Commission Delegated Regulation (EU) No 1062/2010 of 28 September 2010 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of televisions (Text with EEA relevance)

ANNEX I

Energy efficiency class

The energy efficiency class of a television shall be determined on the basis of its Energy Efficiency Index (*EEI*) as set out in Table 1. The Energy Efficiency Index of a television shall be determined in accordance with point 1 of Annex II.

TABLE 1

Energy efficiency class of a television

Energy efficiency class	Energy Efficiency Index
A+++ (most efficient)	$EEI < 0{,}10$
A++	$0{,}10 \leq EEI < 0{,}16$
A+	$0{,}16 \leq EEI < 0{,}23$
A	$0{,}23 \leq EEI < 0{,}30$
B	$0{,}30 \leq EEI < 0{,}42$
C	$0{,}42 \leq EEI < 0{,}60$
D	$0{,}60 \leq EEI < 0{,}80$
E	$0{,}80 \leq EEI < 0{,}90$
F	$0{,}90 \leq EEI < 1{,}00$
G (least efficient)	$1{,}00 \leq EEI$

ANNEX II

Method for calculating the Energy Efficiency Index and the annual on-mode energy consumption

1. The Energy Efficiency Index (*EEI*) is calculated as $EEI = P/P_{ref}(A)$, where:

— $P_{ref}(A) = P_{basic} + A \times 4{,}3224$ Watts/dm^2,

— P_{basic} = 20 Watts for television sets with one tuner/receiver and no hard disc,

— P_{basic} = 24 Watts for television sets with hard disc(s),

— P_{basic} = 24 Watts for television sets with two or more tuners/receivers,

— P_{basic} = 28 Watts for television sets with hard disc(s) and two or more tuners/receivers,

— P_{basic} = 15 Watts for television monitors,

— A is the visible screen area expressed in dm^2,

— P is the on-mode power consumption of the television in Watts measured in accordance with Annex VII, rounded to one decimal place.

2. The annual on-mode energy consumption E in kWh is calculated as $E = 1{,}46 \times P$.

3. Televisions with automatic brightness control

For the purposes of calculating the Energy Efficiency Index and the annual on-mode energy consumption referred to in points 1 and 2, the on-mode power consumption as established according to the procedure set out in Annex VII is reduced by 5 % if the following conditions are fulfilled when the television is placed on the market:

(a) the luminance of the television in the home-mode or the on-mode condition as set by the supplier, is automatically reduced between an ambient light intensity of at least 20 lux and 0 lux;

(b) the automatic brightness control is activated in the home-mode condition or the on-mode condition of the television as set by the supplier.

ANNEX III

Product fiche

1. The information in the product fiche of the television shall be provided in the following order, and shall be included in the product brochure or other literature provided with the product:

(a) supplier's name or trade mark;

(b) supplier's model identifier; where model identifier means the code, usually alphanumeric, which distinguishes a specific television model from other models of the same trade mark or supplier's name;

(c) the energy efficiency class of the model in accordance with Annex I, Table 1; where the television has been awarded an 'EU Ecolabel' under Regulation (EC) No 66/2010 of the European Parliament and of the Council[1], this information may be included;

(d) the visible screen diagonal in centimetres and in inches;

(e) the on-mode power consumption measured in accordance with the procedure set out in Annex VII;

(f) the annual energy consumption calculated in accordance with Annex II in kWh per year, rounded to the first integer; it shall be described as: 'Energy consumption XYZ kWh per year, based on the power consumption of the television operating 4 hours per day for 365 days. The actual energy consumption will depend on how the television is used.';

(g) the standby and off-mode power consumption or both measured in accordance with the procedure set out in Annex VII;

(h) the screen resolution in physical horizontal and vertical pixel count.

2. One fiche may cover a number of television models supplied by the same supplier.

3. The information contained in the fiche may be given in the form of a copy of the label, either in colour or in black and white. Where this is the case, the information listed in point 1 not already displayed on the label must also be provided.

ANNEX IV

Technical documentation

The technical documentation referred to in Article 3(1)(c) shall include:

(a) the name and address of the supplier;

(b) a general description of the television model, sufficient for it to be unequivocally and easily identified;

(c) where appropriate, the references of the harmonised standards applied;

(d) where appropriate, the other technical standards and specifications used;

(e) identification and signature of the person empowered to bind the supplier;

(f) test parameters for measurements:

- (i) ambient temperature;
- (ii) test voltage in V and frequency in Hz;
- (iii) total harmonic distortion of the electricity supply system;
- (iv) the input terminal for the audio and video test signals;
- (v) information and documentation on the instrumentation, set-up and circuits used for electrical testing;

(g) on-mode parameters:

- (i) the power consumption data in Watts rounded to the first decimal place for power measurements up to 100 Watts, and to the first integer for power measurements above 100 Watts;
- (ii) the characteristics of the dynamic broadcast-content video signal representing typical broadcast TV content;
- (iii) the sequence of steps for achieving a stable condition with respect to power consumption;
- (iv) for televisions with a forced menu, the ratio of the peak luminance of the home-mode and the peak luminance of the brightest on-mode condition provided by the television, expressed as a percentage;
- (v) for television monitors, a description of the relevant characteristics of the tuner used for measurements;

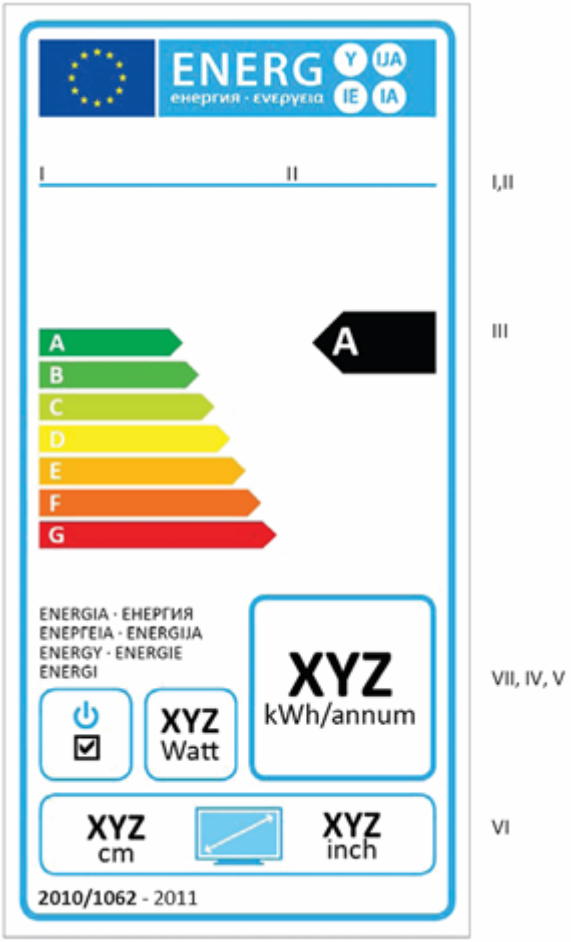
(h) for each standby or off-mode:

- (i) the power consumption data in Watts rounded to the second decimal place;
- (ii) the measurement method used;
- (iii) description of how the mode was selected or programmed;
- (iv) sequence of events to reach the mode where the television automatically changes modes.

ANNEX V

Label

1. LABEL 1



(a) The following information shall be included in the label:

I. supplier's name or trade mark;

II. supplier's model identifier, where 'model identifier' means the code, usually alphanumeric, which distinguishes a specific television model from other models of the same trade mark or supplier's name;

III. the energy efficiency class of the television, determined in accordance with Annex I. The head of the arrow containing the energy efficiency class of the television shall be placed at the same height as the head of the arrow of the relevant energy efficiency class;

IV. on-mode power consumption in Watts, rounded to the first integer;

V. annual on-mode energy consumption calculated in accordance with point 2 of Annex II, in kWh, rounded to the first integer;

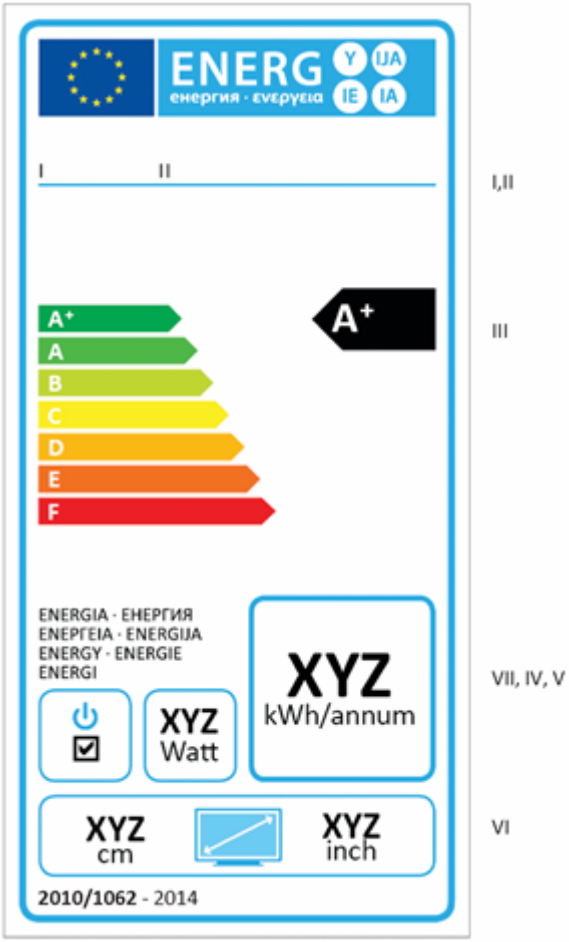
VI. visible screen diagonal in inches and centimetres.

For televisions with an easily visible switch, which puts the television in a condition with power consumption not exceeding 0,01 Watts when operated to the off position, the symbol defined in point 8 of point 5 may be added.

Where a model has been granted a 'European Union Ecolabel' under Regulation (EC) No 66/2010, a copy of the EU Ecolabel may be added.

(b) The design aspects of the label shall be in accordance with point 5.

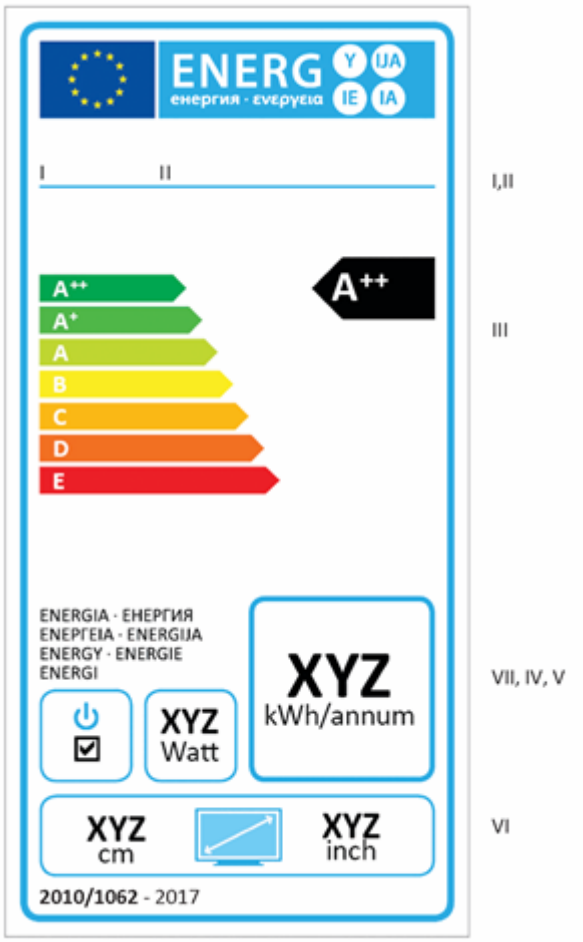
2. LABEL 2



(a) The information listed in point 1(a) shall be included in the label.

(b) The design aspects of the label shall be in accordance with point 5.

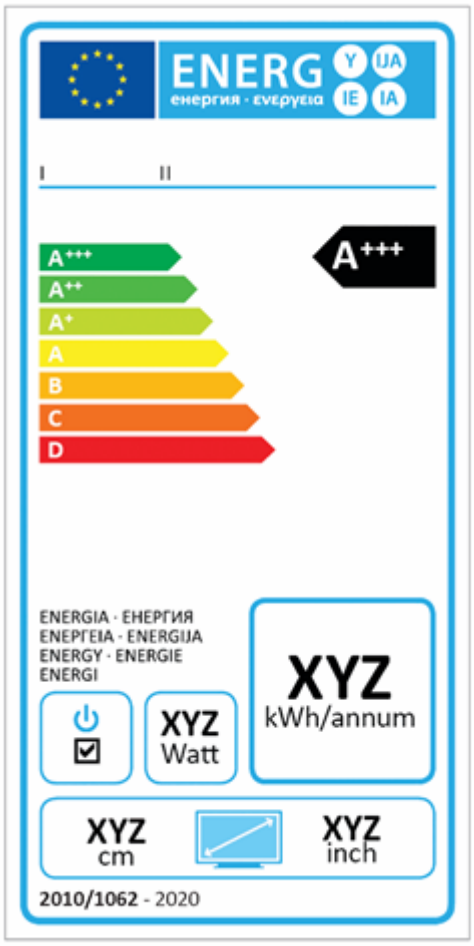
3. LABEL 3



(a) The information listed in point 1(a) shall be included in the label.

(b) The design aspects of the label shall be in accordance with point 5.

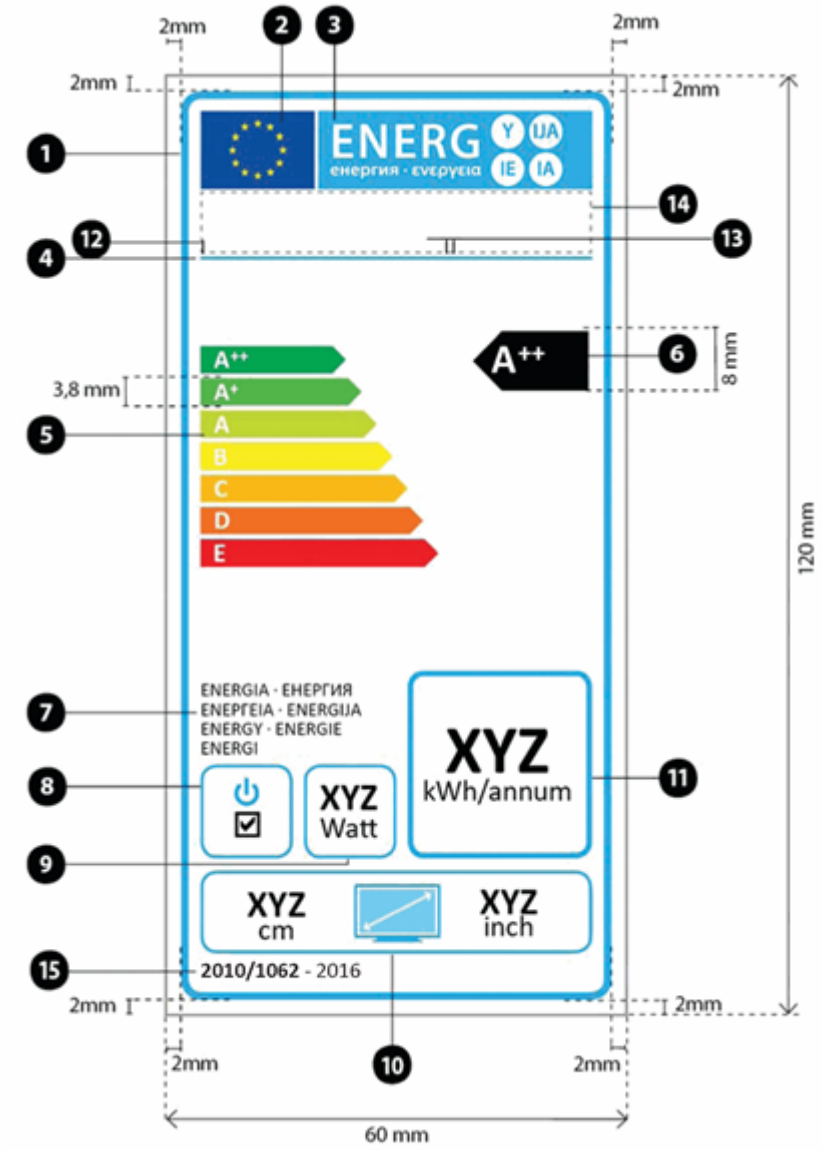
4. LABEL 4



(a) The information listed in point 1(a) shall be included in the label.

(b) The design aspects of the label shall be in accordance with point 5.

5. The design of the label shall be the following:



Whereby:

(a) The label shall be at least 60 mm wide and 120 mm high. Where the label is printed in a larger format, its content must nevertheless remain proportionate to the specifications above.

(b) For televisions with screen area above 29 dm^2 the background shall be white. For televisions with screen area of 29 dm^2 or below the background shall be white or transparent.

(c) Colours are CMYK — cyan, magenta, yellow and black and are given following this example: 00-70-X-00: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black.

(d) The label shall fulfil all of the following requirements (numbers refer to the figure above):

1 **Border stroke:** 3 pt — colour: Cyan 100 % — round corners: 3,5 mm.

2 **EU logo** — colours: X-80-00-00 and 00-00-X-00.

3 **Label logos:**

colour: X-00-00-00

Pictogram as depicted; EU logo and label logo (combined): width: 51 mm, height: 9 mm.

4 **Sub-logos border:** 1 pt — colour: Cyan 100 % — length: 51 mm.

5 **A-G scale**

— **Arrow:** height: 3,8 mm, gap: 0,75 mm — colours:
  — Highest class: X-00-X-00,
  — Second class: 70-00-X-00,
  — Third class: 30-00-X-00,
  — Fourth class: 00-00-X-00,
  — Fifth class: 00-30-X-00,
  — Sixth class: 00-70-X-00,
  — Last class: 00-X-X-00.

— **Text:** Calibri bold 10 pt, capitals, white; '+' symbols: Calibri bold 7 pt, capitals, white.

6 **Energy efficiency class**

— **Arrow:** width: 26 mm, height: 8 mm, 100 % black.

— **Text:** Calibri bold 15 pt, capitals, white; '+' symbols: Calibri bold 10 pt, capitals, white.

7 **Energy**

— **Text:** Calibri regular 7pt, capitals, 100 % black.

8 **Switch logo:**

— **Pictogram as depicted, Border:** 1 pt — colour: Cyan 100 % — round corners: 3,5 mm.

9 **Text related to on-mode power consumption:**

— **Border:** 1 pt — colour: Cyan 100 % — round corners: 3,5 mm.

— **Value:** Calibri bold 14 pt, 100 % black.

— **Second line:** Calibri regular 11 pt, 100 % black.

10 **Television screen diagonal size:**

— **Pictogram as depicted**

— **Border:** 1 pt — colour: Cyan 100 % — round corners: 3,5 mm.

— **Value:** Calibri bold 14 pt, 100 % black. Calibri regular 11pt, 100 % black.

11 **Text related to annual energy consumption:**

— **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.

— **Value:** Calibri bold 25 pt, 100 % black.

— **Second line:** Calibri regular 11 pt, 100 % black.

12 **Supplier's name or trade mark**

13 **Supplier's model identifier**

14 The supplier's name or trade mark and model information should fit in a space of 51 × 8 mm.

15 **Reference period**

Text: Calibri bold 8 pt

Text: Calibri light 9 pt.

ANNEX VI

Information to be provided in the cases where end-users cannot be expected to see the product displayed

1. The information referred to in Article 4(b) shall be provided in the following order:

(a) the energy efficiency class of the model as defined in Annex I;

(b) the on-mode power consumption as referred to in point 1of Annex II;

(c) the annual power consumption in accordance with point 2 of Annex II;

(d) the visible screen diagonal.

2. Where other information contained in the product information fiche is also provided, it shall be in the form and order specified in Annex III.

3. The size and font in which all the information referred in this Annex is printed or shown shall be legible.

ANNEX VII

Measurements

1. For the purposes of compliance and verification of compliance with the requirements of this Regulation, measurements shall be made using a reliable, accurate and reproducible measurement procedure that takes into account the generally recognised state-of-the-art measurement methods, including methods set out in documents the reference numbers of which have been published for that purpose in the *Official Journal of the European Union*.

2. **Measurements of on-mode power consumption referred to in point 1 of Annex II**

(a) General conditions:

(i) measurements shall be made at an ambient temperature of 23 °C +/– 5 °C;

(ii) measurements shall be made using a dynamic broadcast-content video signal representing typical broadcast TV content; The measurement shall be the average power consumed over ten consecutive minutes;

(iii) measurements shall be made after the television has been in the off-mode for a minimum of 1 hour immediately followed by a minimum of 1 hour in the on-mode and shall be completed before a maximum of 3 hours in on-mode. The relevant video signal shall be displayed during the entire on-mode duration. For televisions that are known to stabilise within 1 hour, these durations may be reduced if the resulting measurement can be shown to be within 2 % of the results that would otherwise be achieved using the durations described here;

(iv) measurements shall be made with an uncertainty of less than or equal to 2 % at the 95 % confidence level;

(v) measurements shall be made with the Automatic Brightness Control function, if such a function exists, made inactive. If the Automatic Brightness Control function exists and cannot be made inactive, then the measurements shall be performed with the light entering directly into the ambient light sensor at a level of 300 lux, or more.

(b) Conditions for measuring the on-mode power consumption of televisions:

(i) television sets without forced menu: The power consumption shall be measured in the on-mode condition of the television as delivered by the manufacturer, that is, the brightness controls of the television shall be in the position adjusted by the manufacturer for the end user;

(ii) television sets with forced menu: The power consumption shall be measured in the 'home-mode' condition;

(iii) television monitors without forced menu: The television monitor shall be connected to an appropriate tuner. The power consumption shall be measured in the on-mode condition of the television as delivered by the manufacturer, that is, the brightness controls of the television monitor shall be in the position adjusted by the manufacturer for the end user. The power consumption of the tuner is not relevant for the measurements of on-mode power consumption of the television monitor;

(iv) television monitors with forced menu: The television monitor shall be connected to an appropriate tuner. The power consumption shall be measured in the 'home-mode' condition.

3. **Measurements of standby/off-mode power consumption referred to in point 1(g) of Annex III**

Measurements of power of 0,50 Watts or greater shall be made with an uncertainty of less than or equal to 2 % at the 95 % confidence level. Measurements of power of less than 0,50 Watts shall be made with an uncertainty of less than or equal to 0,01 Watts at the 95 % confidence level.

4. **Measurements of peak luminance referred to in point 2(c) Annex VIII**

(a) Measurements of peak luminance shall be made with a luminance meter, detecting that portion of the screen exhibiting a full (100 %) white image, which is part of a 'full screen test' test pattern that does not exceed the average picture level (APL) point where any power limiting occurs in the display luminance drive system.

(b) Measurements of luminance ratio shall be made without disturbing the luminance meter's detection point on the display whilst switching between the home-mode

condition or the on-mode condition of the television as set by the supplier, as applicable, and the brightest on-mode condition.

ANNEX VIII

Verification procedure for market surveillance purposes

For the purposes of checking conformity with the requirements laid down in Articles 3 and 4, Member State authorities shall apply the following verification procedure for the on-mode power consumption referred to in point 1 of Annex II and the standby/off-mode power consumption referred to in point 1(g) of Annex III.

1. Member State authorities shall test one single unit.

2. The model shall be considered to comply with the declared value of the on-mode power consumption and the declared values for standby and/or off-mode power consumption, if:

(a) the result for on-mode power consumption does not exceed the declared power consumption value by more than 7 %; and

(b) the results for standby and off-mode power consumption values, as applicable, do not exceed the declared power consumption values by more than 0,10 Watts; and

(c) the result for the peak luminance ratio is above 60 %.

3. If the results referred to in point (2)(a) or (b) or (c) are not achieved, three additional units of the same model shall be tested.

4. After three additional units of the same model have been tested, the model shall be considered to comply with the declared value of the on-mode power consumption and the declared values for standby and off-mode power consumption, if:

(a) the average of the results for the latter three units for on-mode power consumption does not exceed the declared power consumption value by more than 7 %; and

(b) the average of the results for the latter three units for standby and off-mode conditions, as applicable, does not exceed the declared power consumption values by more than 0,10 Watts; and

(c) the average of the results for the latter three units for the peak luminance ratio is above 60 %.

5. If the results referred to in point (4)(a) or (b) or (c) are not achieved, the model shall be considered not to comply with the requirements.

(**1**) OJ L 27, 30.1.2010, p. 1.