Proposal on Review of the Grading Standards under the Mandatory Energy Efficiency Labelling Scheme

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Section 1 Background of Mandatory Energy Efficiency Labelling Scheme

- 1. The Mandatory Energy Efficiency Labelling Scheme (MEELS) was introduced through the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598) (the Ordinance) which was enacted on 9 May 2008. Under the Ordinance, energy labels are required to be shown on all prescribed products for supply in Hong Kong to inform consumers of their energy efficiency performance.
- 2. The initial phase of MEELS, covering three types of products, namely room air conditioners, refrigerating appliances and compact fluorescent lamps (CFLs), has been fully implemented since 9 November 2009. The second phase of MEELS, extending the coverage to two more electrical products, namely washing machines and dehumidifiers, has been fully implemented since 19 September 2011. The upgrading of energy efficiency standards for three types of products, namely room air conditioners, refrigerating appliances and washing machines has been fully implemented since 25 November 2015.
- 3. The third phase of MEELS further extends the coverage to three additional types of electrical products, namely televisions, storage type electric water heaters and induction cookers, and expands the scope of room air conditioners and washing machines. The third phase is commenced from 1 June 2018 with a grace period of 18 months.
- 4. All prescribed products for supply in Hong Kong are required to be listed models with reference numbers and bear energy labels.
- 5. A Code of Practice on Energy Labelling of Products (CoP) is approved and issued under section 42 of the Ordinance. The CoP provides practical guidance for requirements under the Ordinance. The latest edition of the CoP is available at the website of the Electrical and Mechanical Services Department with the following link:

https://www.emsd.gov.hk/energylabel/en/doc/2018 CoP (English).pdf

- 6. The scope and grading standards of MEELS are kept under regular reviews to i.) ensure that the grading standards will not be lagged behind by technological advancement and ii.) help consumers to differentiate among energy efficient products. Therefore, it is necessary to review the grading standard under the MEELS.
- 7. Section 2 of this document outlines the proposal on upgrading of energy efficiency standards for single package type room air conditioners, CFLs and dehumidifiers.
- 8. Section 3 of this document summarize the proposed amendments in CoP 2018.

- 9. Section 4 of this documents outlines the proposed transitional arrangements for the submission of product information and method of affixing energy label.
- 10. Section 5 of this document invites views on the proposed upgrading for single package type room air conditioners, CFLs and dehumidifiers on or before 31 Oct 2019.
- 11. This proposal document shall be read in conjunction with the CoP.

Section 2 Proposed Upgrading for Single Package Type Room Air Conditioners, Compact Fluorescent Lamps and Dehumidifiers

Section 2.1 Single Package Type Room Air Conditioners

Proposed Energy Efficiency Grading Standard of Single Package Type Room Air Conditioners

12. The energy efficiency grades for single package type and split type room air conditioners are proposed to be aligned at the same range of Cooling Seasonal Performance Factor⁽¹⁾. The table below shows the current and proposed grading standards for the room air conditioners on Cooling Seasonal Performance Factor.

| Energy Efficiency Grade for | Current Co Performance Fact | Proposed Cooling Seasonal | | |
|-----------------------------------|---|--------------------------------|--|--|
| Cooling Performance | Single Package Type Categories 1 - 2 | Split Type Categories 3 - 4 | Performance Factor (CSPF), F _{CSP} | |
| 1 | $3.00 \le F_{\rm CSP}$ | $4.50 \le F_{\rm CSP}$ | $4.50 \le F_{\text{CSP}}$ | |
| 2 | $2.80 \le F_{\rm CSP} < 3.00$ | $3.50 \le F_{\rm CSP} < 4.50$ | $3.50 \le F_{\rm CSP} < 4.50$ | |
| 3 | $2.60 \le F_{\rm CSP} < 2.80$ | $3.15 \le F_{\rm CSP} < 3.50$ | $3.15 \le F_{\rm CSP} < 3.50$ | |
| 4 | $2.40 \le F_{\rm CSP} < 2.60$ | $2.80 \le F_{\rm CSP} < 3.15$ | $2.80 \le F_{CSP} < 3.15$ | |
| 5 | $F_{\text{CSP}} < 2.40$ | $F_{\rm CSP} < 2.80$ | $F_{\text{CSP}} < 2.80$ | |

Note:

i. Current requirement:

In order to obtain Grade 1 to 4 for cooling performance, the room air conditioner concerned shall also pass the maximum cooling performance test. Only Grade 5 will be accorded if the room air conditioner does not pass the maximum cooling performance test; or the F_{CSP} < 2.40 for single package type room air conditioner or the F_{CSP} < 2.80 for split type room air conditioner.

ii. Proposed requirement:

In order to obtain Grade 1 to 4 for cooling performance, the room air conditioner concerned shall also pass the maximum cooling performance test. Only Grade 5 will be accorded if the room air conditioner does not pass the maximum cooling performance test; or the $F_{CSP} < 2.80$.

¹ The cooling seasonal performance factor (CSPF), F_{CSP} , of the room air conditioner shall be calculated by dividing cooling seasonal total load (CSTL) by cooling seasonal energy consumption (CSEC) calculated in accordance with ISO 16358-1 (Unit: Wh).

13. The current and proposed standards of the room air conditioners on Heating Seasonal Performance Factors⁽²⁾ are shown below:

| Energy Efficiency Grade for Heating Performance | Current Heati Performance Facto Single Package Type | ng Seasonal or (HSPF), <i>F</i> нsp Split Type | Proposed Heating Seasonal Performance Factor (HSPF), F _{HSP} |
|---|---|--|--|
| | Category 2 | Calegory 4 | |
| 1 | $2.60 \le F_{\mathrm{HSP}}$ | $3.60 \le F_{\mathrm{HSP}}$ | $3.60 \le F_{\text{HSP}}$ |
| 2 | $2.40 \le F_{\rm HSP} < 2.60$ | $3.10 \le F_{\rm HSP} < 3.60$ | $3.10 \le F_{\rm HSP} < 3.60$ |
| 3 | $2.20 \le F_{\rm HSP} < 2.40$ | $2.80 \le F_{\rm HSP} < 3.10$ | $2.80 \le F_{\rm HSP} < 3.10$ |
| 4 | $2.00 \le F_{\rm HSP} < 2.20$ | $2.50 \le F_{\rm HSP} < 2.80$ | $2.50 \le F_{\rm HSP} < 2.80$ |
| 5 | $F_{\rm HSP}$ < 2.00 | $F_{\rm HSP}$ < 2.50 | $F_{\rm HSP}$ < 2.50 |

Note:

i. Current requirement:

In order to obtain Grade 1 to 4 for heating performance, the room air conditioner of reverse cycle type concerned shall also pass the maximum heating performance test. Only Grade 5 for heating will be accorded if the room air conditioner of reverse cycle type does not pass the maximum heating performance test; or the $F_{HSP} < 2.00$ for single package type room air conditioner or the $F_{HSP} < 2.50$ for split type room air conditioner.

ii. Proposed requirement:

In order to obtain Grade 1 to 4 for heating performance, the room air conditioner of reverse cycle type concerned shall also pass the maximum heating performance test. Only Grade 5 for heating will be accorded if the room air conditioner of reverse cycle type does not pass the maximum heating performance test; or the $F_{HSP} < 2.5$.

 $^{^{2}}$ The heating seasonal performance factor (HSPF), F_{HSP}, of the room air conditioner of reverse cycle type shall be calculated by dividing heating seasonal total load (HSTL) by heating seasonal energy consumption (HSEC) calculated in accordance with ISO 16358-1 (Unit: Wh).

Section 2.2 CFLs

Proposed Energy Efficiency Grading Standard of CFLs

14. The current energy efficiency grade is determined by using the measured lamp luminous efficacy (Em) or the rated lamp luminous efficacy (Er)⁽³⁾, whichever is smaller. The existing grading requirement of CFLs is shown as follows.

| Rated Lamp | Current X ⁽⁴⁾ (Lumen/W) | | | | | | | | | | |
|--------------------------|---------------------------------------|------------------------|------------------------|------------------------|------------------------|--|--|--|--|--|--|
| (L _w) (Watt) | Grade 1 ⁽⁵⁾ | Grade 2 ⁽⁵⁾ | Grade 3 ⁽⁶⁾ | Grade 4 ⁽⁶⁾ | Grade 5 ⁽⁷⁾ | | | | | | |
| ≦10 | X≧49.5 | 49.5>X≧45 | $45>X \ge 40.5$ | X<40.5 | N/A | | | | | | |
| $10 < L_w \leq 20$ | X≧55 | 55>X≧50 | 50>X≧45 | X<45 | N/A | | | | | | |
| $20 < L_w \leq 30$ | X≧60.5 | 60.5>X≧55 | 55>X≧49.5 | X<49.5 | N/A | | | | | | |
| $30 < L_w$ | X≧66 | 66>X≧60 | 60>X≧54 | X<54 | N/A | | | | | | |

15. It is proposed that the grading requirement of CFLs aligns with that of LED lamps under Hong Kong Voluntary Energy Efficiency Labelling Scheme, except for the Grade 5 requirement. The proposed energy efficiency grade of the CFLs is shown in the table below.

| Proposed X ⁽⁴⁾ | | | | | | | | | |
|---------------------------|--|-----------------|-----------------|--------|--|--|--|--|--|
| | (Lumen/W) | | | | | | | | |
| Grade 1 ⁽⁵⁾ | Grade 1 ⁽⁵⁾ Grade 2 ⁽⁵⁾ Grade 3 ⁽⁶⁾ Grade 4 ⁽⁶⁾ Grade 5 ⁽⁷⁾ | | | | | | | | |
| $X \ge 110$ | $110 > X \ge 90$ | $90 > X \ge 63$ | $63 > X \ge 50$ | 50 > X | | | | | |

³ The rated lamp luminous efficacy (Er) which is determined and calculated by dividing the rated luminous flux by the rated wattage of the same product model.

⁴ Where X = measured lamp luminous efficacy (Em) or rated lamp luminous efficacy (Er), whichever is smaller. ⁵ Applicable to a CFL with both measured average life and rated average life not less than 8,000 hours, and both measured lumen maintenance and rated lumen maintenance at 2,000 hours not less than 80%.

⁶ Applicable to a CFL with both measured average life and rated average life not less than 6,000 hours, and both measured lumen maintenance and rated lumen maintenance at 2,000 hours not less than 78%.

⁷ Applicable to a CFL with measured average life or rated average life less than 6,000 hours, or measured lumen maintenance or rated lumen maintenance at 2,000 hours less than 78%.

Section 2.3 Dehumidifiers

Proposed Energy Efficiency Grading Standard of Dehumidifiers

16. With the rated dehumidifying capacity, Energy Factor $(EF)^{(8)}$ is calculated for determining the energy efficiency grade of the dehumidifiers. The existing energy efficiency grade of the dehumidifier is shown as follows.

| Rated dehumidifying | Current Energy Factor (EF) (litres/kWh) | | | | | | | | | | |
|--|---|-----------------------------|-----------------------------|----------------------|-----------|--|--|--|--|--|--|
| capacity (D _R) (litres/day) | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | | | | | | |
| < 10 | $\text{EF} \ge 1.60$ | $1.60 > EF \ge 1.35$ | $1.35 > EF \ge 1.15$ | $1.15 > EF \ge 1.00$ | 1.00 > EF | | | | | | |
| $10 \le D_R < 15$ | $\text{EF} \ge 1.85$ | $1.85 > EF \ge 1.55$ | $1.55 > EF \ge 1.35$ | $1.35 > EF \ge 1.20$ | 1.20 > EF | | | | | | |
| $15 \le D_R < 20$ | $\mathrm{EF} \ge 2.00$ | $2.00 > EF \ge 1.65$ | $1.65 > EF \ge 1.45$ | $1.45 > EF \ge 1.25$ | 1.25 > EF | | | | | | |
| $20 \leq D_R < 25$ | $\text{EF} \ge 2.10$ | $2.10 > EF \ge 1.75$ | $1.75 > \text{EF} \ge 1.55$ | $1.55 > EF \ge 1.35$ | 1.35 > EF | | | | | | |
| $25 \le D_R < 35$ | EF ≥ 2.35 | $2.35 > \text{EF} \ge 2.00$ | $2.00 > \text{EF} \ge 1.70$ | $1.70 > EF \ge 1.50$ | 1.50 > EF | | | | | | |

17. For the proposed grading standard, the calculation method as specified in the CoP remains the same. The proposed energy efficiency grade of the dehumidifiers is determined as shown in the table below.

| Rated dehumidifying | Proposed Energy Factor (EF) (litres/kWh) | | | | | | | | | | |
|--|--|-----------------------------|----------------------|-----------------------------|-----------|--|--|--|--|--|--|
| capacity (D _R) (litres/day) | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | | | | | | |
| < 10 | $\text{EF} \ge 2.00$ | $2.00 > \text{EF} \ge 1.70$ | $1.70 > EF \ge 1.45$ | $1.45 > EF \ge 1.25$ | 1.25 > EF | | | | | | |
| $10 \le D_R < 15$ | $\text{EF} \ge 2.30$ | $2.30 > \text{EF} \ge 1.95$ | $1.95 > EF \ge 1.70$ | $1.70 > EF \ge 1.50$ | 1.50 > EF | | | | | | |
| $15 \le D_R < 20$ | $\text{EF} \ge 2.50$ | $2.50 > EF \ge 2.05$ | $2.05 > EF \ge 1.80$ | $1.80 > EF \ge 1.55$ | 1.55 > EF | | | | | | |
| $20 \leq D_R < 25$ | $\text{EF} \ge 2.65$ | $2.65 > \text{EF} \ge 2.20$ | $2.20 > EF \ge 1.95$ | $1.95 > \text{EF} \ge 1.70$ | 1.70 > EF | | | | | | |
| $25 \le D_R < 35$ | $\mathrm{EF} \ge 2.95$ | $2.95 > EF \ge 2.50$ | $2.50 > EF \ge 2.15$ | $2.15 > EF \ge 1.90$ | 1.90 > EF | | | | | | |

 $^{^{8}}$ The energy factor (litres/kWh) is determined by conducting the dehumidifying capacity test and is calculated by dividing the amount of water removed (litres) by the corresponding energy consumption (kWh).

Section 3 – Summary of Proposed Amendments in CoP 2018

- 18. The following summary table includes the major amendments, with requirements tightened in general for enhanced energy efficiency. Please refer to CoP 2018 for the detailed requirements.
- 19. This serves the purpose of ease of reference only. The Code should take preference over any discrepancy if identified.
- 20. The energy efficiency grading specified on the energy labels shown on the appendices in the draft revision of CoP are to be amended in accordance with the CoP.

| Clause | | CoP 2018 | | Draft Revision of CoP (Aug 2019 Revision) | | | |
|--|--|-------------------------------|-----------------------------------|---|--|-----------------------|-------------------|
| Room Air Conditioners | · | | | | | | |
| 1.4 | ISO 5151:2010 | ISO 5151:2017 | | | | | |
| Table 7.8 Energy efficiency grades for cooling performance | Cooling Seasonal Po (CSPF) | erformance Factor , F_{CSP} | Energy Efficiency Grade for | | Cooling Seasonal Performance Factor (CSPF) | Energy Efficiency | |
| | Single Package Type Split Type Cooling Performance Performance Performance | | | $F_{\rm CSP}$ | Performance ^(Note) | | |
| | Categories 1 - 2 | Categories 3 - 4 | (Note) | | Categories 1 - 4 | | |
| | $3.00 \le F_{\rm CSP}$ | $4.50 \le F_{\text{CSP}}$ | 1 | | $4.50 \le F_{\text{CSP}}$ | 1 | |
| | $2.80 \le F_{\rm CSP} < 3.00$ | $3.50 \le F_{\rm CSP} < 4.50$ | 2 | | $3.50 \le F_{\rm CSP} < 4.50$ | 2 | |
| | $2.60 \le F_{\rm CSP} < 2.80$ | $3.15 \le F_{\rm CSP} < 3.50$ | 3 | | $3.15 \le F_{\rm CSP} < 3.50$ | 3 | |
| | $2.40 \le F_{\rm CSP} < 2.60$ | $2.80 \le F_{\rm CSP} < 3.15$ | 4 | | $2.80 \le F_{\rm CSP} < 3.15$ | 4 | |
| | $F_{\rm CSP} < 2.40$ | $F_{\rm CSP} < 2.80$ | 5 | | $F_{\rm CSP} < 2.80$ | 5 | |
| | | | | | | | |
| Table 7.8 | Note: In order to obtain | Grade 1 to 4 for cooli | ng performance, the | Note: In order to | o obtain Grade 1 to | 4 for cooling perform | nance, the room |
| Energy efficiency grades for | room air condit | ioner concerned sh | all also pass the | air condi | tioner concerned sh | all also pass the ma | aximum cooling |
| cooling performance (Note) | maximum cooling | g performance test. C | Only Grade 5 will be | performat | nce test. Only Grad | le 5 will be accorded | l if the room air |
| | accorded if the r | room air conditioner | does not pass the | condition | er does not pass the | maximum cooling p | erformance test; |
| | maximum cooling | gperformance test; or | the FCSP < 2.40 for | or the FC | SP < 2.80. | | |
| | single package ty | pe room air condition | oner or the FCSP < | | | | |
| | 2.80 for split type | room air conditioner | ſ. | | | | |
| | | | | | | | |

| Clause | | CoP 2018 | | Draft Revision of CoP (Aug 2019 Revision) | | | | | |
|--|--|--|--|--|--|--|---|--|--|
| Table 7.9 Energy efficiency grades for heating performance | Heating Seasonal Pe (HSPF), | rformance Factor F _{HSP} | Energy Efficiency Grade for Heating | | Heating Seasonal Performance Factor (HSPF), | Energy Efficiency Grade | | | |
| | Single Package Type Category 2 | Split Type Category 4 | Performance (Note) | | F _{HSP} | Performance (Note) | | | |
| | $2.60 \le F_{\text{HSP}}$ | $3.60 \le F_{\text{HSP}}$ | 1 | | Categories 2 and 4 $3.60 \le E_{\text{tran}}$ | 1 | | | |
| | $2.40 \le F_{\rm HSP} < 2.60$ | $3.10 \le F_{\rm HSP} < 3.60$ | 2 | | $3.00 \le T_{\text{HSP}}$ | 2 | | | |
| | $2.20 \le F_{\rm HSP} < 2.40$ | $2.80 \le F_{\rm HSP} < 3.10$ | 3 | | $3.10 \le F_{HSP} < 3.00$ | 3 | | | |
| | $2.00 \le F_{\rm HSP} < 2.20$ | $2.50 \le F_{\rm HSP} < 2.80$ | 4 | | $2.00 \le T_{\text{HSP}} < 3.10$ $2.50 \le F_{\text{HSP}} < 2.80$ | 4 | | | |
| | $F_{\rm HSP} < 2.00$ | $F_{\rm HSP} < 2.50$ | 5 | | $F_{\text{HSP}} < 2.50$ | 5 | | | |
| Table 7.9 Energy efficiency grades for heating performance (Note) | Note: In order to obtai room air conditi also pass the m Grade 5 for he conditioner of maximum heatin single package 2.50 for split typ | n Grade 1 to 4 for he ioner of reverse cycl naximum heating pe eating will be acco reverse cycle typ ng performance test; type room air conditio | eating performance, the le type concerned shall erformance test. Only orded if the room air e does not pass the or the FHSP < 2.00 for itioner or the FHSP < ner. | Note: In order to obtain Grade 1 to 4 for heating performance, the room air conditioner of reverse cycle type concerned shall also pass the maximum heating performance test. Only Grade 5 for heating will be accorded if the room air conditioner of reverse cycle type does not pass the maximum heating performance test; or the FHSP < 2.50. | | | | | |
| Appendix 1A (Example for Calculating the Energy Efficiency Grade for Room Air Conditioner (Cooling - Fixed Capacity Single Package Type)) | | | | The Energy Fixed Cap to the tight | y Efficiency Grade of pacity Single Package ened grading require | the Room Air Cond Type) in the examp ment. | ditioner (Cooling ple is revised due | | |

| Clause | | | CoP 2 | 018 | | | Draft Revision of CoP (Aug 2019 Revision) | | | | |
|---|-------------------------------------|------------------------------------|-----------|-----------|---------|----------|---|---------------------------------------|------------------------------------|-----------------------------------|------------------------------|
| Compact Fluorescent Lamps | | | | | | | | | | | |
| Table 9.1 Derivation of energy efficiency grades | Rated Lamp | X ^{Note (1)} (Lumen/W) | | | | | | X | Note (1) (Lumen/V | V) | |
| | Wattage (L _w) (Watt) | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 |
| | | N | ote (2) | Note | (3) | Note (4) | N | lote (2) | Note (3) | | Note (4) |
| | ≦10 | X≧49.5 | 49.5>X≧45 | 45>X≧40.5 | X<40.5 | N/A | $X \ge 110$ | $110 > X \ge 90$ | $90 > X \ge 63$ | $63 > X \ge 50$ | 50 > X |
| | $10 < L_w \leq 20$ | X≧55 | 55>X≧50 | 50>X≧45 | X<45 | N/A | | <u> </u> | I | <u> </u> | |
| | $20 < L_w \leq 30$ | X≧60.5 | 60.5>X≧55 | 55>X≧49.5 | X<49.5 | N/A | | | | | |
| | $30 < L_{\rm w}$ | X≧66 | 66>X≧60 | 60>X≧54 | X<54 | N/A | | | | | |
| Appendix 3A (Example for Calculating the Energy Efficiency Grade for Compact Fluorescent Lamp) | | | | | | | The Ene the exan | rgy Efficiency (nple is revised o | Grade of the C lue to the tight | ompact Fluores rened grading r | scent Lamp in equirement. |

| Clause | CoP 2018 | | | | | | |] | Draft Revisi | on of CoP (| Aug 2019 R | evision) | |
|--|---|---------------------------------|--|--|--|------------|---------------------------------|---|---|---|----------------------------|---|-------------------------------|
| Dehumidifiers | | | | | | | | | | Ì | | , | |
| Table 11.2 | Rated | Energy Factor (EF) (litres/kWh) | | | | Rated | Energy Factor (EF) (litres/kWh) | | | | | | |
| Derivation of energy efficiency grades | dehumidifying capacity (D _R) (litres/day) | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | | dehumidifying capacity (D _R) (litres/day) | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 |
| | < 10 | $1.6 \leq EF$ | $\begin{array}{l} 1.35 \leqq \\ \text{EF} < 1.6 \end{array}$ | $\begin{array}{c} 1.15 \leq \\ EF < 1.35 \end{array}$ | $\begin{array}{c} 1 \leqq \\ \text{EF} < 1.15 \end{array}$ | EF < 1 | | < 10 | EF ≥ 2.00 | 2.00 > EF ≥ 1.70 | 1.70 > EF ≥ 1.45 | 1.45 > EF ≥ 1.25 | 1.25 > EF |
| | $10 \le D_R < 15$ | $1.85 \leq EF$ | $\begin{array}{c} 1.55 \leq \\ EF < 1.85 \end{array}$ | $\begin{array}{c} 1.35 \leq \\ EF < 1.55 \end{array}$ | $\begin{array}{c} 1.20 \leq \\ \mathrm{EF} < 1.35 \end{array}$ | EF < 1.2 | | $10 \le D_R < 15$ | EF ≥ 2.30 | $\begin{array}{c} 2.30 > \\ EF \geq 1.95 \end{array}$ | $1.95 > \\ EF \ge 1.70$ | $\begin{array}{c} 1.70 > \\ EF \geq 1.50 \end{array}$ | 1.50 > EF |
| | $15 \leq D_R < 20$ | $2 \leq EF$ | $\begin{array}{c} 1.65 \leq \\ \mathrm{EF} < 2 \end{array}$ | $\begin{array}{c} 1.45 \leq \\ \text{EF} < 1.65 \end{array}$ | $\begin{array}{c} 1.25 \leq \\ \text{EF} < 1.45 \end{array}$ | EF < 1.25 | - | $15 \le D_R < 20$ | EF ≥ 2.50 | 2.50 > EF ≥ 2.05 | 2.05 > EF ≥ 1.80 | 1.80 > EF ≥ 1.55 | 1.55 > EF |
| | $20 \leq D_R < 25$ | 2.1 ≦ EF | $1.75 \leq \text{EF} < 2.1$ | $1.55 \leq EF < 1.75$ | $1.35 \leq \text{EF}$ < 1.55 | EF < 1. 35 | | $20 \leq D_R < 25$ | EF ≥ 2.65 | 2.65 > EF ≥ 2.20 | 2.20 > EF ≥ 1.95 | 1.95 > EF ≥ 1.70 | 1.70 > EF |
| | $25 \le D_R \le 35$ | 2.35 ≦ | $2 \leq 225$ | $1.7 \leq$ | $1.5 \leq$ | EF < 1.5 | | $25 \le D_R \le 35$ | $EF \ge 2.95$ | 2.95 > EF ≥ 2.50 | 2.50 > EF ≥ 2.15 | 2.15 > EF ≥ 1.90 | 1.90 > EF |
| Appendix 5A (Example for Calculating the Energy Efficiency Grade for Dehumidifier) | | | | | | | - | - The Energy revised due | e Efficiency to the tighte | Grade of ened grading | the Dehumi g requiremen | difier in the it. | e example is |
| Televisions | | | | | | | | | | | | | |
| Appendix 6A (Example for Calculating the Energy Efficiency Grade for Television) | | | | | | | - | The calculat clarity. Another ex Television is | tion of Ener ample calc s added for | gy Efficien culation of clarity. | cy Grade for the Energy | Television Efficiency | is revised for y Grade for |
| Storage Type Electric W | ater Heaters | | | | | | | | | | | | |
| Appendix 7A (Example for Calculating the Energy Efficiency Grade for Storage Type Electric Water Heater) | | | | | | | - | - The calculat Water Heate | tion of the E er is revised | nergy Effic: for clarity. | iency Grade | for Storage | Type Electric |

Section 4 – Proposed Transitional Arrangements

| Itom | - Milestone Date | Description | Energy Label (Note) |
|------|--|--|---------------------|
| Item | Winestone Date | Description | Affixed on Products |
| 1 | December 2019 (Commencement of Upgrading Exercise) (exact date to be determined) | Gazette the revised Code of Practice on Energy Labelling of Products (CoP) Serve the updating notices to specified persons on commencement and full implementation of the gazetted revised CoP. Submission of Product Information - New Product Model For a new product model to be listed during the transitional period, the specified person submits to EMSD in a specified form (Form 1) with the calculations of the existing and new energy efficiency grading in accordance with the CoP (2018 version) and the CoP (2019 version) respectively. Submission of Product Information - Existing Product Model For an existing product model already listed before Commencement date of Upgrading Exercise, the specified person submits to EMSD during the transitional period in a specified form (Form 4) to update the calculation of the new energy efficiency grading in accordance with the CoP (2019 version), unless he no longer supplies the product model. If a specified person no longer supplies an existing product model, he should submit to EMSD in a specified form (Form 3) to update the production information. | Old energy label |
| 2 | Transitional Period | Energy Label to be Used During the transitional period, old energy labels are used for the three prescribed products to be supplied in the market. Method of Affixing Energy Label For single package type room air conditioners and dehumidifiers contained in packaging which are manufactured in or imported into Hong Kong during the transitional period, the old energy label can be affixed in a prominent and clearly visible position of the packaging. This is to facilitate subsequent replacement by new energy label at the end of the transitional period. For CFLs, the method of affixing energy label remains unchanged (i.e. printed on or affixed to a prominent position of the individual product packaging and is to be clearly visible). For display units to be exhibited at retail outlets during the transitional period, the old energy labels should be affixed in a prominent and clearly visible position of the display units. | Old energy label |

| Itom | Milostono Doto | Description | Energy Label (Note) |
|------|---|---|----------------------------|
| Item | Milestone Date | Description | Affixed on Products |
| 3 | A week before full implementation | • Retailers replace old energy labels by new energy labels for affixing on display units at retail outlets on the date of full implementation | Change-over Period |
| | Imprenientation | Suppliers and retailers inform consumers of changing new energy efficiency grading standard. | label to new energy label) |
| 4 | December 2020 (Full Implementation of Upgrading Exercise) (exact date to be determined) | On or after full implementation date of upgrading exercise, importers, suppliers and retailers use new energy labels for the three prescribed products to be supplied in the market. Retailers affix new energy labels on all display units in a prominent and clearly visible position at retail outlets. | New energy label |

Note:

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Old and new energy labels mean energy labels of existing grading standard and new grading standard respectively. Old and new energy labels are the same in format but are different in energy efficiency grades and reference numbers. _

Section 5 – Collection of Views

We invite your views and comments on the proposed draft revision of CoP (August 2019 Revision). Please send in your comments on or before 31 Oct 2019 by mail, email or facsimile to the following—

| Address: | Energy Efficiency Office |
|----------------|---|
| | Electrical and Mechanical Services Department |
| | 3 Kai Shing Street |
| | Kowloon |
| Email address: | meels_review@emsd.gov.hk |
| Facsimile: | (852) 2890 6081 |

22. Please note that the Government would wish, either in discussion with others or in any subsequent report, whether privately or publicly, to be able to refer to and attribute views submitted in response to this document. Any request to treat all or part of a response in confidence will be respected. If no such request is made, it will be assumed that the response is not intended to be confidential.