

## **Background**

The Environmental Protection Department (hereinafter “Department”) issued a consultation paper on a mandatory energy efficiency labelling scheme (EELS) in July 2005 to seek public response by October 31, 2005. The consultation paper (hereinafter “the paper”) discusses the current pattern of energy consumption in Hong Kong, refers to the Voluntary EELS operative in Hong Kong since 1995, which covered 17 types of products.

The paper outlines the objectives of the mandatory EELS as follows:

- (a) to increase public awareness of the importance of using energy-efficient products;
- (b) to provide consumers with more energy-efficient products; and
- (c) to provide incentive to product suppliers to market more energy-efficient products.

The proposed initial phase of the mandatory EELS will cover three products, namely, refrigerators; room coolers; and compact fluorescent lamps. The Department selected these three products for at least three reasons. First, the three products together accounted for over 70% of the electricity consumption in the residential sector. Second, the product categories are included in the present voluntary EELS. Third, these products received high levels of participation in the voluntary EELS.

The paper continues with a brief description of procedures for product registration and outlines the qualification requirement of laboratories preparing energy efficiency performance test reports to be submitted to the mandatory EELS for product registration application.

Under the proposed EELS, the energy label contains, among other information, a numeric grading that indicates the level of energy efficiency performance of the product. It is intended that the grading be periodically reviewed and revised to reflect ensuing technological advancement that will improve the product’s energy efficiency.

The duty of affixing the label of concerned products rests upon the importers or local manufacturers.

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<sup>1</sup> This response is also endorsed by the following organizations: ACCA Hong Kong, Hong Kong Electrical Appliances Manufacturers Association, Hong Kong Small and Medium Enterprises General Association, Hong Kong Sustainable Development Forum, The Canadian Chamber of Commerce in Hong Kong

Retailers are obligated to sell concerned products only if they are properly labelled.

The paper proposes a one-year grace period after the enactment of relevant legislation for compliance. The Electrical and Mechanical Services Department (EMSD) of Hong Kong is the proposed enforcement agency of the mandatory EELS.

It is estimated that the mandatory EELS of the three proposed products will bring an annual reduction of carbon dioxide emission of 105,000 tonnes to Hong Kong.

### **Our Response**

Business Environment Council (BEC) applauds the timely introduction of a mandatory EELS on energy using products. Our response to the paper will be divided into two parts. First, we will express our opinion on the paper itself. Then, we would like to advise the Department on broader policy issues concerning improving environment performance from the product perspective.

#### ***A) Response to the Paper***

BEC generally agrees with the Department in the selection of products to be included in the initial phase of the EELS, the duties of importers, manufacturers, retailers and EMSD, procedures of product registration and qualification of testing laboratories. We advise the Department to consider the inclusion of the following elements in the mandatory EELS or supporting systems thereof:

##### 1. Information for consumers

The success of an EELS depends on, among other things, the consumer's awareness of the benefits of energy efficient products, the preferential purchasing of an energy efficient product and its correct usage to optimize energy efficiency.

In reviewing the paper, the only objective of the mandatory EELS that aims at consumer information is the objective to "increase public awareness of the importance of using energy-efficient products." This may not be sufficient to encourage consumers' selection of such products and ensure their correct usage. Without an adequate consumer driven market of energy efficient products, the marketing and provision of such products by their suppliers to the market, as the other objectives of the paper suggested, may be insufficient to fully realize the benefits of the mandatory EELS. It should also be noted that despite a product being designed to be energy efficient, the incorrect usage thereof may prohibit its optimum benefit. Thus, information for the appropriate use and maintenance of the product is necessary.

BEC advises the Department that:

- As different models of products and/or products with different functions/benefits may be different in its energy consumption rate. (For example, some air conditioners have additional filters and other air quality facilities/features tend to use more energy.) Therefore, the labelling scheme should

consider the full product variety and should find a way to fairly reflect these product differences to ensure a fair comparison to be done.

- Instead of containing only a numeric grading (1 to 5) that indicates the level of energy efficiency performance of the product, the label should also provide detailed information about how much energy savings are achieved, which can even be expressed in a dollar amount according to the current electricity rate, so that customers can weigh the energy saving performance against other factors such as product cost when making their purchasing.
- Information provided for consumers should be *broad*. A mere label on a product is insufficient. Thus, concurrent with the enforcement of the mandatory EELS, the consumers at large should be communicated through a wider variety of channels about the EELS itself, the environmental benefits of registered products, their specific performance, the availability of such products on the market and the correct usage and maintenance of such products to optimize energy efficiency. BEC is aware that the EMDS's website contains a list of registered products under the Volunteer EELS [http://www.emsd.gov.hk/emsd/eng/pee/eels\\_reg\\_1.shtml](http://www.emsd.gov.hk/emsd/eng/pee/eels_reg_1.shtml). The Department may consider using this platform and build upon it to provide aforesaid consumer information for informed product purchasing, use and maintenance.
- Information provided for consumers should be *communicative*. Instead of approaching EELS from purely a product regulatory angle, the Department should equally emphasize providing consumers necessary information to conduct an informed purchase of a product. It is not apparent from EMDS's website on Volunteer EELS that target readers are consumers. Please see as a reference the website of Energy Star <http://www.energystar.gov/>, which is operated by the United States Environmental Protection Agency and the *Choose Green Reports* issued by Green Seal (available from <http://www.greenseal.org/recommendations.htm#product>), which provide information about basic knowledge of the green products, their environmental benefits and usage of to professionals and the general public.
- Information provided for consumers should be *easily accessible*. The reference to website as a source of consumer information earlier is one of many channels of communication to the consumer. BEC realizes that different sectors of consumers prefer different channels of communication. Thus, various channels of communication to the consumers should be explored by the Department and when appropriate managed together with manufacturers, importers or retailers. For examples, the correct usage of a particular product to optimize energy efficiency could be incorporated as labels, markings or within instructional manuals. The use of appropriate replacement parts to ensure energy efficiency could be incorporated in a service manual. Information leaflets can also be made available at retail outlets.

## 2. Guidance for Manufacturers

Energy efficiency of a product is largely determined at its design phase. Manufacturers who are engaged in product design are in the position of improving the energy efficiency of its products by incorporating appropriate materials and components, and design elements to optimize the product's

energy efficiency. The EELS is one method to encourage the uptake of manufacturers in designing energy efficient products.

BEC advises the Department that:

- Within the scope of EELS, methods that promote the design and marketing of energy efficient products should be encouraged. Thus, the Department may consider a platform for the industry to share non-proprietary knowledge on the selection of materials, components or design elements, which may improve energy efficiency of the product. BEC notes that EMDS publishes on its website various scheme documents for specific energy using products [http://www.emsd.gov.hk/emsd/eng/pee/eels\\_sch\\_doc.shtml](http://www.emsd.gov.hk/emsd/eng/pee/eels_sch_doc.shtml). The Department may consider expanding the scope of these documents to provide guidance for the industry in energy efficient product design.
- Other methods to promote better understanding and adoption of eco-product design will be discussed later.

### 3. Impact to Manufacturers and Importers

As suggested in the mandatory EELS, importers or manufacturers of products covered by the mandatory EELS will have to register the product models with EMSD prior to supplying them to the local market and a registration fee to recover the administration cost of vetting and approval of the registration will be levied. Therefore, the proposed scheme will likely incur some additional cost and timing to market.

BEC advises the Department that:

- To investigate and put in place ways to minimize the cost and timing impact with a view to ensuring that the new scheme would not overburden the suppliers, limit consumers' range of product choices and reduce timing to market for new products.

### **B) A Broader Product Policy Necessary**

As the Department is aware, overseas governments that are progressive in addressing environmental issues have successively legislate to control one or more environmental aspects of energy using products during their life-cycle. For examples, Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE) prescribed the mandatory separate collection and recycling of WEEE. Among other responsibilities, producers of WEEE are required to fund waste treatment of products that they placed on the market.

[http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l\\_037/l\\_03720030213en00240038.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_037/l_03720030213en00240038.pdf). Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substance in electrical and electronic equipment (EEE) mandated the maximum allowable concentration of six hazardous substance contained in EEE. [http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l\\_037/l\\_03720030213en00190023.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_037/l_03720030213en00190023.pdf). In July 2005, the

PRC State Administration for Quality Supervision, Inspection and Quarantine (AQSIQ) and the China National Certification Accreditation Administration correspondingly announced new inspection and testing standards for six hazardous substances in electronic and electrical products which will take effect on 18 January 2006. Most recently, Directive 2005/32/EC of the European Parliament and of the Council of 6 July 2005 establish[ed] a framework for the setting of ecodesign requirements for energy-using products and amending several earlier Directives on energy efficiency of various products.

<http://www.mtprog.com/ReferenceLibrary/Directive2005-32-ECecodesignrequirementsforenergy-using-products.pdf>.

In addition to legislative means, other measures have been used to encourage environmental performance from the product perspective. These measures include environmental labelling schemes that review products more than from the energy efficiency perspective, public and private sector green procurement policies, and programs that encourage manufacturers to adopt environmental management systems.

BEC advises the Department that:

- The mandatory EELS is one of many measures that have been used in other places in the world in improving the environmental performance from the product perspective. Other measures, whether voluntary or mandatory, by legislation or agreement, initiated by the public or private sector, engaging the consumer (demand) or the producer (supply) should be considered.
- Energy efficiency at usage is an attribute to the environment achieved during one of many phases of the life cycle of a product. Environmental performance of many products can be assessed and possibly improved at each phase of the products' life cycle. For instance, the conservation of raw material usage can be improved by using more recycled materials. The adoption of better product design can lower the resource requirement or emission during product production. Transportation cost can be lowered due to better packaging design. The restriction of hazardous materials contained in products will reduce their harm to the environment. The encouragement of the use of recyclable material in the product can facilitate product recycling and recovery. Life-cycle thinking is an important concept to adhere to during policy making.
- To move forward with a cohesive set of measures that seek to improve the environment from the product perspective, policy makers must have a clear product policy, including elements discussed above, that are integrated. Participation of stakeholders, including the government, consumer, manufacturer, retailer and environmental groups, in the formulation of such a product policy is essential.

## **Conclusion**

BEC applauds the timely introduction of the mandatory EELS on energy using products. For the scheme to successfully achieve its aim of reducing energy consumption, the scheme should be accompanied with useful, understandable and readily available information to enable consumers to make informed buying decision and to use the products properly. Such information should also be communicated through various different channels to reach different sectors of consumers. We also strongly encourage the creation of information sharing platform for manufacturers to share non-proprietary product design knowledge that to facilitate the development of energy efficient products. On administration of the mandatory EELS, the application procedure should not overburden the suppliers, limit consumers' range of product choices and reduce timing to market for new products.

While the mandatory EELS scheme for the three target appliances is an important move, BEC considers that a broader product policy that encourages the development and introduction of products with full life-cycle environmental consideration in their design. Such product policy should include the use of voluntary and regulatory tools, and engaging the consumers (i.e. the demand) and the producers and importers (i.e. the supply).