
The Hong Kong Voluntary Energy Efficiency Labelling Scheme for

Computers

July 2010

Energy Efficiency  **EMSD**

Electrical and Mechanical Services Department
3 Kai Shing Street, Kowloon, Hong Kong
Homepage: <http://www.emsd.gov.hk>

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1. Purpose

This set of document is intended to give a general description on the introduction of the Hong Kong Voluntary Energy Efficiency Labelling Scheme for Computers.

2. Background

- 2.1 The Energy Efficiency Labelling Scheme (EELS) is an energy conservation initiative that the Government of the Hong Kong Special Administrative Region (HKSAR) has adopted. Under the scheme, certain common types of electrical appliances and office equipment will incorporate an energy label that serves to inform consumers of the product's energy consumption and efficiency. Consumers should then be able to take those factors into account and make their purchasing decision.
- 2.2 The concept of EELS has been developed and implemented in several forms and in different stages of development. In some countries, it is a compulsory requirement for certain kinds of appliances to be provided with energy labels before they can be put on the market. The labelling requirements may apply to equipment such as household refrigerators / freezers, washing machines, room coolers, clothes dryers, compact fluorescent lamps, storage water heaters, etc. The EELS generally aims to achieve the following:
- greater public awareness of energy conservation and environmental improvement needs;
 - provision of readily available, pre-purchase information on energy consumption and efficiency data, where applicable, to enable ordinary consumers to select more energy efficient products;
 - stimulation to the manufacturers/ market for phasing out less energy efficient models; and
 - actual energy savings and environment improvement.
- 2.3 Hong Kong also aims at achieving the above objectives. The Hong Kong Voluntary EELS now covers ten types of household appliances and seven types of office equipment. There is also one type of gas appliance for domestic gas instantaneous water heaters. The scope of EELS has also been extended to cover petrol passenger cars.

3. Scope

- 3.1 The scheme will only apply to the manufacturers and importers who have participated in the voluntary scheme.
- 3.2 The scheme commenced from 23 December 2004 and energy labels will expire on 31 December 2013 when re-registration is necessary.
- 3.3 The scope of application covers all new registered appliances imported to or manufactured in Hong Kong with effect from the date that is declared by the participants but does not cover second-hand products, products already in existing use, under trans-shipment or manufactured for export, etc.
- 3.4 The scheme will operate as a 'Recognition Type' labelling system. All participating appliances will be registered under this scheme provided that they have met the performance requirement specified in the scheme.
- 3.5 Computers under this labelling scheme include desktops, towers or mini-towers, or portable units. These include high-end desktop computers, personal computers, workstations, network computer desktops, X terminal controllers, computer-based point-of-sale retail terminals and tablet PCs.
- 3.6 To qualify, the unit must be capable of being powered from a wall outlet, but this does not preclude units that are capable of being powered from a wall outlet and also from a battery. This definition is intended primarily to cover computers sold for use in businesses or homes. This definition of a computer does not include computers sold or otherwise marketed as "File Server" or "Server".
- 3.7 A tablet PC capable of being powered and/or charged from a wall outlet and marketed as being a "PC" or personal computer is eligible under the definition of "portable unit".
- 3.8 Products marketed as "personal handheld devices" or PDAs is not included in the scope of this EELS. A PDA unit does not function as a desktop or laptop computer because of its size and target-function, nor does it consume similar amounts of energy to operate.

4. Definitions

Unless otherwise specified, the following definitions shall apply throughout this document:-

<i>Authority</i>	means the Electrical and Mechanical Services Department, the Government of the Hong Kong Special Administrative Region (HKSAR).
<i>computer</i>	means a desktop, tower or mini-tower, or portable unit including high-end desktop computers, personal computers, workstations, network computer desktops, X terminal controllers, computer-based point-of-sale retail terminals and tablet PCs. To qualify, the unit must be capable of being powered from a wall outlet, but this does not preclude units that are capable of being powered from a wall outlet and also from a battery.
<i>deep sleep mode</i>	means the further reduced power state that the monitor enters after a further period of inactivity after sleep mode.
<i>Director</i>	means the Director of Electrical and Mechanical Services.
<i>Government</i>	means the Government of the Hong Kong Special Administrative Region.
<i>IEC</i>	means the International Electrotechnical Commission.
<i>inactivity</i>	means a period of time during which a computer does not encounter any user input (e.g., keyboard input or mouse movement.)
<i>inspecting officer</i>	means the officer authorized by the Director to carry out inspection on appliances under this scheme.
<i>integrated computer system</i>	means system in which the computer and visual display monitor are combined into a single unit. Such system must meet all of the following criteria: it is not possible to measure the power consumption of the two components separately; and the system is connected to the wall outlet through a single power cable.
<i>ISO</i>	means the International Organization for Standardization
<i>label</i>	means the energy label as described in Section 7.
<i>Maximum Continuous Power Rating of Power Supply</i>	means the value of maximum continuous power rating defined by the power supply manufacturer in the operating instructions provided with the product.
<i>model</i>	means the commercial description of the make, type, and if available and appropriate, variant and version of a computer.

<i>monitor</i>	means a cathode-ray tube (CRT), flat panel display (e.g., a liquid crystal display) or other display device and its associated electronics. A monitor may be sold separately or integrated into the computer chassis. This definition is intended primarily to cover standard monitors designed for use with computers.
<i>participants</i>	means the manufacturers, importers or the dealers of computers participating in the scheme.
<i>rated frequency</i>	means the frequency shown on the nameplate of the equipment.
<i>rated voltage</i>	means the voltage shown on the nameplate of the equipment.
<i>recognized laboratory</i>	means a laboratory that complies with the requirements as stated in Section 8 and is acceptable to the Authority for carrying out tests and issuing test reports for computers.
<i>scheme</i>	means the Hong Kong Voluntary Energy Efficiency Labelling Scheme for Computers.
<i>sleep mode</i>	means the reduced power state that the computer / monitor enters after a period of inactivity.
<i>wake events</i>	means a user, programmed, or external event or stimulus that causes the computer to transition from its sleep modes to its active mode of operation. Examples of wake events include, but are not limited to, movement of the mouse, keyboard activity or a button press on the chassis, and in the case of external events, stimulus conveyed via a telephone, remote control, network, cable modem, satellite, etc.

5. Technical Standards

Appliance Classifications

5.1 Computers are classified into the following categories:

Table 1: Appliance Classification

Category	Description
A	Computers that are shipped with the capability to be on networks such that they can remain in their sleep mode while their network interface adapter retains the ability to respond to network queries. Computers that are not shipped with a network interface capability. Computers shipped to a non-networked environment. Computers sold or marketed as personal computers.
B	Computers that are shipped with the capability to be on networks that currently require the computer's processor and/or memory to be involved in maintaining its network connection while in sleep mode. These computers are expected to maintain identical network functionality in and out of sleep mode.
C	Integrated Computer System (computer and monitor are combined into a single unit).

Key Criteria

- 5.2 The key criteria for products to qualify under this scheme include:
- Automatically entering a low-power sleep mode after a period of inactivity.
 - Fulfilling Energy-efficiency specifications based on power supply.
 - Including mechanisms through which the low-power modes of monitors (if applicable) can be activated.

Energy Efficiency Specifications for Qualifying Products

- 5.3 The energy efficiency specifications for qualifying computers are stipulated in the following clauses. There are three sets of requirement for the three appliance categories respectively.
- 5.4 Appliances under **Category A** shall fulfil the following requirement:
- (a) The computer shall enter a sleep mode after a period of inactivity. The default time for all products shall be preset for less than 30 minutes. The user shall have the ability to change the time settings or disable the sleep mode.
 - (b) If the computer is shipped with the capability to be on a network, it shall have the ability to enter a sleep mode while on the network.
 - (c) If the computer is shipped with the capability to be on a network, it shall retain in sleep mode its ability to respond to wake events directed or targeted to the

computer while on a network. If the wake event requires the computer to exit the sleep mode and perform a task, the computer shall re-enter its sleep mode after a period of inactivity following the completion of the task requested.

- (d) The computer shall consume power in the sleep mode according to Table 2.

Table 2: Energy Efficiency Specifications For Category A Computers

Maximum Continuous Power Rating of Power Supply (MCPR)	Watts in sleep mode
$MCPR \leq 200\text{ W}$	Not more than 15 W
$200\text{ W} < MCPR \leq 300\text{ W}$	Not more than 20 W
$300\text{ W} < MCPR \leq 350\text{ W}$	Not more than 25 W
$350\text{ W} < MCPR \leq 400\text{ W}$	Not more than 30 W
$MCPR > 400\text{ W}$	Not more than 10% of maximum continuous output rating

* Computers that always maintain a level of power consumption of 15 watts or less comply with the power consumption requirements, and are not required to incorporate the sleep mode described.

5.5 Appliances under **Category B** shall fulfill the following requirements:

- (a) The computer shall enter a sleep mode after a period of inactivity. The default time for all products shall be preset for less than 30 minutes. The user shall have the ability to change the time settings or disable the sleep mode.
- (b) If the computer is shipped with the capability to be on a network, it shall have the ability to enter a sleep mode irrespective of the network technology.
- (c) The computer shall retain in sleep mode its ability to respond to all types of network requests. There shall be no loss in network functionality available to the user (e.g., the network functionality available to the user during the sleep mode shall be the same as that was available before the computer entered the sleep mode).
- (d) The computer shall consume in the sleep mode, no more than 15% of the maximum continuous power rating of its power supply.

5.6 Appliances under **Category C** shall fulfill the following requirements:

- (a) The integrated computer system shall enter a sleep mode after a period of inactivity. The default time for all products shall be preset for less than 30 minutes. The user shall have the ability to change the time settings or disable the sleep mode.
- (b) If the integrated computer system is shipped with the capability to be on a network, it shall have the ability to enter a sleep mode while on the network.
- (c) If the integrated computer system is shipped with the capability to be on a network, it shall retain in sleep mode its ability to respond to wake events directed or targeted to the computer while on a network. If the wake event requires the computer to exit the sleep mode and perform a task, the integrated computer system shall re-enter its sleep mode after a period of inactivity after the completion of the task requested.
- (d) An integrated computer system shall consume no more than 35 watts in the sleep mode. Integrated computer systems that always maintain a level of power consumption less than or equal to 35 watts comply with the power consumption requirements of this scheme and are not required to incorporate the sleep mode described.

Other requirements

- 5.7 Operating Systems: The proper activation of a computer's low-power/"sleep" mode is typically contingent upon the installation and use of a particular version of an operating system. If a computer is shipped from the applicant with one or more operating systems, the computer shall be capable of entering and fully recovering from the low-power/"sleep" mode while running in at least one of those operating systems. If the computer is not shipped with operating system software, the applicant shall clearly specify which mechanism will render the computer compliant with the EELS requirement. In addition, if any special software, hardware drivers, or utilities are necessary for the proper activation and recovery of the sleep mode, they must be installed in the computer.
- 5.8 Monitor Control: The computer shall include one or more mechanisms through which it can activate the low-power modes of a monitor with such modes. Applicant shall clearly specify in product literature the manner in which its computer can control energy labelled monitors, and any special circumstances that must exist in order for monitor power management to be accomplished. Applicant shall set the computer's default to activate the monitor's first low-power or sleep mode within 30 minutes of user inactivity. Applicant shall also set the default time for the next level of power management such that the monitor enters the second low-power or "deep sleep" mode within 60 minutes of inactivity. The combined total of the default times for both low-power modes shall not exceed 60 minutes. Applicant can choose to set the computer to activate the monitor to enter the second low-power or "deep sleep" mode directly within 30 minutes of inactivity (i.e., the computer can activate the monitor to bypass the first sleep mode and enter the second deep sleep mode). The user shall have the ability to change the time settings or disable the low-power modes for the monitor control. This monitor control requirement does not apply to integrated computer systems. However, integrated computer systems that are marketed and sold as part of a docking system shall have the capability to automatically control the power of an externally connected monitor.

Safety Requirements

- 5.9 All materials and workmanship of the products are also needed to comply with IEC 60950 "Information technology equipment – Safety" requirements and / or the Electrical Products (Safety) Regulation of the HKSAR, where applicable.

6. Test Methods

General

- 6.1 All test methods specified in this document are only related to checking compliance with the power rating during sleep mode. It is not the intention of this document to detail out the test standards and requirements for checking compliance with the Electrical Products (Safety) Regulation of the HKSAR. The participant should conduct appropriate tests, where necessary, in addition to those specified in this document in order to comply with the requirements stipulated in the aforesaid Electrical Products (Safety) Regulation.

Compliance with Safety Requirements

- 6.2 The testing standards for checking compliance with the safety requirements are based on IEC 60950 "Information technology equipment – Safety" requirements. For detailed requirements and procedural descriptions one should refer to the respective standard.
- 6.3 To the extent that definitions in the IEC standard do not conflict with the definitions of this document, the definitions in the aforesaid standard shall be included.

Test Conditions

- 6.4 For all computers, the test conditions shall be as follows:

- | | | |
|-----|---------------------------|-------------------|
| (a) | Electrical supply | 220V \pm 2%; |
| (b) | Frequency | 50Hz \pm 2%; |
| (c) | Line impedance | < 0.25 ohm; |
| (d) | Total harmonic distortion | < 5%; and |
| (e) | Test room temperature | 25 °C \pm 3 °C. |

Test Equipment

- 6.5 A wattmeter shall be used to measure the power consumption of the computer under test. The wattmeter shall be capable of reading the power drawn by the computer without disrupting the electrical power supply.
- 6.6 The wattmeter should have a frequency response of at least 3 kHz and should provide resolution of 0.1 W and accuracy of \pm 1%. In addition, the meter should be capable of reading the current drawn by the computer without causing internal peak distortion (i.e. clipping off the top of the current wave). The use of a wattmeter with higher crest factors and more current range choices should be preferred.

Measurement of Power Rating

- 6.7 The measurement procedures for the sleep mode operation are as follows:
- Power on all test equipment, wait until they have stabilised and properly adjust operation range.
 - Connect the test equipment and unit under test.
 - Check for normal operation of the test unit and leave all customer adjustment to factory default settings.
 - Check the time required for the test unit to enter into sleep mode against the default time.
 - Either verify that the wall outlet power is within specifications or adjust the AC power source output as described in Clause 6.4.
 - Set the power meter current range. The full scale value selected multiplied by the crest factor rating (I_{peak}/I_{rms}) of the meter must be greater than the peak current reading from the oscilloscope.
 - After the unit under test reaches operating temperature and the readings on the power meter stabilize, take the true power reading in watts from the power meter.

- (h) Record the test conditions and test data. The measurement time shall be sufficiently long to measure the correct average value.

6.8 The default time to sleep mode and average power rating of the computer in sleep mode operation shall be determined by computing the average value of five (5) respective separate measurements.

7. Energy Label

General

7.1 Energy labels are classified into the following two types:

- (a) Verification label; and
- (b) Information label.

7.2 A verification label indicates the appliance meets the energy performance standards as required by the scheme. It is a compulsory requirement for participant to affix this label to his registered appliances.

7.3 An information label contains information to guide the general public to contact the Authority regarding enquires about the scheme. The affixation of this label to registered appliances is optional.

Label Location

7.4 The energy label should be self-adhesive and affixed to the appliance at a prominent location. The participant should ensure that the verification label appears on every registered appliance on display or sale and the information on the label shall be legible.

Colour Scheme and Dimensions

7.5 The energy labels should be printed on decent material and should have colour schemes and dimensions as shown in Annex 1. It should be printed in English and in Chinese.

Material Quality

7.6 The material used for the energy label should be durable and possess good wear and tear characteristics. It should stick tightly on the appliance.

8. Testing Facilities, Laboratories and Accreditation Bodies

- 8.1 The testing is carried out either by independent test institutes or by the manufacturers or importers themselves at their own test facilities. The Authority will accept the results and certificates issued by the test laboratory which fulfills one of the following criteria as specified in Clause 8.2, 8.3 or 8.4.
- 8.2 The laboratory is accredited by the Hong Kong Accreditation Service (HKAS) for the relevant test under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or a scheme with which HKAS has concluded a mutual recognition agreement[#]; and the results are issued in a test report or certificate bearing the accreditation mark.
- 8.3 (a) Self-declaration by original manufacturer that the operations of their in-house laboratory followed principally the requirements of ISO/IEC 17025; **and**
- (b) The manufacturer currently operating according to a recognized international quality system (such as ISO 9001); **and**
- (c) The manufacturer's in-house laboratory had been successful in carrying out energy consumption tests on computers and where these tests had been evaluated and certified by internationally recognised third party certification organisations.
- 8.4 The tests results are issued by a laboratory which achieves HOKLAS accreditation (or is accredited by a scheme with which HOKLAS has signed a mutual recognition agreement) for laboratory testing of electrical and mechanical appliances other than testing based on technical methods stipulated in this scheme, and the laboratory can demonstrate their capability of carrying out tests on computers in accordance with the technical methods.

Laboratory Accreditation

- 8.5 The Authority takes cognizance of the need to ensure acceptable and compatible quality standards of testing laboratories, and considers that they need to be accredited by some independent bodies.
- 8.6 The criteria of accreditation should be based on ISO/IEC 17025 and accreditation bodies should operate in accordance with ISO/IEC Guide 58.

[#] *HKAS has concluded mutual recognition arrangements with overseas accreditation bodies for testing laboratory accreditation. The list of mutual recognition arrangement partners may change from time to time and the up-to-date list is available from the HKAS website of www.info.gov.hk/itc/hkas. Partners to these arrangements recognise the accreditations granted by one another as equivalent.*

- 8.7 The Authority will recognize accreditation granted by the Hong Kong Accreditation Service under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) and by overseas accreditation bodies which have concluded mutual recognition arrangements with HKAS for accreditation of testing laboratories. The Authority will consider accreditation by other bodies on a case-by-case basis.

Energy Efficiency Verification Service

- 8.8 An increasing number of countries now accept, as proof of product conformance, energy efficiency verification services provided by third-party organisation that has been accredited as a certification organisation. In accordance with this trend, the Authority will consider seriously test results that have been evaluated and verified against the energy efficiency standards of the scheme by reputable third-party certification organisations.

9. Registration and Participation

Registration Procedures

- 9.1 All manufacturers, importers and the other parties involved in the appliance distribution network are welcomed and encouraged to participate in the scheme. For some known manufacturers and importers, invitation letters will be issued to them. However, any party may submit their applications for registration no matter whether they are invited or not.
- 9.2 The proforma letter of invitation is shown in Annex 2.
- 9.3 Applicant should submit formal application to

*Chief Engineer / Energy Efficiency A
Energy Efficiency Office
Electrical and Mechanical Services Department
3 Kai Shing Street, Kowloon
Hong Kong*

by means of an application letter through mail, facsimile or electronic mail. In order to ensure effective implementation of the scheme, the applicant must be committed to fully comply with the duties, responsibilities and obligations set out in this scheme. The proforma letter of application as shown in Annex 3 details the aforesaid obligations and should be used for application. To facilitate the application process, the application form can be downloaded from EMSD website.

Information / Documents to be Submitted for Registration

- 9.4 Each make and model of an appliance participating in the scheme should be provided with a test report issued by a recognized laboratory. The test report should contain the

power consumption test. The details of the technical information to be submitted together with the application are listed as follows:

- (a) Information on the company
Name, Address, Telephone number, Fax, e-mail address, Contact person, Importer, Distributor, etc.
- (b) Products to apply for participating in the scheme
Names of products, types, brand names, model references, countries of origin
- (c) Parties which will be responsible for making and fixing the Energy Label
- (d) Commencement date to affix energy label on appliance
Year _____, Month _____
- (e) Documentary proof that the appliance(s) comply with IEC 60950 "Information technology equipment – Safety" requirements and/ or the Electrical Products (Safety) Regulation of the HKSAR, where applicable
- (f) Detailed test reports shall provide at least the following relevant technical data for the appliance:
 - Product Category
 - Sleep Mode power rating
 - Maximum Continuous Power Rating of the computer power supply;
- (g) Documentary proof that the appliance fulfils other requirement, if applicable, as stipulated in the test method.
 - ability to enter a sleep mode while on the network
 - ability to respond to wake events
 - ability to respond to all types of network requests
 - requirement on operating systems
 - requirement on monitor control

9.5 Company's name and chop should be stamped on all the documents provided. All photocopy test reports submitted to the Authority shall be certified true copy by appropriate organization.

Acceptance of Registration

- 9.6 On receipt of the application, the Authority will verify whether the appliance meets the energy efficiency and performance requirements based on the submitted data. The accuracy of the submitted data, their inconsistencies and non-compliance will be dealt with in accordance with Section 11.
- 9.7 If the application is accepted, the participant will be notified of the result within 17 working days upon receipt of all necessary information requested. The participant will then be allowed to affix the energy label onto the 'registered' appliance. Both manufacturer and importer of the registered appliance should ensure that the energy label is correctly printed and affixed on the appliance in accordance with Section 7. The proforma letter of acceptance is shown in Annex 5.

9.8 If the application is rejected, the notification letter as shown in Annex 6 will also be given within 17 working days upon receipt of all necessary information requested.

9.9 The flow chart for registration is shown in Annex 7.

Participant's Duties, Responsibilities and Obligations

9.10 The participant is obliged to:

- (a) submit application and information including test results in accordance with format and procedures set out in Section 9.3 – 9.5;
- (b) conduct tests via recognized laboratories and to comply with the specified test methodology and classification scheme;
- (c) produce and affix labels at his own costs;
- (d) fully inform other sales agents in his distribution network once the particular make and model of an appliance is registered under this scheme;
- (e) allow random/ad-hoc inspection to be conducted by persons authorized by the Authority on registered appliance at his premises;
- (f) conduct re-test(s) at his own costs at some recognized laboratories, if non-compliance is found on his appliance. The result of re-test(s) shall reach the Authority within the prescribed period of time specified by the Authority;
- (g) inform the Authority of any change in the technical information and data that were previously submitted to the Authority together with the application letter;
- (h) accept the fact that if appliance fails to perform in accordance with the requirements as given in Sections 5 and 6 and this cannot be readily rectified, the Authority may order it be de-registered from the scheme; and
- (i) remove all energy labels from appliances which had been de-registered immediately.

9.11 The details of appliances registered under this scheme will be kept in a register maintained by the Authority. The registration records will be regularly uploaded and maintained in the EMSD internet for public and interested parties for access and information.

Termination

9.12 Under circumstances of poor performance such as:

- (a) (repeated) failure to fulfil obligations set out under Section 9.10; or
- (b) in any other case where the Director is of the opinion that registration of an appliance is contrary to the public interest

the Authority may de-register an appliance from the scheme with immediate effect by giving the participant notice in writing. Once an appliance is de-registered, no one is allowed to fix an energy label on it. However, participant will normally be given a grace period of three months to remove all labels from the de-registered appliances.

De-registration may occur even when there is no legal action taken under either the

Trade Descriptions Ordinance or the Copyright Ordinance.

- 9.13 Participant who decides to discontinue participating in the scheme or to withdraw any registered model from the registered appliance list shall give at least three months' advance notice to the Authority.

10. Legal Provisions

- 10.1 This scheme is a voluntary scheme. However, a participant who abuses the scheme by giving false information on a label may contravene provisions of the Trade Descriptions Ordinance.
- 10.2 No one could take advantage of the scheme by using the label on his appliances without authorization of the Authority as that may constitute an infringement of copyright under the Copyright Ordinance.

11. Compliance Monitoring and Inspection

Purpose

- 11.1 To uphold credibility of the scheme and to maintain continuous confidence of the consumers, compliance check on energy labels on those appliances participating in the scheme are needed. Also to avoid the unsatisfactory situation that the non-participating parties taking advantage of the scheme by using unauthorized labels, the Authority may also carry out suitable form of inspection on those unregistered appliances which have not been registered under the scheme.

Scope

- 11.2 The scope of inspection includes sample checking and testing the following items:
- (a) whether the energy label is positioned as required in Section 7.2;
 - (b) whether the energy label being displayed is of correct format in accordance with Section 7;
 - (c) whether the data submitted by the participants are correct by random re-testing; and
 - (d) whether unregistered appliances display unauthorized energy label.
- 11.3 The participants will be requested to take immediate remedial action and report the follow-up action taken if non-compliance is found on their appliances.

- 11.4 If a registered appliance is found not meeting the requirements specified in accordance with the technical standards stipulated in Section 5 during random testing, the Authority may request the participant to conduct separate performance tests at his own costs, in accordance with the test methodology as stated in Section 6 in one of the test laboratories agreed by the Authority. If non-compliance is confirmed and no remedial action is to be taken by the applicant, the Authority may order it be de-registered from the scheme. Failure to remove energy labels from the de-registered appliances after the Director has withheld his authorization for using such labels may contravene the relevant ordinances.

Inspecting Officers

- 11.5 The Authority will authorize inspecting officers to carry out appliance compliance monitoring and inspection. The officers will carry proper identification cards which will be produced during their inspection operations. However, the officers will not inform the participants in advance of their intended inspection operation.
- 11.6 It is the participants' duty to allow the inspecting officers to gain access to their premises to carry out inspection.

Mode of Inspection

- 11.7 Inspections will be carried out on registered appliances under the scheme on random basis. Based on the record of the registration, random inspection programmes will be developed.
- 11.8 In addition to the random inspections, the inspecting officers will carry out ad-hoc inspections in response to complaints. The items to be inspected in such a case will depend upon the nature of complaint and may include all types of inspection as stated in Section 11.2.
- 11.9 Inspections will normally be carried out at the retail outlets and appliance showrooms. Where necessary, inspection will also be done at warehouses.
- 11.10 The inspection results will be properly recorded for future analysis as well as on evaluation of the effectiveness of the scheme.

12. Complaints and Appeal

- 12.1 The Authority will be responsible for dealing with complaints from participants and other parties against matters related to the scheme.

Complaints Handling Procedure

- 12.2 The Director shall ensure that complaints are properly recorded and handled without undue delay.

12.3 The Authority shall carry out preliminary investigation on complaints and reply to the complainants within a reasonable time. For complaints that require site inspection and laboratory test, the complainant shall be notified through an interim reply.

12.4 The Authority shall inform the complainant of the results or decisions made on the complaint.

Appeal Procedure

12.5 A participant who is aggrieved by a decision or action taken by the Authority may appeal to the Director in writing stating the reason for the appeal.

12.6 The Director may decide to suspend the decision or action given by the Authority from the day on which the appeal is made until such appeal is disposed of, withdrawn or abandoned unless such suspension would, in the opinion of the Director, be contrary to public interest.

12.7 The Director may by notice to the appellant require that appellant to attend meeting with him or his representatives and provide documents and give evidence relevant to the appeal.

12.8 The Director shall notify the appellant of his decision and reasons for it. The decision will be final and binding.

13. Maintenance of Scheme

13.1 To ensure that the scheme can continue to operate effectively and efficiently after its introduction, a proper system of maintenance is needed.

13.2 The maintenance system consists essentially of:

(a) Continuous updating of the lists of participants in the scheme as follows:

- i) registered appliances with details such as registration number in the scheme, date of registration or de-registration if it occurs, energy efficiency data, performance data, make, model and other related information; and
- ii) registered importers, manufacturers, local agents etc. in the distribution network with details such as address, date of registration or de-registration if it occurs, etc.

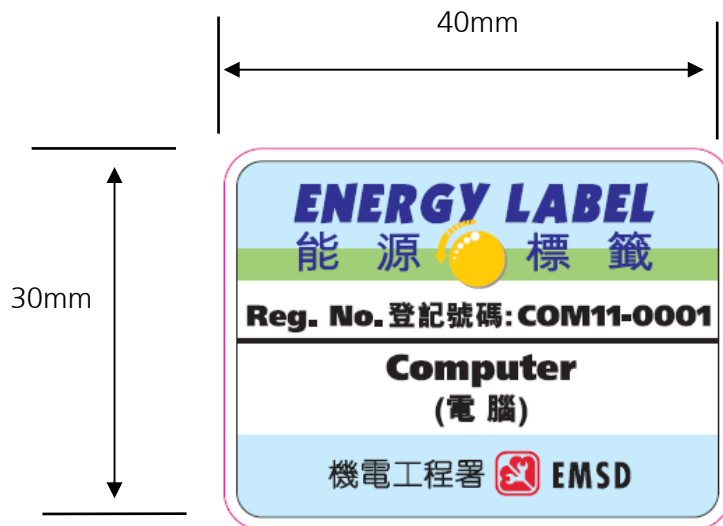
(b) Periodic review of the test methodology, and procedures for application registration and compliance monitoring, etc., to bring them in line with the latest needs of the manufacturers, importers and retailers, etc.

(c) Continuous evaluation of the effectiveness of the scheme and assessment of what changes are necessary.

14. Future Development

- 14.1 It is hoped that following implementation, the market will phase out appliances of low efficiency and public awareness of using energy efficient products and energy conservation will be improved.
- 14.2 To further facilitate the public in choosing energy efficient appliances and raise public awareness on energy saving, the Government has introduced a mandatory Energy Efficiency Labelling Scheme (EELS) through the Energy Efficiency (Labelling of Products) Ordinance.
- 14.3 Under the mandatory EELS, energy labels are required to be shown on prescribed products for supply in Hong Kong to inform consumers of their energy efficiency performance. Five types of prescribed products covered in the mandatory EELS are room air conditioners, refrigerating appliances, compact fluorescent lamps, washing machines and dehumidifiers.

Energy Label Format
(Revised on 1 April 2011)



(Not to Scale)

Soft copies of this label can be obtained from Energy Efficiency Office, Electrical and Mechanical Services Department.

Proforma Letter of Invitation

Our ref. EEO/LB/28

Your ref.

Tel.

Fax.

Date

[Name and Address of
Manufacturers/Importers/Agents]

Dear Sir/Madam,

Invitation of Application for Registration to Participate in Voluntary Energy Efficiency Labelling Scheme for Computers

Having gone through the necessary consultations and duly considered the views from various concerned parties, the government has decided to introduce a voluntary energy efficiency labelling scheme for computers to Hong Kong with effect from (_____). The details of the scheme^① have been finalized and I enclose herewith a guide of the scheme for your reference.

Being one of the major computer manufacturers / importers / agents^② in Hong Kong, you are invited to participate in the scheme so as to take part in promoting public awareness in energy conservation and environmental improvement to Hong Kong. If you are interested to participate in the scheme, please apply in accordance with the proforma letter of application (Annex 3) and submit details including technical information in accordance with the attached Annex 4 to the 'Chief Engineer / Energy Efficiency A' at the following address.

Energy Efficiency Office
Electrical and Mechanical Services Department
3 Kai Shing Street, Kowloon
Hong Kong

Please be reminded to submit accurate test data to support your application. Under this Scheme, routine compliance monitoring and checking will be performed and if a registered computer is found to be non-compliant, we may consider deregistering the computer from the Scheme.

Should you need further clarification or information, you are most welcome to contact the undersigned or Mr. _____, at the telephone number _____.

Yours faithfully,

for Director of Electrical & Mechanical Services

(Note: ^① 'scheme' means 'The Voluntary Energy Efficiency Labelling Scheme for Computers'

^② delete as appropriate)

Proforma Letter of Application

Your ref. EEO/LB/28
Our ref.

Tel.

Date

Chief Engineer/Energy Efficiency A
Electrical & Mechanical Services Department
3 Kai Shing Street, Kowloon
Hong Kong

Dear Sir/Madam,

Application for Registration to Participate in Voluntary Energy Efficiency Labelling Scheme for Computers

Our company is the (manufacturer/importer/agent*) of _____ in Hong Kong. We support the introduction of the labelling scheme to Hong Kong and would like to be one of the participants in the scheme to promote energy efficiency.

I understand fully the obligations and duties stated in the scheme and will comply with all relevant requirements, in particular those specified below:

- i) conduct tests via recognized laboratories and to comply with the specified test standards;
- ii) produce and affix specified labels at my own costs;
- iii) allow random/ad-hoc inspection to be conducted by persons authorized by the issuing Authority on registered appliance at my premises;
- iv) conduct re-test(s) at my own costs at some recognized laboratories, if the results of inspection suggest inaccurate energy label information being displayed. The result of re-test(s) shall reach the Authority within the prescribed period time specified by the Authority;
- v) inform the Authority of any change in the technical information and data that were previously submitted to the Authority together with the application letter; and
- vi) accept the fact that if appliance fails to perform in accordance with the required energy efficiency standards and performance as given in Section 5 and this cannot be readily rectified, the Authority may order it be de-registered from the scheme.

The details of information of those appliances which we intend to register with the Authority are shown in the attached document, (Annex 4) and are submitted herewith for your vetting.

Yours faithfully,

(Manufacturer/Importer/Agent 's Name and Company Chop)

* _____
delete as appropriate

Information to be Submitted to Energy Efficiency Office

1. Information on the company:
Name, Address, Telephone number, Fax, e-mail address, Contact person, Importer, Distributor, etc.
2. Product to apply for participating in the scheme:
Name of products, types, make, model references, countries of origin
3. Parties which will be responsible for making and fixing the Energy Label
4. Commencement date to affix Energy Labels on appliance
Year _____, Month _____
5. Detailed test reports providing at least the following relevant technical data for the appliances:
 - (a) Product Category
 - (b) Sleep Mode power rating;
6. Documentary proof that the appliance fulfils other requirement, if applicable, as stipulated in the test method
 - (a) ability to enter a sleep mode while on the network
 - (b) ability to respond to wake events
 - (c) ability to respond to all types of network requests
 - (d) requirement on operating systems
 - (e) requirement on monitor control
7. Documentary proof that the appliance(s) comply with the Electrical Products (Safety) Regulation of the Hong Kong Special Administrative Region.

*Note: Company's name and chop should be stamped on the all documents provided.
All test reports submitted to the office should be certified true copy by appropriate organization.*

Proforma Letter of Acceptance

Your ref.
Our ref. EEO/LB/28

Tel:
Fax:

Date

[
Manufacturers/Importers/Agents
]

Dear Sir/Madam,

Acceptance of Application for Registration to Participate in Voluntary Energy Efficiency Labelling Scheme for Computers

With reference to your letter of ref. _____ dated _____, I am pleased to inform you that your application to participate in the captioned scheme has been accepted.

I enclose herewith the registration certificates of computers registered. The registered computers are as follows :

<u>Brand/Make/Model</u>	<u>Registration No.</u>	<u>Effective date</u>
(_____)	(_____)	(_____)

You are allowed to affix a specified energy label onto each and every appliance registered under the scheme. The contents of the energy label should be based on the information that you have provided in your application ref. _____ and dated _____.

Should you have any queries regarding the scheme, please contact this office.

Yours faithfully,

for Director of Electrical & Mechanical Services

Proforma Letter of Rejection

Your ref.
Our ref. EEO/LB/28

Tel.
Fax.

Date

[
Manufacturers/Importers/Agents

]

Dear Sir/Madam,

Rejection of Application for Registration to Participate in Voluntary Energy Efficiency Labelling Scheme for Computers

With reference to your letter of application ref. _____ dated _____, I regret to inform you that your application for registration to participate in the scheme has not been accepted for the following reasons:-

1. _____ etc.

You are most welcome to submit new application again in future, when you have the necessary documents / information to support your application.

Yours faithfully,

for Director of Electrical & Mechanical Services

Flow Chart for Registration

