

# COMMISSION DECISION

of *[date]*

## establishing the ecological criteria for the award of the EU Ecolabel for Portable Computers

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel<sup>1</sup>, and in particular Article 8(2) thereof,

After consulting the European Union Eco-labelling Board,

Whereas:

- (1) Under Regulation (EC) No 66/2010, the EU Ecolabel may be awarded to those products with a reduced environmental impact during their entire life cycle.
- (2) Regulation (EC) No 66/2010 provides that specific EU Ecolabel criteria are to be established according to product groups.
- (3) Commission Decision 2005/343/EC<sup>2</sup> has established the ecological criteria and the related assessment and verification requirements for portable computers. Following the review of the criteria set out in that Decision, Commission Decision 2005/343/EC<sup>3</sup> has established revised criteria which are valid until 31 December 2010.
- (4) Those criteria have been further reviewed in the light of technological developments. It results from the review that it is necessary to modify the definition of the product group so as to reflect definitions from **Energy Star**<sup>4</sup>. Those new criteria, as well as the related assessment and verification requirements, should be valid for four years from the date of adoption of this Decision.
- (5) Decision 2005/343/EC should be replaced for reasons of clarity.
- (6) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 16 of Regulation (EC) No 66/2010.
- (7) A transitional period should be allowed for producers whose products have been awarded the Ecolabel for personal computers on the basis of the criteria set out in Decision 2005/343/EC, so that they have sufficient time to adapt their products to comply with the revised criteria and requirements. Producers should also be allowed to submit applications

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<sup>1</sup> OJ L 27, 30.1.2010, p. 1.

<sup>2</sup> OJ L 115, 4.5.2005, p. 35.

<sup>3</sup> OJ L 115, 4.5.2005

<sup>4</sup> OJ L 161, 24.06.2009, p.16

based on the criteria set out in Decision 2005/343/EC or on the criteria set out in this Decision until the lapse of validity of that Decision.

- (8) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 16 of Regulation (EC) No 66/2010,

HAS ADOPTED THIS DECISION:

*Article 1*

The product group 'portable computers' shall comprise "Notebook computers" as defined in Article 2.

Digital picture frames are not included in the scope.

*Article 2*

For the purpose of this Decision, the following definitions shall apply:

(1) *Computer* means a device which performs logical operations and processes data.

(2) *Notebook Computer* means a computer designed specifically for portability and to be operated for extended periods of time either with or without a direct connection to an AC power source. Notebooks must utilise an integrated computer display and be capable of operation off an integrated battery or other portable power source. In addition, most notebooks use an external power supply and have an integrated keyboard and pointing device. Notebook computers are typically designed to provide similar functionality to desktops, including operation of software similar in functionality as that used in desktops. For the purpose of this Decision, tablet PCs, which may use touch-sensitive screens along with or instead of other input devices shall be considered Notebook Computers.

(3) *External Power Supply* means a component contained in a separate physical enclosure external to the computer casing and designed to convert line voltage AC input from the mains to lower DC voltage(s) for the purpose of powering the computer. An external power supply must connect to the computer via a removable or hard-wired male/female electrical connection, cable, cord or other wiring.

*Article 3*

In order to be awarded the EU Ecolabel under Regulation (EC) No 66/2010, an item must fall within the product group 'Notebook Computers' as defined in Article 2 of this Decision and must comply with the ecological criteria as well as the related assessment and verification requirements, set out in the Annex to this Decision.

*Article 4*

The criteria for the product group 'Portable Computers' as well as the related assessment and verification requirements, shall be valid for 4 years from the date of adoption of this Decision.

*Article 5*

For administrative purposes the code number assigned to the product group 'Portable Computers' shall be '018'.

*Article 6*

Decision 2005/343/EC is repealed.

*Article 7*

1. By derogation from Article 6, applications for the EU Ecolabel for products falling within the product group "Portable Computers" submitted before the date of adoption of this Decision shall be evaluated in accordance with the conditions laid down in Decision 2005/343/EC.

2. Applications for the EU Ecolabel for products falling within the product group " Portable Computers " submitted from the date of adoption of this Decision but by 31 December 2010 at the latest may be based either on the criteria set out in Decision 2005/343/EC or on the criteria set out in this Decision.

Those applications shall be evaluated in accordance with the criteria on which they are based.

3. Where the Ecolabel is awarded on the basis of an application evaluated according to the criteria set out in Decision 2005/343/EC, that Ecolabel may be used for 12 months from the date of adoption of this Decision.

4. Licences issued by competent bodies under this Decision shall have a maximum validity date of 2 years and shall only be renewed subject to the applicant demonstrating that the EU Ecolabelled product meet criteria no. 1 and 3 of the Annex.

*Article 7*

This Decision is addressed to the Member States.

Done at Brussels,

*For the Commission*  
Janez POTOČNIK  
*Member of the Commission*

## ANNEX

### FRAMEWORK

#### **The aims of the criteria**

The criteria aim at promoting reduction of environmental damage or risks related to the use of energy (global warming, acidification, depletion of non-renewable energy sources) by reducing energy consumption, reduction of environmental damage related to the use of natural resources and reduction of environmental damage related to the use of hazardous substances by reducing the use of such substances.

#### **CRITERIA**

Criteria are set for each of the following aspects:

1. Energy Savings
2. Power Management
3. Power Supplies
4. Mercury in Fluorescent Lamps
5. Hazardous substances and mixtures
6. Substances listed in accordance with article 59(10) of REACH
7. Plastic parts
8. Noise
9. User instructions
10. Repairability
11. Design for disassembly
12. Lifetime extension
13. Packaging
14. Information appearing on the Ecolabel

#### **Assessment and verification requirements**

The specific assessment and verification requirements are indicated within each criterion.

Where the applicant is required to provide declarations, documentation, analyses test reports, or other evidence to show compliance with the criteria, it is understood that these may originate from the applicant and/or his supplier(s) and/or their supplier(s), et cetera, as appropriate.

Where possible, the testing should be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent. Where appropriate, test methods other than those indicated for each criterion may be used if the competent body assessing the application accepts their equivalence.

## EU ECOLABEL CRITERIA

### Criterion 1 - Energy Savings

#### *Energy savings for portable computers*

The portable computer's energy efficiency performance shall be at least 20% better than the latest energy efficiency requirements set out by Energy Star<sup>5</sup>.

**Assessment and verification:** The applicant shall declare the compliance of the product with these requirements to the competent body.

### Criterion 2 - Power Management

#### *(a) Power Management Requirements*

The portable computer shall be shipped with the power management system enabled at the time of delivery to the customers. Power management settings shall be:

- i. 10 minutes to screen off (display sleep),
- ii. 30 minutes to computer sleep (system level S3, suspended to RAM).

#### *(b) Network Requirements for Power Management*

- i. Portable computers with Ethernet capability shall have the ability to enable and disable Wake on LAN (WOL) for sleep mode.

#### *(c) Network Requirements for Power Management (applies to portable computers shipped through enterprise channels only)*

- i. Portable computers with Ethernet capability must meet one of the following requirements:
  - Be shipped with Wake On LAN enabled from the sleep mode when operating on AC power, or
  - Provide control to enable WOL that is sufficiently-accessible from both the client operating system user interface and over the network if portable computer is shipped to enterprise without WOL enabled;
- ii. Portable computers with Ethernet capability shall be capable of both remote (via network) and scheduled wake events from Sleep mode (e.g. Real Time Clock). Manufacturers shall ensure, where the manufacturer has control (i.e. configured through hardware settings rather than software settings), that these settings can be managed centrally, as the client wishes, with tools provided by the manufacturer.

**Assessment and verification:** the applicant shall provide the competent body with a declaration to certify that the computer has been shipped in the power management settings stated above or better.

### Criterion 3 - Power Supplies

#### *External Power Supplies*

They shall meet the energy efficiency requirements set out by Energy Star<sup>6</sup>.

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<sup>5</sup> As defined by the European Commission. See EU Energy Star Website: <http://www.eu-energystar.org/en/253.shtml#computerequipment>

<sup>6</sup> As defined by the European Commission. See EU Energy Star Website: <http://www.eu-energystar.org/en/253.shtml#computerequipment>

**Assessment and verification:** The applicant shall declare the compliance of the product with these requirements to the competent body.

#### Criterion 4 - Mercury in Fluorescent Lamps

The backlights in the portable computer shall not contain mercury or its compounds. The exclusion of mercury is valid, independent of the exemptions set out in the Annex to Directive 2002/95/EC<sup>7</sup>.

**Assessment and verification:** The applicant shall declare the compliance of the product with these requirements to the competent body and provide a brief description of the lighting system used.

#### Criterion 5 - Hazardous substances and mixtures

According to the Article 6(6) of the Regulation No 66/2010 on EU Ecolabel, the product or any part of it thereof shall not contain substances or mixtures meeting the criteria for classification with the hazard classes or categories specified below nor shall it contain substances referred to in Article 57 of REACH Regulation (EC) No 1907/2006.

List of hazard statements:

H300 Fatal if swallowed	R28
H301 Toxic if swallowed	R25
H304 May be fatal if swallowed and enters airways	R65
H310 Fatal in contact with skin	R27
H311 Toxic in contact with skin	R24
H330 Fatal if inhaled	R23/26
H331 Toxic if inhaled	R23
H340 May cause genetic defects	R46
H341 Suspected of causing genetic defects	R68
H350 May cause cancer	R45
H350i May cause cancer by inhalation	R49
H351	R40
H360F May damage fertility	R60
H360D May damage the unborn child	R61
H360FD May damage fertility. May damage the unborn child	R60/61/60-61
H360Fd May damage fertility. Suspected of damaging the unborn child	R60/63
H360Df May damage the unborn child. Suspected of damaging fertility	R61/62
H361f Suspected of damaging fertility	R62
H361d Suspected of damaging the unborn child	R63
H361fd May damage fertility. May damage the unborn child	R62-63

<sup>7</sup> OJ L 37, 13.2.2003, p.19.

H362 May cause harm to breast fed children	R64
H370 Causes damage to organs	R39/23/24/25/26/27/28
H371 May cause damage to organs	R68/20/21/22
H372 Causes damage to organs	R48/25/24/23
H373 May cause damage to organs	R48/20/21/22
H400 Very toxic to aquatic life	R50/50-53
H410 Very toxic to aquatic life with long-lasting effects	R50-53
H411 Toxic to aquatic life with long-lasting effects	R51-53
H412 Harmful to aquatic life with long-lasting effects	R52-53
H413 May cause long-lasting effects to aquatic life	R53
EUH059 Hazardous to the ozone layer	R59
EUH029 Contact with water liberates toxic gas	R29
EUH031 Contact with acids liberates toxic gas	R31
EUH032 Contact with acids liberates very toxic gas	R32
EUH070 Toxic by eye contact	R39-41

The use of substances or mixtures which upon processing change their properties (e.g., become no longer bioavailable, undergo chemical modification) in a way that the identified hazard no longer applies are exempted from the above requirement.

Concentration limits for substances or mixtures meeting the criteria for classification with the above mentioned hazard classes or categories, and for substances meeting the criteria of Article 57 (a), (b) or (c) of REACH, shall not exceed the generic or specific concentration limits determined in accordance with the Article 10 of CLP Regulation No1272/2008. If specific concentration limits are determined they should prevail against the generic ones.

Concentration limits for substances meeting criteria of Article 57 (d), (e) or (f) of Regulation (EC) No 1907/2006 shall not exceed 0, 1% weight by weight.

***Assessment and verification:***

*Concentration limits shall be specified in the Safety Data Sheets according to Article 31 of REACH Regulation 1907/2006.*

*In case of mixtures:*

*The applicant shall provide a declaration of compliance with this criterion, together with a list of ingredients and related Safety Data Sheets according to Annex II of the REACH regulation (EC) No 1907/2006 for the product as well as for all substances or mixtures listed in the formulation(s).*

*In case of articles:*

*The applicant shall provide a declaration of compliance with this criterion, together with related documentation, such as declarations of compliance signed by the material suppliers and copies of relevant Safety Data Sheets for substances or mixtures.*

The following substances/uses of substances are specifically derogated from this requirement: *specific to each product group – still open for comments whether any derogations for computers are needed.*

### **Criterion 6 - Substances listed in accordance with article 59(10) of REACH**

According to Article 6(7) of Regulation No 66/2010 on the EU Ecolabel, no derogation from the exclusion in Article 6(6) shall be given concerning substances identified as substances of very high concern and included in the list foreseen in Article 59 of REACH, present in mixtures, in an article or in any homogenous part of a complex article in concentrations higher than 0.1%. Specific concentration limits determined in accordance with Article 10 of CLP Regulation No1272/2008 shall apply in case it is lower than 0, 1%.

#### Assessment and verification:

The list of substances identified as substances of very high concern and included in the candidate list in accordance with Article 59 of REACH can be found here:

[http://echa.europa.eu/chem\\_data/authorisation\\_process/candidate\\_list\\_table\\_en.asp](http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp)

Reference to the list shall be made on the date of application.

Concentration limits shall be specified in the Safety Data Sheets according to Article 31 of REACH Regulation 1907/2006.

### **Criterion 7 – Plastic parts**

(a) If any plasticizer substance in the manufacturing process is applied, phthalates must comply with the requirements on hazardous substances set out in criteria 5 and 6. Additionally DNOP (di-n-octyl phthalate), DINP (di-isononyl phthalate), DIDP (di-isodecyl phthalate) are not permitted in the product.

(b) Plastic parts shall not contain a chlorine content greater than 50% by weight.

(c) Only biocidal products containing biocidal active substances included in Annex IA to Directive 98/8/EC of the European Parliament and of the Council ( 2 ), and authorised for use in computers, shall be allowed for use.

*Assessment and verification: a certificate signed by the manufacturer declaring compliance with these requirements shall be submitted to the awarding competent body. A declaration of compliance signed by the plastic and biocides suppliers and copies of relevant safety data sheets about materials and substances shall also be provided to the awarding competent body. All biocides used shall be clearly indicated.*

### **Criterion 8 - Noise**

The ‘Declared A-weighted Sound Power Level’ (re 1 pW) of the portable computer, according to paragraph 3.2.5 of ISO 9296, shall not exceed:

- 32 dB (A) in the idle operating mode,
- 36 dB (A) when accessing a hard-disk drive.

**Assessment and verification:** *the applicant shall provide the competent body with a report, certifying that the levels of noise emissions have been measured in accordance with ISO 7779 and declared in accordance with ISO 9296. The report shall state the measured levels of noise emissions in both the idle operating mode and when accessing a disk drive, which shall be declared in accordance with paragraph 3.2.5 of ISO 9296.*

### **Criterion 9 - User instructions**

The portable computer shall be sold with relevant user information that provides advice on its proper environmental use. The information shall be located in a single, easy-to-find place in the user instructions as well as on the manufacturer's website. The information shall include in particular:

(a) Energy consumption: TEC value (as per Energy star), as well as the maximum power demand in each operating mode. In addition, instructions must be provided on how to use the devices energy-saving mode.

(b) Information that energy efficiency cuts energy consumption and thus saves money by reducing electricity bills and that unplugging your portable computer reduces energy consumption to zero.

(c) The following indications on how to reduce power consumption when the portable computers are not being used:

- i. Putting the portable computer into off mode, will reduce energy consumption, but will still draw some power,
- ii. Reducing the brightness of the screen will reduce energy use.
- iii. Running the disk fragmentation on the portable computer will reduce energy use and increase the life of your portable computer (this is not applicable to Solid State Device machines).
- iv. Screen savers can stop notebook displays from powering down into a lower power mode when not in use. Ensuring that screen savers are not activated on notebook computers can therefore reduce energy use.

(d) Repair information should be included in the user instructions to let the user know who is qualified to repair the portable computer, including contact details as appropriate.

(e) End-of-life instructions for the proper disposal of portable computers at civic amenity sites or through retailer take-back schemes as applicable, which shall comply with Directive 2002/96/EC<sup>8</sup>.

(f) Information that the product has been awarded the EU Ecolabel with a brief explanation as to what this means together with an indication that more information on the Ecolabel can be found at the website address <http://www.ecolabel.eu>

**Assessment and verification:** *The applicant shall declare compliance of the product with these requirements and shall provide a copy of the instruction manual to the competent body. These User Instructions should then be pre-loaded onto the computer for the user to read and available for access on the manufacturers website.*

### **Criterion 10 - Repairability**

The applicant shall ensure that spare parts are available for at least five years from the end of production of the portable computer.

**Assessment and verification:** *The applicant shall declare the compliance of the product with these requirements to the competent body.*

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<sup>8</sup> OJ L037, 13.02.2003, p.24.

## **Criterion 11 - Design for disassembly**

The manufacturer shall demonstrate that the portable computer can be easily dismantled by professionally trained recyclers using the tools usually available to them, for the purpose of repairs and replacements of worn-out parts, upgrading older or obsolete parts, and separating parts and materials, ultimately for recycling.

To facilitate the dismantling:

- (a) Fixtures within the portable computer shall allow for its disassembly, e.g. screws, snap-fixes, especially for parts containing hazardous substances.
- (b) Plastic parts shall be of one polymer or be of compatible polymers for recycling and have the relevant ISO11469 marking if greater than 25 g in mass.
- (c) Metal inlays that cannot be separated shall not be used.
- (d) Data on the nature and amount of hazardous substances in the portable computer shall be gathered in accordance with Council Directive 2006/121/EC and the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

***Assessment and verification:** a test report shall be submitted with the application detailing the dismantling of the portable computer. It shall include an exploded diagram of the portable computer labelling the main components as well as identifying any hazardous substances in components. It can be in written or audiovisual format. Information regarding hazardous substances shall be provided to the competent body in the form of a list of materials identifying material type, quantity used and location.*

## **Criterion 12 - Lifetime extension**

Portable computers shall have facilities that enable the following:

- i. Exchangeable and upgradeable memory,
- ii. Expansion capability: presence of at least three USB interfaces as well as a connection for an external monitor,
- iii. Additional or replacement optical drive.

***Assessment and verification:** The applicant shall declare the compliance of the product with these requirements to the competent body.*

## **Criterion 13 - Packaging**

Where cardboard boxes are used, they shall be made of 80 % recycled material. Where plastic bags are used for the final packaging, they shall be made of, at least, 75 % recycled material or they shall be biodegradable or compostable, in agreement with the definitions provided by the EN 13432 or equivalent.

***Assessment and verification:*** a sample of the product packaging shall be provided on application, together with a corresponding declaration of compliance with this criterion. Only primary packaging, as defined in Directive 94/62/EC<sup>9</sup>, is subject to the criterion.

#### **Criterion 14 - Information appearing on the Ecolabel**

Optional label with text box shall contain the following text:

- "- High energy efficiency
- Designed to facilitate recycling
- Mercury free backlights".

***Assessment and verification:*** The applicant shall declare the compliance of the product with this requirement, and shall provide a copy of the Ecolabel as it will appear on the packaging and/or product and/or accompanying documentation to the competent body.

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<sup>9</sup> OJ L 365, 31.12.1994, p.10.