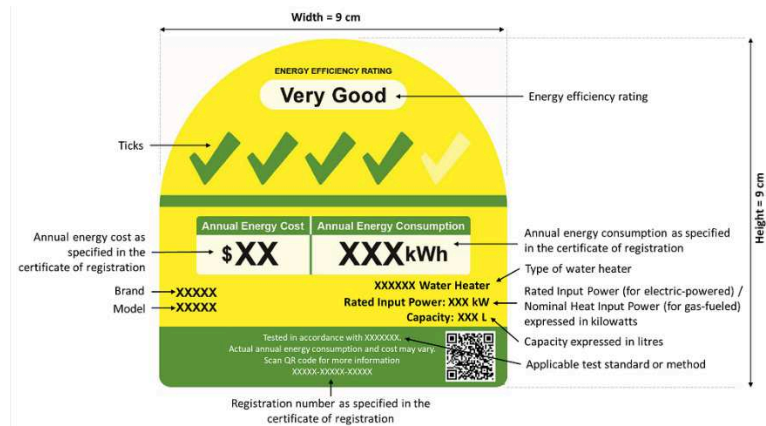
“(da) commercial storage refrigerators:



”;

(za) in paragraph 4, after sub-paragraph (e), insert —

“(f) water heaters:



”; and

(zb) replace paragraph 5 with —

“Test standard or method

5. Subject to regulation 2(2), a test report for any regulated goods must contain the results of tests carried out for the regulated goods in accordance with the applicable test standard or method, as follows:

<i>Regulated goods</i>	<i>Type</i>	<i>Applicable test standard or method</i>
(a) Air-conditioner	(i) Casement/ Window type	— ISO 5151:2017
	(ii) Split type (inverter) with more than one indoor unit	— ISO 15042:2017 The cooling tests must be conducted at 2 points, namely, the full-load cooling capacity and the part-load cooling capacity
	(iii) Split type (inverter) with one indoor unit	— ISO 5151:2017 The cooling tests must be conducted at 2 points, namely, the full-load cooling capacity and the part-load cooling capacity
	(iv) Split type (non-inverter) with more than one indoor unit	— ISO 15042:2017
	(v) Split type (non-inverter) with one indoor unit	— ISO 5151:2017
	(vi) Three-phase variable refrigerant flow (VRF) air-conditioner	— ISO 15042:2017 The cooling tests must be conducted at 4 points, namely, the full-load cooling capacity and part-load cooling capacity at 75%, 50% and 25%. The tests must include a single outdoor unit that services the network of indoor units
	(vii) PAC	— ISO 18326:2018
	(viii) Air-conditioners described in items (i) to (vi) (for standby power)	— IEC 62301:2011
(b) Clothes dryer	All	— IEC 61121:2002+ AMD1:2005 The test must be conducted on cotton textiles using the dry cotton drying programme

(c) Lamp	(i) Incandescent lamp	<p>— The luminous flux measurement test must be conducted in accordance with CIE 084-1989</p> <p>The test conditions for the luminous flux measurement test are as specified in —</p> <p>(a) for tungsten filament lamps, IEC60064:1993+ AMD1:2000+ AMD2:2002+ AMD3:2005; and</p> <p>(b) for tungsten halogen lamps, IEC60064:1993+ AMD1:2000+ AMD2:2002+ AMD3:2005 or IEC 60357:2002</p>
	(ii) CFLi	— IEC 60969:2016
	(iii) LED Lamp	<p>— IEC 62612:2013 or IEC 62612:2013+ AMD:2015 or IEC 62612:2013+ AMD1:2015+ AMD2:2018</p> <p>The luminous flux measurement test must be conducted in accordance with CIE S 025:2015</p>
	(iv) CFLni	— IEC 60901:1996+ AMD1:1997+ AMD2:2000
	(v) LFL	— IEC 60081:1997+ AMD1:2000
	(vi) LED lamp designed as a direct replacement for CFLni	<p>— IEC 62612:2013 or IEC 62612:2013+ AMD:2015 or IEC 62612:2013+ AMD1:2015+ AMD2:2018</p> <p>The luminous flux measurement test must be conducted in accordance with CIE S 025:2015</p>
	(vii) Linear LED lamp	<p>— IEC 62612:2013 or IEC 62612:2013+ AMD:2015 or IEC 62612:2013+ AMD1:2015+ AMD2:2018</p> <p>The luminous flux measurement test must be conducted in accordance with CIE S 025:2015</p>

(d) Refrigerator (other than a commercial storage refrigerator)	All	— IEC 62552-3:2015+ AMD1:2020
(e) Commercial storage refrigerator	All	— ISO 22041:2019
(f) Television	(i) All	— IEC 62087-3:2015 The test must be conducted using dynamic broadcast content video signal
	(ii) All (for standby power)	— IEC 62301:2011
(g) Motor	All	— Method 2-1-1B of IEC 60034-2-1:2014 or Method B of IEEE 112-2004
(h) Ballast	All	— IEC 62442-1:2011 or IEC 62442:2018
(i) Water heater	All	— SS 646:2019

Notes:

1. Where the expression “for standby power” appears in relation to a regulated good, the applicable test standard or method corresponding to that regulated good applies in relation to that regulated good when it is in standby mode.

2. Unless otherwise stated, the applicable test standard or method corresponding to a regulated good applies in relation to that regulated good when it is not in standby mode.”.

Replacement of Second Schedule

5. In the principal Regulations, replace the Second Schedule with —

“SECOND SCHEDULE

Regulation 4(2)

FEES

1. Application to register the following regulated goods:

(a) air-conditioner (other than three-phase variable refrigerant flow (VRF) air-conditioner or PAC)	\$70
(b) three-phase variable refrigerant flow (VRF) air-conditioner	\$85
(c) PAC	\$70
(d) clothes dryer	\$70
(e) lamp	\$70
(f) refrigerator (other than a commercial storage refrigerator)	\$70
(g) commercial storage refrigerator	\$70
(h) television	\$70
(i) motor	\$80
(j) ballast	\$70
(k) water heater	\$70
2. Application to renew the registration of the following regulated goods:

(a) air-conditioner (other than three-phase variable refrigerant flow (VRF) air-conditioner or PAC)	\$50
(b) three-phase variable refrigerant flow (VRF) air-conditioner	\$55
(c) PAC	\$50
(d) clothes dryer	\$50
(e) lamp	\$50

(f) refrigerator (other than a commercial storage refrigerator)	\$50
(g) commercial storage refrigerator	\$50
(h) television	\$50
(i) motor	\$60
(j) ballast	\$50
(k) water heater	\$50”.

Transitional provisions

6.—(1) Regulations 2(*b*), (*e*) and (*g*), 3(*b*), 4(*a*) to (*g*), (*o*), (*q*), (*w*), (*x*), (*z*), (*za*) and (*zb*) and 5 do not apply in relation to any supply, between 1 April 2025 and 31 March 2026 (both dates inclusive), of commercial storage refrigerators or regulated water heaters that are —

- (a) imported into or manufactured in Singapore before 1 April 2025; or
- (b) imported into or manufactured in Singapore on or after 1 April 2025 and supplied under an agreement entered into before that date.

(2) Despite regulation 4(*h*) to (*n*), (*p*) and (*r*) to (*u*), paragraphs 2 and 3(*d*) and (*e*) of the First Schedule to the principal Regulations as in force immediately before 1 April 2025 continue to apply in relation to any supply, between 1 April 2025 and 31 March 2026 (both dates inclusive), of any regulated goods mentioned in those provisions that are —

- (a) imported into or manufactured in Singapore before 1 April 2025; or
- (b) imported into or manufactured in Singapore on or after 1 April 2025 and supplied under an agreement entered into before that date.

(3) Despite regulation 4(*zb*), the test standard in paragraph 5(*a*)(vi) of the First Schedule to the principal Regulations as in force immediately before 1 April 2025 continues to apply for the purposes

of any test report to be submitted for the renewal of the registration, or modification, of any regulated good mentioned in that provision that was registered before that date.

(4) In this regulation —

“commercial storage refrigerator” has the meaning given by Part 2 of the Fourth Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017;

“regulated water heater” means any water heater described in Part 1 of the Eighth Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017.

*[G.N. Nos. S 603/2018; S 730/2019; S 199/2021;
S 995/2021; S 711/2023]*

Made on 24 January 2025.

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