

**For discussion on
25 January 2016**

**Legislative Council
Panel on Environmental Affairs**

**Proposed Third Phase of
Mandatory Energy Efficiency Labelling Scheme**

INTRODUCTION

This paper seeks Members' views on the products covered by the proposed third phase of Mandatory Energy Efficiency Labelling Scheme ("MEELS").

BACKGROUND

2. Significant energy savings could be achieved by using more energy-efficient products, which helps reduce the emission of greenhouse gases and other air pollutants from power generation. To further promote public awareness of energy saving and the choice of energy-efficient products, the Government introduced in 2008 MEELS through the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598) ("the Ordinance") under which energy labels are required to be shown on the prescribed products for supply in Hong Kong to inform consumers of the products' energy efficiency performance. Currently, over 40 countries, including the Mainland, European Union, United States, Canada, Australia, New Zealand, South Korea and Singapore have introduced mandatory energy efficiency labelling schemes on various types of products.

3. The MEELS was implemented in phases. The initial and second phases have been fully implemented since November 2009 and September 2011 respectively, covering five types of prescribed products, namely room air conditioners, refrigerating appliances, compact

fluorescent lamps, washing machines with a washing capacity at or under 7kg, and dehumidifiers. It is estimated that these five electrical products altogether account for about 60% of the annual electricity consumption in the residential sector in 2012.

4. Similar to most of the overseas mandatory energy efficiency labelling schemes, the MEELS in Hong Kong requires manufacturers or importers of the prescribed products to conduct tests in accredited testing laboratories. The testing laboratories include accredited laboratory under the Hong Kong Laboratory Accreditation Scheme (“HOKLAS”) or under an accreditation scheme operated by a laboratory accreditation body in other economies with which HOKLAS has concluded a mutual recognition arrangement. The tests must be carried out in accordance with the Code of Practice on Energy Labelling of Products (“CoP”) issued by the Director of Electrical and Mechanical Services (“DEMS”) under the Ordinance.

5. If DEMS is satisfied with the information submitted including the test results, he will notify the manufacturers or importers of the reference number¹ assigned to the product model concerned. Manufacturers or importers are required to attach energy labels in the prescribed format specified in the Ordinance before supplying these products in Hong Kong. All local suppliers (including wholesalers and retailers) cannot supply any specified product which has not been assigned a reference number and does not bear the energy labels.

6. The CoP issued by DEMS provides practical guidance and technical details about the energy efficiency labelling for the prescribed products. It specifies the relevant test standards², calculation methods and determination of energy efficiency grading levels of prescribed products, in accordance with which the energy efficiency performance of the product models are tested and assessed.

¹ The reference number can provide identification of the product model and its specified person (i.e. the applicant who has submitted the specified information in respect of the model).

² The test standards are in line with international standards, including those issued by International Electrotechnical Commission and International Organisation for Standardisation.

7. The Electrical and Mechanical Services Department (“EMSD”) conducts regular shop inspections to monitor compliance with the labelling requirements under the Ordinance. Samples of listed models are regularly selected for testing by independent accredited laboratories to ensure that the products conform to the energy efficiency information submitted to EMSD. All test results are announced on EMSD’s website. If a listed model is found not conforming to the performance requirements, its reference number will be removed from the record of listed models, and the model will not be allowed to be supplied to the market.

REVIEW OF MEELS

8. Any regulatory system has to move with times. The scope and grading standards of MEELS are kept under regular reviews to ensure that the grading standards will not be lagged behind by technological advancement. The scope of MEELS is also regularly reviewed to cover more products and hence increase the penetration rate of products bearing energy labels.

Review of Grading Standards

9. A review of the grading standards of room air conditioners, refrigerating appliances, and washing machines with a washing capacity at or under 7kg was completed in late 2014. In reviewing the grading standards of these products, due regard had been given to such factors as the distribution of the products among various existing grades; grading systems adopted overseas; development of testing standards; and energy saving potential arising from further tightening of the grading standards, etc.

10. After a three-month consultation with the trade in early 2014, a Task Force (chaired by EMSD and comprised representatives of relevant trade associations and the Consumer Council) was set up to consider the implementation of the new energy efficiency grading standards of the three aforementioned products. With the agreement of the Task Force, EMSD promulgated the tightened energy efficiency grading standards of

these products through the issue of a revised CoP. The revised CoP was gazetted in October 2014.

11. Full implementation of the new standards took place on 25 November 2015, after which the three products to be supplied into the market must bear energy labels under the new energy efficiency grading standards. Relevant information has been uploaded onto the thematic website “Energy Label Net”³ which provides information about the latest development of the scheme. Announcements in TV and radio have been broadcasted since early November 2015. Promotional posters and leaflets, as well as notification letters / reminders have been distributed to the public and suppliers respectively. Promotional visits, seminars and school outreach programmes are also conducted regularly.

12. It is estimated that the upgrading of the energy efficiency grading standards of the three products could bring annual electricity saving of about 300 million kilowatt-hour (“kWh”) and an annual reduction of carbon dioxide emissions by about 210 000 tonnes.

PROPOSED THIRD PHASE OF MEELS

Recommendation for Product Coverage Extension

13. In order to capture further energy saving potential, a review of the scope of the MEELS has been conducted with a view to expanding the coverage of the scheme.

14. Having considered comments received during a three-month consultation conducted in the second quarter of 2015 and other factors such as overseas practices, availability of test standards and testing laboratories, as well as energy consumption and energy saving potential of the products, we recommend the inclusion of the following five products to the third phase of MEELS:

³ The website is assessable via <http://www.energylabel.emsd.gov.hk/en/mainpage.html>. Publicity materials can be found on this page (<http://www.energylabel.emsd.gov.hk/en/about/background.html>).

- (a) televisions;
- (b) electric storage water heaters;
- (c) induction cookers;
- (d) washing machines ($7\text{kg} < \text{washing capacity} \leq 10\text{kg}$)⁴; and
- (e) room air conditioners (heat pump).

15. The proposed products are included in the mandatory labelling schemes in some other jurisdictions (such as the Mainland, European Union, United States, Australia and South Korea). International test standards and accredited testing laboratories⁵ in Hong Kong are also available for testing these products.

Key Requirements

16. Similar to the current practice under the MEELS, importers and local manufacturers are required to submit the product information, including test reports, to EMSD for assignment of reference number and record; and to label these products in the prescribed format before supplying the products to the local market. The format of energy label will be similar to that of products under the current scheme (see a sample at **Annex 1**). Retailers are allowed to supply these only if the products bear energy labels that are properly shown with prescribed specifications.

Energy Saving Potential

17. The five potential products proposed for inclusion into the third phase are estimated to account for about 15% of the annual electricity consumption in the residential sector. It is estimated that the potential annual energy saving arising from the third phase of MEELS is around 150 million kWh, which will translate into an annual reduction of carbon dioxide emissions of 105 000 tonnes.

⁴ Washing machines with washing capacity $\leq 7\text{kg}$ are currently covered by MEELS.

⁵ It refers to the testing laboratories which are accredited by the HOKLAS, or those which are accredited by overseas accreditation schemes having concluded mutual recognition agreements with HOKLAS.

Requirements for Legislative Amendments

18. The inclusion of new products into the MEELS will require amendments to Schedule 1 to the Ordinance, which is a piece of subsidiary legislation subject to positive vetting by the Legislative Council. An order will have to be published in the Gazette by the Secretary for the Environment to amend the Schedules of the Ordinance to include the details of products. As for the inclusion of energy labels for new products, it will require amendments to Schedule 2 to the Ordinance, which would be subject to negative vetting by the Legislative Council.

19. To provide guidance on the grading of the new products, the CoP issued under the Ordinance will have to be revised by incorporating technical details of new products and issued to provide latest guidance. The revision of the CoP will not involve legislative amendments.

20. Subject to Members' agreement to our proposal on the third phase of the MEELS, we will prepare the relevant legislative amendments for submission to the Legislative Council within the 2016-17 legislative year. We will also work with the trade on the implementation details of the proposal, including revision of the CoP and the transitional arrangement.

Transitional Arrangements

21. To enable the trade to make necessary preparation for the extension of product coverage of the scheme, a grace period of 18 months for the third phase is proposed. This is in line with the arrangement for introducing the initial and second phases of the MEELS. Furthermore, product models which have already been registered under the Voluntary Energy Efficiency Labelling Scheme⁶ need not be re-tested for transition to the mandatory scheme.

⁶ The scheme covers 22 types of household products and office equipment, and has been extended to cover petrol passenger cars. For details, please visit EMSD's website via http://www.emsd.gov.hk/en/energy_efficiency/voluntary_energy_efficiency_labelling_scheme/index.html.

22. In line with the arrangement of the first two phases of the MEELS, we suggest exempting the following products from the scheme –

- (a) products which have been manufactured in or imported into Hong Kong before amendment of the legislation for the third phase; and
- (b) products which are to be supplied as part of or in connection with the disposition of any newly developed premises and of which a procurement contract has been entered into before amendment of the legislation for the third phase.

Consultation

23. The key views received from the Consumer Council, trade associations, professional and education institutions, power companies, as well as product manufacturers and suppliers during the three-month consultation conducted in the second quarter of 2015 on the proposal for the third phase of MEELS have been incorporated in the legislative proposal. In general, they are supportive of the proposal.

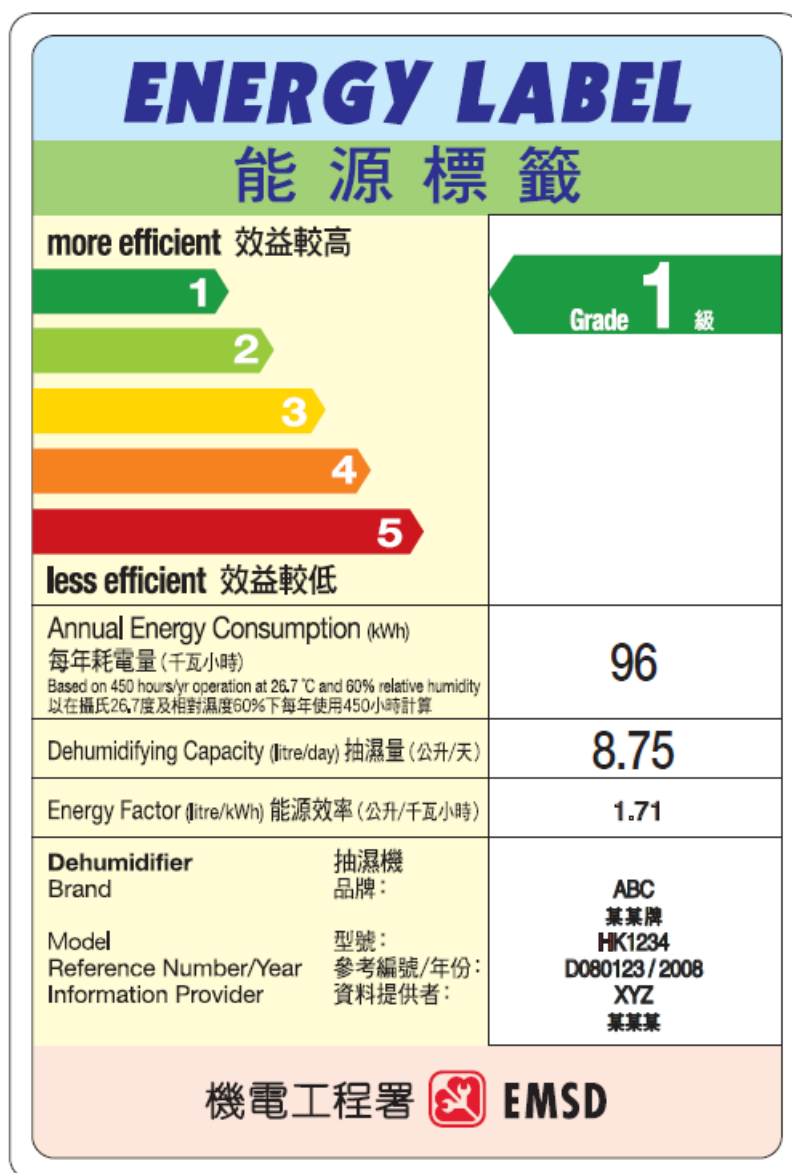
24. The Energy Efficiency and Conservation Sub-committee under the Energy Advisory Committee was consulted in March 2015 and November 2015, and was supportive of the proposal.

WAY FORWARD

25. Members are invited to comment on the proposal as set out in this paper.

**Environment Bureau
Electrical and Mechanical Services Department
January 2016**

A Sample of Energy Label



Note: This is a sample of energy label for dehumidifier. Energy label format for the proposed five products and details of information, which is indicated in the potential product's label, will be discussed with the trade.