#### L.N. 29 of 2023

# **Energy Efficiency (Labelling of Products) Ordinance** (Amendment of Schedules 1 and 2) Order 2023

(Made by the Secretary for Environment and Ecology under section 54 of the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598))

#### 1. Commencement

This Order comes into operation on a day to be appointed by the Secretary for Environment and Ecology by notice published in the Gazette.

## 2. Energy Efficiency (Labelling of Products) Ordinance amended

The Energy Efficiency (Labelling of Products) Ordinance (Cap. 598) is amended as set out in sections 3 and 4.

## 3. Schedule 1 amended (prescribed products)

Schedule 1, Part 2, after Division 8—

Add

# "Division 9—LED Lamps

1. In this Schedule—

LED lamp (LED 燈) means a lamp—

- (a) that uses the light-emitting diode technology, but not the organic light-emitting diode technology, to emit light; and
- (b) that—
  - (i) is capable of providing general lighting;

- (ii) uses mains electricity as the only power source; and
- (iii) has a rated lamp wattage not exceeding 60 watts.

#### 2. In this Division—

general lighting (一般照明) means illumination—

- (a) that is uniform across the area being illuminated; and
- (b) with all of the following optical characteristics—
  - (i) chromaticity coordinates x and y are within the range of—
    - (A) 0.270 < x < 0.530; and
    - (B)  $-2.3172 \text{ x}^2 + 2.3653 \text{ x} 0.2199 < \text{y} < -2.3172 \text{ x}^2 + 2.3653 \text{ x} 0.1595;$
  - (ii) luminous flux is not less than 60 lumens;

lamp (燈) means a product—

- (a) that is designed to emit light by using electricity; and
- (b) that is an encased assembly comprising—
  - (i) a light source;
  - (ii) a single lamp cap; and
  - (iii) a control gear, and any additional component, that is necessary for the stable operation of the product;

## Note (with no legislative effect)—

A luminaire, which is a complete lighting unit comprising one or more lamps or light sources, fittings and electric wires, does not fall within this definition.

lamp cap (燈頭), in relation to a product, means a part of the product that connects the product to a lamp-holder or lamp connector for electricity;

- mains electricity (市電) means the electricity that is supplied in Hong Kong at a voltage of 380/220V and a frequency of 50 Hz;
- rated lamp wattage (額定瓦數值), in relation to a product, means the wattage of the product as determined and declared by the manufacturer or importer of the product in accordance with the standard and requirements specified in the approved code of practice.

## Division 10—Gas Cookers

1. In this Schedule—

gas cooker (氣體煮食爐)—

- (a) means a product—
  - (i) that is a domestic gas appliance as defined by regulation 2 of the Gas Safety (Installation and Use) Regulations (Cap. 51 sub. leg. C);
  - (ii) that is designed for producing flames for cooking by burning town gas, or liquefied petroleum gas, as defined by section 2 of the Gas Safety Ordinance (Cap. 51); and
  - (iii) that—
    - (A) is of either built-in type or tabletop type; and
    - (B) has a rated heat input not exceeding 7 kilowatts for each burner; but

(b) does not include a portable cassette cooker.

### 2. In this Division—

burner (燃燒器), in relation to a product, means a part of the product that mixes gas with air for combustion;

portable cassette cooker (手提卡式煮食爐) means a product that is designed for producing flames for cooking by burning liquefied petroleum gas supplied by a disposable cylinder as defined by section 2 of the Gas Safety Ordinance (Cap. 51);

rated heat input (額定熱負荷), in relation to a burner of a product, means the heat input of the burner when operating independently, as determined and declared by the manufacturer or importer of the product in accordance with the standard and requirements specified in the approved code of practice.

- 3. For paragraph (a)(iii)(A) of the definition of *gas cooker* in section 1—
  - (a) a product is of built-in type if it is designed to be installed in a hollow of a similar size as the product in a kitchen worktop; and
  - (b) a product is of tabletop type if it is designed to be a stand-alone appliance that rests on a flat surface.

# Division 11—Gas Instantaneous Water Heaters

1. In this Schedule—

gas instantaneous water heater (即熱式氣體熱水爐) means a product—

(a) that is a domestic gas appliance as defined by regulation 2 of the Gas Safety (Installation and Use) Regulations (Cap. 51 sub. leg. C);

## (b) that—

- (i) is designed for heating water that flows through the product's heat exchanger by burning town gas, or liquefied petroleum gas, as defined by section 2 of the Gas Safety Ordinance (Cap. 51); and
- (ii) has a mechanism to control gas passage relative to water flow; and
- (c) that has a rated heat input not exceeding 70 kilowatts.

## 2. In section 1—

rated heat input (額定熱負荷), in relation to a product, means the heat input of the product as determined and declared by the manufacturer or importer of the product in accordance with the standard and requirements specified in the approved code of practice.".

## 4. Schedule 2 amended (specification of energy labels)

(1) Schedule 2, Part 1, after section 8—Add

- "9. The requirements to be complied with by energy label for LED lamps are specified in Part 10.
- 10. The requirements to be complied with by energy label for gas cookers are specified in Part 11.

- 11. The requirements to be complied with by energy label for gas instantaneous water heaters are specified in Part 12.".
- (2) Schedule 2, Part 4, section 1—

## Repeal

"largest".

(3) Schedule 2, English text, Part 4, section 1—

## Repeal

"labels"

### **Substitute**

"label".

(4) Schedule 2, Part 4, section 4—

## Repeal

"energy label in Part 4"

#### Substitute

"largest energy label".

(5) Schedule 2, Part 4—

# Repeal section 5

#### **Substitute**

- "5. (1) Subject to subsection (2), the energy label is to be printed on or affixed to a prominent position of the individual product packaging and is to be clearly visible.
  - (2) The energy label may be attached to the product packaging in a manner, if any, approved by the Director.".

(6) Schedule 2, Part 4, section 6—

## Repeal

everything after "label is to be chosen"

#### Substitute

"in accordance with the following criteria—

- (a) the energy label is to be encircled by a blank border that is at least 2 mm wide, and it must not cover more than 50% of the surface area of the largest side of the product packaging;
- (b) the size specified in section 2 of this Part (*largest label size*) is to be chosen if all the requirements in paragraph (a) (*paragraph (a) requirements*) can be complied with by choosing that size;
- (c) if the paragraph (a) requirements cannot be complied with by choosing the largest label size, then the largest of the following sizes that complies with the paragraph (a) requirements is to be chosen—
  - (i) 90% of the largest label size;
  - (ii) 80% of the largest label size;
  - (iii) 70% of the largest label size;
  - (iv) 60% of the largest label size;
- (d) if a size smaller than the largest label size is chosen in accordance with paragraph (c), sections 2 and 4 of this Part have effect as if the dimensions specified in that section 2 and the font size specified in that section 4 were adjusted proportionately;

(e) if the product packaging is so small that choosing a size of 60% of the largest label size would not comply with the paragraph (a) requirements, the specified person in respect of the product is to apply for the Director's directions on the manner of displaying the energy label on the packaging.".

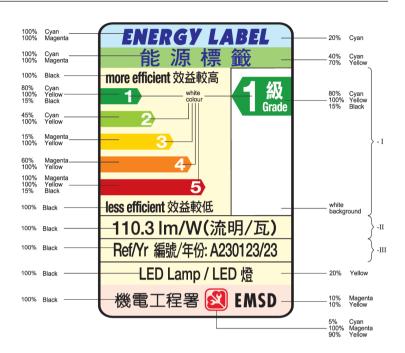
(7) Schedule 2, after Part 9—

Add

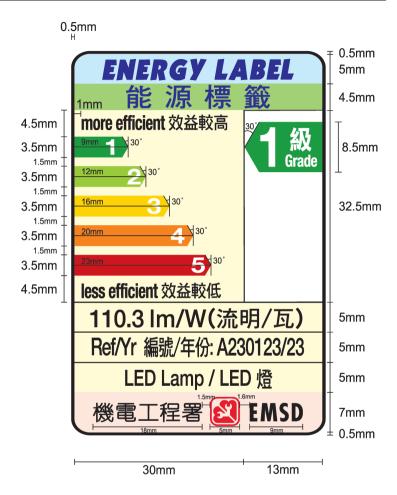
# **"Part 10**

# Requirements to be Complied with by Energy Label for LED Lamps

1. The colour and design of the energy label must be as specified in the diagram below—



2. The dimensions of the largest energy label must be as specified in the diagram below—



Actual Size: 44mm(W) x 65mm(H)

3. The energy label under section 1 of this Part is divided into 3 rectangular areas (marked "I", "II" and "III" by the side of the label). The information to be contained in each area of the energy label is specified in column 2 of Table I in relation to the area specified opposite to that information in column 1 of the Table.

### Table I

# Column 1 Column 2 Area Information to be contained

- I The energy efficiency grading of the model, calculated in accordance with the approved code of practice. The head of the arrow containing the energy efficiency grade number is to be placed at the same level and has the same colour as the head of the relevant arrow on the left.
- II The lumens per watt, being the lamp lumen efficacy calculated by computing the ratio of the measured lamp luminous flux and the lamp electrical power input, determined in accordance with the approved code of practice.
- III The reference number assigned by the Director and the year in which the reference number is assigned or, if the energy efficiency grading is calculated in accordance with the new calculation method under section 12 of this Ordinance, the year in which the new calculation method takes effect.

4. The specifications for the font and font size of the words printed on the largest energy label are as follows—

Column 1	Column 2
Description on the energy label	Font and font size
ENERGY LABEL	13 point Italic Kabel Ult BT (English)
能源標籤	12.5 point DFHeiBold (Chinese)
more efficient	9.6 point Helvetica Neue Bold (English)
效益較高	9.1 point DFHeiBold (Chinese)
less efficient	9.6 point Helvetica Neue Bold (English)
效益較低	9.1 point DFHeiBold (Chinese)
Grade on the left (1, 2, 3, 4, 5)	10.6 point Helvetica Neue Bold (English)
Grade on the right—	
The word "Grade"	8 point Helvetica Neue Bold Condensed (English)
The figure "1"	27 point Helvetica Neue Bold (English)
The word "級"	14 point DFHeiBold (Chinese)

Section 4

L.N. 29 of 2023 B321

Column 1 Description on the energy label	Column 2  Font and font size
2222-83 20022	2 0000 0000 0000 0000
lm/W	11.8 point Helvetica Neue Medium (English)
(流明/瓦)	10.8 point DFHeiBold (Chinese)
Figure of lm/W	11.8 point Helvetica Neue Medium (English)
Ref/Yr	11.8 point Helvetica Neue Medium Condensed (English)
編號/年份:	10.8 point DFHeiBold Condensed (Chinese)
Characters of reference number and year	11.8 point Helvetica Neue Medium Condensed (English)
LED Lamp /	10.65 point Helvetica Neue Medium (English)
LED 燈	10.65 point Helvetica Neue Medium (English)
	10.65 point DFHeiBold (Chinese)
機電工程署	10.4 point Monotype Yuen (Chinese)
EMSD and its logo	11.6 point Futura Bold Condensed (English)

5. (1) Subject to subsection (2), the energy label is to be printed on or affixed to a prominent position of the individual product packaging and is to be clearly visible.

- (2) The energy label may be attached to the product packaging in a manner, if any, approved by the Director.
- 6. The size of the energy label is to be chosen in accordance with the following criteria—
  - (a) the energy label is to be encircled by a blank border that is at least 2 mm wide, and it must not cover more than 50% of the surface area of the largest side of the product packaging;
  - (b) the size specified in section 2 of this Part (*largest label size*) is to be chosen if all the requirements in paragraph (a) (*paragraph (a) requirements*) can be complied with by choosing that size;
  - (c) if the paragraph (a) requirements cannot be complied with by choosing the largest label size, then the largest of the following sizes that complies with the paragraph (a) requirements is to be chosen—
    - (i) 90% of the largest label size;
    - (ii) 80% of the largest label size;
    - (iii) 70% of the largest label size;
    - (iv) 60% of the largest label size;

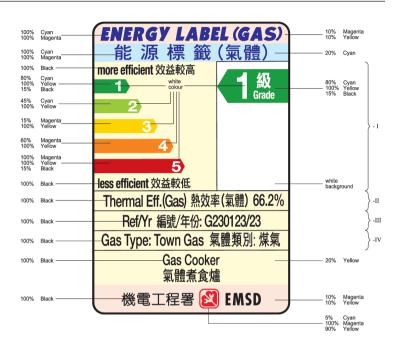
(d) if a size smaller than the largest label size is chosen in accordance with paragraph (c), sections 2 and 4 of this Part have effect as if the dimensions specified in that section 2 and the font size specified in that section 4 were adjusted proportionately;

(e) if the product packaging is so small that choosing a size of 60% of the largest label size would not comply with the paragraph (a) requirements, the specified person in respect of the product is to apply for the Director's directions on the manner of displaying the energy label on the packaging.

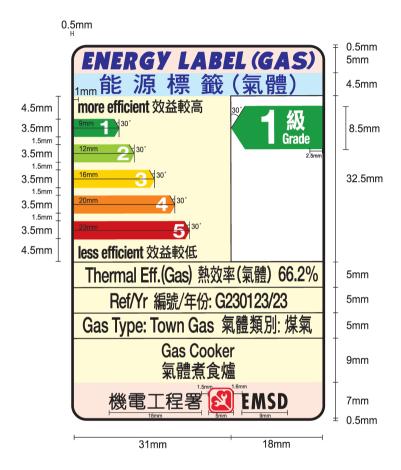
# Part 11

# Requirements to be Complied with by Energy Label for Gas Cookers

1. The colour and design of the energy label for a gas cooker that burns town gas must be as specified in the diagram below—

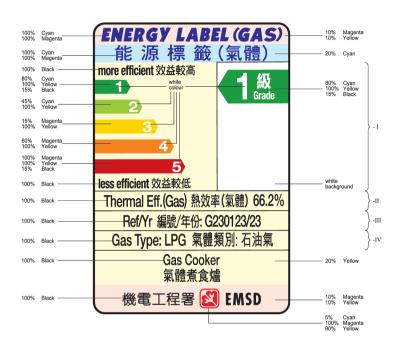


2. The dimensions of the energy label for a gas cooker that burns town gas must be as specified in the diagram below—

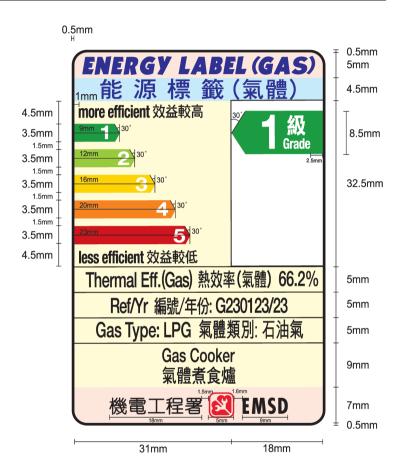


Actual Size: 50mm(W) x 74mm(H)

3. The colour and design of the energy label for a gas cooker that burns liquefied petroleum gas must be as specified in the diagram below—



4. The dimensions of the energy label for a gas cooker that burns liquefied petroleum gas must be as specified in the diagram below—



Actual Size: 50mm(W) x 74mm(H)

5. The energy label under section 1 or 3 of this Part is divided into 4 rectangular areas (marked "I", "II", "III" and "IV" by the side of the label). The information to be contained in each area of the energy label is specified in column 2 of Table J in relation to the area specified opposite to that information in column 1 of the Table.

#### Table J

## Column 1 Column 2 Information to be contained Area T The energy efficiency grading of the model, calculated in accordance with the approved code of practice. The head of the arrow containing the energy efficiency grade number is to be placed at the same level and has the same colour as the head of the relevant arrow on the left The thermal efficiency, calculated by computing П the ratio of the heat generated at a given time to the measured heat input, determined in

III The reference number assigned by the Director and the year in which the reference number is assigned or, if the energy efficiency grading is calculated in accordance with the new calculation method under section 12 of this Ordinance, the year in which the new calculation method takes effect.

accordance with the approved code of practice.

- IV The type of gas burnt by a gas cooker of the model.
- 6. The specifications for the font and font size of the words printed on one or both of the energy labels in this Part are as follows—

Column 1 Description on the	Column 2
energy label	Font and font size
ENERGY LABEL (GAS)	13 point Italic Kabel Ult BT (English)
能源標籤(氣體)	12.5 point DFHeiBold (Chinese)
more efficient	9.6 point Helvetica Neue Bold (English)
效益較高	9.1 point DFHeiBold (Chinese)
less efficient	9.6 point Helvetica Neue Bold (English)
效益較低	9.1 point DFHeiBold (Chinese)
Grade on the left (1, 2, 3, 4, 5)	10.6 point Helvetica Neue Bold (English)
Grade on the right—	
The word "Grade"	8 point Helvetica Neue Bold Condensed (English)
The figure "1"	27 point Helvetica Neue Bold (English)
The word "級"	14 point DFHeiBold (Chinese)
Thermal Eff.(Gas)	11.8 point Helvetica Neue Medium Condensed (English)
熱效率(氣體)	10.8 point DFHeiBold Condensed (Chinese)

Column 1	Column 2
Description on the energy label	Font and font size
Figure of thermal efficiency and the sign "%"	11.8 point Helvetica Neue Medium Condensed (English)
Ref/Yr	11.8 point Helvetica Neue Medium Condensed (English)
編號/年份:	10.8 point DFHeiBold Condensed (Chinese)
Characters of reference number and year	11.8 point Helvetica Neue Medium Condensed (English)
Gas Type:	11.8 point Helvetica Neue Medium Condensed (English)
氣體類別:	10.8 point DFHeiBold Condensed (Chinese)
Town Gas	11.8 point Helvetica Neue Medium Condensed (English)
煤氣	10.8 point DFHeiBold Condensed (Chinese)
LPG	11.8 point Helvetica Neue Medium Condensed (English)
石油氣	10.8 point DFHeiBold Condensed (Chinese)

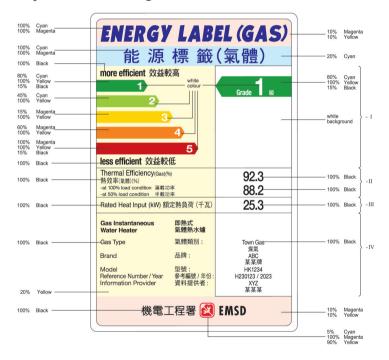
Column 1	Column 2
Description on the energy label	Font and font size
Gas Cooker	10.65 point Helvetica Neue Medium (English)
氣體煮食爐	10.65 point DFHeiBold (Chinese)
機電工程署	10.4 point Monotype Yuen (Chinese)
EMSD and its logo	11.6 point Futura Bold Condensed (English)

- 7. (1) Subject to subsection (3), the energy label is to be attached or affixed to a prominent position of the gas cooker and is to be clearly visible.
  - (2) To avoid doubt, if only a part of the gas cooker is being exhibited, the energy label is to be attached or affixed to a prominent position of that part and is to be clearly visible.
  - (3) The energy label may be attached to the gas cooker or its packaging in a manner, if any, approved by the Director.

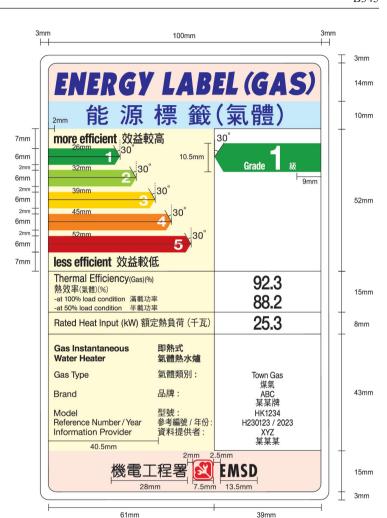
## Part 12

# Requirements to be Complied with by Energy Label for Gas Instantaneous Water Heaters

1. The colour and design of the energy label for a gas instantaneous water heater that burns town gas must be as specified in the diagram below—



2. The dimensions of the energy label for a gas instantaneous water heater that burns town gas must be as specified in the diagram below—

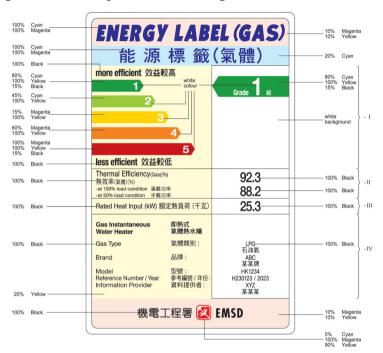


Actual Size: 106mm(W) x 163mm(H)

L.N. 29 of 2023

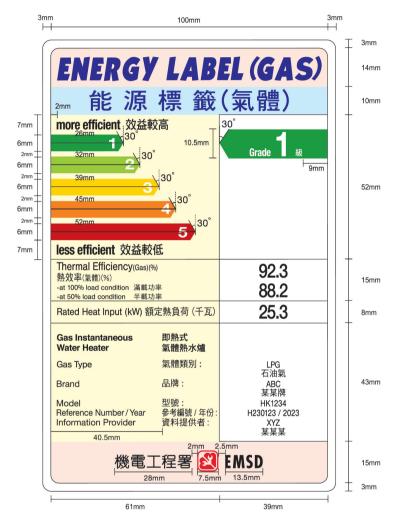
Section 4 B347

3. The colour and design of the energy label for a gas instantaneous water heater that burns liquefied petroleum gas must be as specified in the diagram below—



4. The dimensions of the energy label for a gas instantaneous water heater that burns liquefied petroleum gas must be as specified in the diagram below—

B349



Actual Size: 106mm(W) x 163mm(H)

5. The energy label under section 1 or 3 of this Part is divided into 4 rectangular areas (marked "I", "II", "III" and "IV" by the side of the label). The information to be contained in each area of the energy label is specified in column 2 of Table K in relation to the area specified opposite to that information in column 1 of the Table.

## Table K

Column 1	Column 2
Area	Information to be contained

- I The energy efficiency grading of the model, calculated in accordance with the approved code of practice. The head of the arrow containing the energy efficiency grade number is to be placed at the same level and has the same colour as the head of the relevant arrow on the left.
- II The thermal efficiency, calculated by computing the ratios of the heat generated at a given time to the measured heat input at 100% load condition and at 50% load condition, determined in accordance with the approved code of practice.
- III The rated heat input, as determined in accordance with the approved code of practice.

Column 1 Column 2
Area Information to be contained

IV The type of gas burnt by a gas instantaneous water heater of the model, the brand name, the product model, the reference number assigned by the Director, the year in which the reference number is assigned or, if the energy efficiency grading is calculated in accordance with the new calculation method under section 12 of this Ordinance, the year in which the new calculation method takes effect and the name of the information provider. The information provider is the specified person who submitted the specified information to the Director.

6. The specifications for the font and font size of the words printed on one or both of the energy labels in this Part are as follows—

Column 1	Column 2
Description on the energy label	Font and font size
ENERGY LABEL (GAS)	31 point Italic Kabel Ult BT (English)
能源標籤(氣體)	24 point DFHeiBold (Chinese)

Column 1 Description on the	Column 2
energy label	Font and font size
more efficient	14 point Helvetica Neue Bold (English)
效益較高	14 point DFHeiBold (Chinese)
less efficient	14 point Helvetica Neue Bold (English)
效益較低	14 point DFHeiBold (Chinese)
Grade on the left (1, 2, 3, 4, 5)	15 point Helvetica Neue Bold (English)
Grade on the right—	
The word "Grade"	11 point Helvetica Neue Bold Condensed (English)
The figure "1"	35.5 point Helvetica Neue Bold (English)
The word "級"	9.5 point DFHeiBold (Chinese)
Thermal Efficiency(Gas)(%)	11.5 (8) point Helvetica Roman (English)
熱效率(氣體)(%)	10 (8) point DFHeiMedium (Chinese)

Column 1	Column 2
Description on the energy label	Font and font size
-at 100% load condition	7 point Helvetica Roman (English)
滿載功率	7 point DFHeiMedium (Chinese)
-at 50% load condition	7 point Helvetica Roman (English)
半載功率	7 point DFHeiMedium (Chinese)
Rated Heat Input (kW)	10 point Helvetica Roman (English)
額定熱負荷(千瓦)	10 point DFHeiMedium (Chinese)
Figures of thermal efficiency and rated heat input on the right	20 point Helvetica Medium (English)
Gas Instantaneous Water Heater	9 point Helvetica Bold (English)
即熱式氣體熱水爐	9 point DFHeiBold (Chinese)

Column 1	Column 2
Description on the energy label	Font and font size
Gas Type	
Brand	
Model	9 point Helvetica Roman
Reference Number / Year	(English)
Information Provider	
氣體類別:	
品牌:	9 point DFHeiMedium
型號:	(Chinese)
參考編號/年份:	
資料提供者:	
Characters of gas type, brand, model,	9 point Helvetica Roman (English)
reference number, year and information	7.5 point DFHeiMedium
provider on the right	(Chinese)
機電工程署	16 point Monotype Yuen (Chinese)
EMSD and its logo	17.9 point Futura Bold Condensed (English)

7. (1) Subject to subsection (3), the energy label is to be attached or affixed to a prominent position of the gas instantaneous water heater and is to be clearly visible.

- (2) To avoid doubt, if only a part of the gas instantaneous water heater is being exhibited, the energy label is to be attached or affixed to a prominent position of that part and is to be clearly visible.
- (3) The energy label may be attached to the gas instantaneous water heater or its packaging in a manner, if any, approved by the Director.".

TSE Chin-wan
Secretary for Environment and
Ecology

13 March 2023

Explanatory Note Paragraph 1

L.N. 29 of 2023 B363

## **Explanatory Note**

Under section 4 of the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598) (*Ordinance*), a manufacturer or importer must not supply a prescribed product unless the product—

- (a) is a product of a listed model with a reference number assigned by the Director of Electrical and Mechanical Services; and
- (b) bears an energy label.
- 2. A similar requirement is imposed under section 5 of the Ordinance on a person who is not a manufacturer or importer of a prescribed product.
- 3. The Energy Efficiency (Labelling of Products) Ordinance (Amendment of Schedule 1) Order 2022 was made to amend Part 1 of Schedule 1 to the Ordinance by adding LED lamps, gas cookers and gas instantaneous water heaters (*new prescribed products*) as prescribed products under the Ordinance.
- 4. This Order amends Part 2 of Schedule 1 to the Ordinance by adding new Divisions 9, 10 and 11 which contain the descriptions of the new prescribed products.
- 5. Schedule 2 to the Ordinance is also amended by adding new Parts 10, 11 and 12 which set out the requirements to be complied with by the energy labels for the new prescribed products.
- 6. This Order also makes textual amendments to the requirements to be complied with by the energy label for compact fluorescent lamps in Part 4 of Schedule 2 to the Ordinance.