

立法會 *Legislative Council*

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Paper for the House Committee meeting on 18 December 2009

Report of the Subcommittee on Energy Efficiency (Labelling of Products) (Amendment of Schedules) Order 2009

Purpose

This paper reports on the deliberations of the Subcommittee on Energy Efficiency (Labelling of Products) (Amendment of Schedules) Order 2009 (the Subcommittee).

Background

2. The mandatory Energy Efficiency Labelling Scheme (EELS) was introduced through the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598) (the Ordinance) which was enacted on 9 May 2008, with a grace period of 18 months ending on 8 November 2009. 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. The initial phase of the mandatory EELS covers three types of prescribed products, namely room air conditioners, refrigerating appliances and compact fluorescent lamps (CFLs), which already account for about 60% of local electricity consumption in the residential sector.

3. In view of the positive feedback on the initial phase, the Administration proposes to implement the second phase of the mandatory EELS to include washing machines and dehumidifiers. The two proposed products together account for about 7% of the annual electricity consumption in the residential sector. It is estimated that the implementation of the second phase of mandatory EELS can bring about an additional energy saving of about 25 GWh. This amounts to a saving of about \$25 million in electricity bill per year, and an annual reduction of carbon dioxide emission of 17 500 tonnes.

The Order

4. The Order seeks to amend the Ordinance by adding two prescribed products, namely washing machines and dehumidifiers, to Part 2 of Schedule 1, Schedule 2 and 3 of the Ordinance.

The Subcommittee

5. At the House Committee meeting held on 6 November 2009, Members agreed to form a Subcommittee to study the Order. Under the chairmanship of Hon Audrey EU Yuet-mee, the Subcommittee has held three meetings. The membership list of the Subcommittee is in **Appendix I**. Apart from examining the Order with the Administration, the Subcommittee has also invited views from the trade and interested parties. A list of the five groups which have given views to the Subcommittee is in **Appendix II**.

Deliberations of the Subcommittee

6. The Subcommittee supports in principle the implementation of the second phase of mandatory EELS. In the course of deliberation, members have examined issues relating to the initial and subsequent phases of the mandatory EELS, washing machines and dehumidifiers.

Initial and subsequent phases of the mandatory EELS

7. The Subcommittee has noted that of the 18 products originally under the voluntary EELS, only three products have been selected for inclusion in the initial phase of the mandatory EELS and two in the second phase. A list of the 18 products and their penetration rates is given in **Appendix III**. Some members have enquired about the Administration's plan to include the remaining products in the subsequent phases of the mandatory EELS. Mr Vincent FANG however is of the view that legislation should only be considered when voluntary schemes/measures cannot achieve the target results, and that the trade ought to be consulted in advance of the proposed inclusion of additional products in the mandatory EELS. According to the Administration, the inclusion of energy consuming products into the mandatory EELS will be implemented in phases, taking into account the market penetration rates and potential for energy saving of individual products, as well as availability of international testing standard and accredited laboratory in Hong Kong or neighbouring areas to conduct test for the products. Reference will also be made to overseas mandatory EELS and development of best practices in the international arena with a view to upgrading the energy performance requirements of products covered by the two phases of the mandatory EELS. The Administration will consult the relevant trades on the need and justification for further extension of product coverage, having regard to the results of the initial phase of the mandatory EELS, such as public acceptance and energy saving achievements.

8. Given the relatively high market penetration rate of television (TV) sets, some members have questioned why these are not included in the mandatory EELS. The Administration's explanation is that under the voluntary EELS, only the energy consumed in the stand-by mode of TV sets is assessed. As the international standard for testing the on-mode power has only been launched recently, there is no accredited laboratory in Hong Kong that could conduct test for TV sets in accordance with this standard. Besides, the inclusion of TV sets in the mandatory EELS may have significant adverse effects on the short launching time of the new models.

9. Some members have enquired about the progress of the initial phase of the mandatory EELS. According to the Administration, implementation of the initial phase of the mandatory EELS is generally smooth. The Electrical and Mechanical Services Department (EMSD) has carried out inspections at the relevant shops since the full implementation of the mandatory EELS on 9 November 2009. About 500 out of around 3 500 shops (or 14%) have been inspected as at 20 November 2009, of which 96% have complied with the requirements under the mandatory EELS. EMSD have issued 20 prohibition notices to non-compliant cases.

10. As CFLs contain toxic mercury, some members have expressed concern about inadvertent release of such chemical into the environment due to improper disposal of spent CFLs. They have enquired about measures being contemplated to recycle spent CFLs. According to the Administration, it will step up the collection of spent CFLs to cater for the wider use of CFLs. At present, spent CFLs can be recycled under the voluntary Fluorescent Lamp Recycling Programme. All collection points of fluorescent tubes and CFLs in the residential sector are provided with sticker labels, posters and collection boxes with logo of the scheme to enhance public awareness. Licensed chemical waste collectors are engaged to collect the spent fluorescent tubes and CFLs from the collection points as well as from the commercial and industrial sectors on a regular basis. The recovered products are delivered to the Chemical Waste Treatment Plant (CWTC) at Tsing Yi for proper treatment before disposal at landfills. To prevent contamination of groundwater by waste and leachate, the bases and sides of strategic landfills in the territory are sealed with impermeable liners which are made of high-density polyethylene that can withstand the erosive chemical or metallic substances in leachate. In response to members' concern whether CWTC has sufficient capacity to treat the anticipated increase in spent CFLs following the implementation of the mandatory EELS, the Administration has advised that the current annual capacity of the mercury waste treatment facility of CWTC will be enhanced. It is expected that the capacity of the mercury waste treatment facility will increase from one million spent fluorescent tubes and/or CFLs to about three million upon completion of the upgrading work in 2010.

Washing machine

11. Under the Order, "washing machine" includes, among others, those that have a rated washing capacity not exceeding 7 kilograms (kg), whether or not they have built-in dryers for drying textiles by means of heating. The annual energy consumption of a washing machine is calculated by multiplying the measured energy consumption per cycle by an average of 260 washes per year.

12. The Subcommittee has noted that some deputations have raised concern about the threshold of 7kg since washing machines with a rated washing capacity exceeding 7kg are not uncommon in the local market. The Administration's explanation is that the scope of washing machines under the mandatory EELS is consistent with that under the voluntary EELS. According to a trade survey commissioned by EMSD in 2008, sales volume of washing machines with a rated washing capacity exceeding 7kg accounts for around 1% (about 2 300 units) of the total annual sales quantity of washing machines in Hong Kong. The compliance cost for such washing machines under the mandatory EELS, if included, will be relatively higher given the limited

volume. In the light of the Subcommittee's concern, EMSD has conducted a questionnaire survey inviting all members of the trade task force to express views on the proposed change in scope of washing machines covered under the mandatory EELS to those with a rated washing capacity exceeding 7kg. The majority of them have expressed reservations on the proposed expansion given that the annual sales volume of washing machines with capacity exceeding 7kg is only around 1%. The relatively higher compliance cost might drive some of these products out of the market and in turn reduce consumers' choice. In view of the trade's views and the fact that the potential energy saving of the proposed expansion of scope would be limited, the Administration holds the view that the original scope of washing machine under the mandatory EELS should be kept.

13. Some members have questioned the rationale for only measuring the energy performance of washing function even if the washing machine has built-in dryer. They have also enquired about the basis upon which the average of 260 washes per year is arrived at. According to the Administration, measuring and evaluating only the washing function of the combined washer/dryer is in line with the practice of the mandatory EELS in other economies, including Australia and the Mainland. The basis of using 260 washes is adopted in consultation with the trade. The Administration has also taken on board members' suggestion of featuring the concept of water conservation in the publicity programme for the second phase of the mandatory EELS on washing machines.

Dehumidifier

14. Under the Order, "dehumidifier" includes, among others, those that have a rated dehumidifying capacity not exceeding 87 litres (L) per day. The annual energy consumption of dehumidifiers is calculated by multiplying the measured power consumption at 26.7°C and 60% relative humidity (RH) by an average of 450 hours per year.

15. Some deputations have pointed out that dehumidifiers with a rated dehumidifying capacity exceeding 35L are not common for domestic application and the sales volume is very limited. Some members share the concern about the relatively high compliance cost if these dehumidifiers are included under the mandatory EELS. These members have also noted that unlike washing machines, a more stringent approach has been adopted in determining the scope of dehumidifiers. According to the Administration, the scope of dehumidifiers is proposed after making reference to relevant international practices, such as the United States and Canada. However, different countries adopt different scopes for washing machines. In the light of the Subcommittee's concern, the Administration has consulted members of the trade task force in the questionnaire survey on narrowing down the coverage of dehumidifiers to those with a rated dehumidifying capacity not exceeding 35L. Most of them have indicated support for the proposed change on the ground that the annual sales volume of dehumidifiers with capacity exceeding 35L is very small. Taking into consideration the trade and the Subcommittee's view, the Administration is prepared to amend the Order accordingly.

16. The Subcommittee has noted that some deputations are of the view that the testing condition for the energy performance of dehumidifiers should take into account local practice where 30°C and 80% RH are used to measure the energy performance of dehumidifiers. According to the Administration, the testing standard for dehumidifiers under the Order is in line with the international practice to enable consumers from other countries to assess the energy performance of dehumidifiers sold in Hong Kong. Places with similar weather conditions as Hong Kong, such as the Mainland, Taiwan and Japan, also adopt the same international testing standard of 26.7°C/27°C and 60% RH. Besides, the Consumer Council has pointed out that the proposed testing condition of 30°C and 80% RH might not accurately reflect the indoor environment because, in actual operation, RH would become progressively lower after the dehumidifier has been in operation for a while. Hence, the assumption to maintain the testing condition at 80% RH may not be realistic. The Administration has further advised that while the energy performance of dehumidifiers would vary depending on RH of surrounding environment, their energy efficiency grading would not be affected as they would be tested with the same standard. To alleviate the trade's concern, the Administration has taken on board the Subcommittee's suggestion of stepping up publicity to promote public awareness on the difference in energy performance of dehumidifiers as a result of the change in testing standard.

Amendments to the Order

17. A set of amendments to be moved by the Administration is in **Appendix IV**.

Advice sought

18. Members are requested to note the deliberations of the Subcommittee.

Prepared by
Council Business Division 1
Legislative Council Secretariat
17 December 2009

**Subcommittee on Energy Efficiency (Labelling of Products) Ordinance
(Amendment of Schedules) Order 2009**

Membership list

Chairman Hon Audrey EU Yuet-mee, SC, JP

Members Hon Vincent FANG Kang, SBS, JP
Hon Andrew LEUNG Kwan-yuen, SBS, JP
Hon WONG Ting-kwong, BBS, JP
Hon KAM Nai-wai, MH
Hon Cyd HO Sau-lan
Hon CHAN Hak-kan
Hon Tanya CHAN

(Total : 8 Members)

Clerk Miss Becky YU

Legal Adviser Miss Kitty CHENG

Date 16 November 2009

Appendix II

List of organizations which have given views to the Subcommittee

- (a) Hong Kong Electrical Appliances Manufacturers Association
- (b) Consumer Council
- (c) Radio Association of Hong Kong
- (d) Hong Kong & Kowloon Electrical Appliances Merchants Association Ltd
- (e) WWF Hong Kong

Appendix III

List of the 18 products and their penetration rates under the voluntary EELS

	Penetration rate (on sales quantity) ³
Room air conditioners ¹	Not Applicable
Refrigerating appliances ¹	Not Applicable
Compact fluorescent lamps ¹	Not Applicable
Multifunction devices	50%
Electric storage water heaters	55%
Dehumidifiers ²	26%
Photocopiers	20%
Washing machines ²	29%
Laser printers	15%
Television sets	< 10%
Domestic gas instantaneous water heaters	< 10%
Electric rice-cookers	0%
Hot/cold bottled water dispensers	0%
LCD monitors	< 5%
Electronic ballasts	< 5%
Fax machines	< 5%
Electric clothes dryers	0%
Computers	0%

Note

- 1 - Room air conditioners, refrigerating appliances and compact fluorescent lamps have been included in the initial phase of mandatory EELS.
- 2 - Washing machines and dehumidifiers are proposed to be included in the second phase of mandatory EELS.
- 3 - The estimated penetration rate figures of individual products under the voluntary EELS are primarily the findings of the trade survey commissioned by EMSD in 2008.

INTERPRETATION AND GENERAL CLAUSES ORDINANCE

RESOLUTION

(Under section 34(2) of the Interpretation and General Clauses Ordinance
(Cap. 1))

**ENERGY EFFICIENCY (LABELLING OF PRODUCTS)
ORDINANCE (AMENDMENT OF SCHEDULES) ORDER 2009**

RESOLVED that the Energy Efficiency (Labelling of Products) Ordinance (Amendment of Schedules) Order 2009, published in the Gazette as Legal Notice No. 204 of 2009 and laid on the table of the Legislative Council on 4 November 2009, be amended, in section 2, in the new Division 5, in section 1(b)(iv), by repealing “87” and substituting “35”.