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ANNEXES 1 to 5

**ANNEXES**

**to the**

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**  
**on the establishment of a Carbon Border Adjustment Mechanism ('CBAM')**

**ANNEX I**  
**List of goods**

1. For the purpose of the identification of goods, this Regulation shall apply to goods falling under the CN codes listed below.
2. References to the CN codes below shall be those of Commission Implementing Regulation (EU) 2020/1577.

**Cement**

<b>CN code</b>
2523 – Portland cement, aluminous cement, slag cement, supersulphate cement and similar hydraulic cements, whether or not coloured or in the form of clinkers:
2523 10
2523 29

**Electricity**

<b>CN code</b>
2716 – Electrical energy:
2716 00

**Fertilisers**

<b>CN code</b>
2808 – Nitric acid; sulphonitric acids:
2808 00
2814 – Ammonia, anhydrous or in aqueous solution:
2814 10
2814 20
3102 – Mineral or chemical fertilisers, nitrogenous:
3102 10
3102 30

**Iron and Steel**

<b>CN code</b>
7205 – Granules and powders, of pig iron, spiegeleisen, iron or steel:
7205 10
7205 21
7205 29
7206 – Iron and non-alloy steel in ingots or other primary forms (excluding iron of heading 7203):
7206 10
7206 90
7207 – Semi-finished products of iron or non-alloy steel:
7207 11
7207 12
7207 19
7207 20

7208 – Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, hot-rolled, not clad, plated or coated:
7208 10
7208 25
7208 26
7208 27
7208 36
7208 37
7208 38
7208 39
7208 40
7208 51
7208 52
7208 53
7208 54
7208 90
7209 – Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, cold-rolled (cold-reduced), not clad, plated or coated:
7209 15
7209 16
7209 17
7209 18
7209 25
7209 26
7209 27
7209 28
7209 90
7210 – Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, clad, plated or coated:
7210 11
7210 12
7210 20
7210 30
7210 41
7210 49
7210 50
7210 61
7210 69
7210 70
7210 90
7211 – Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, not clad, plated or coated:
7211 13
7211 14
7211 23
7211 29
7211 90
7212 – Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, clad, plated or coated:

7212 10
7212 20
7212 30
7212 40
7212 50
7212 60
7213 – Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel:
7213 10
7213 20
7213 91
7213 99
7214 – Other bars and rods of iron or non-alloy steel, not further worked than forged, hot-rolled, hot-drawn or hot-extruded, but including those twisted after rolling:
7214 10
7214 20
7214 30
7214 91
7214 99
7215 – Other bars and rods of iron or non-alloy steel:
7215 10
7215 50
7215 90
7216 – Angles, shapes and sections of iron or non-alloy steel:
7216 10
7216 21
7216 22
7216 31
7216 32
7216 33
7216 40
7216 50
7216 61
7216 69
7216 91
7216 99
7217 – Wire of iron or non-alloy steel:
7217 10
7217 20
7217 30
7217 90

### Aluminium

<b>CN code</b>
7601 – Unwrought aluminium:
7601 10
7601 20
7603 – Aluminium powders and flakes:
7603 10

7603 20
7604 – Aluminium bars, rods and profiles:
7604 10
7604 21
7604 29
7605 – Aluminium wire:
7605 11
7605 19
7605 21
7605 29
7606 – Aluminium plates, sheets and strip, of a thickness exceeding 0,2 mm:
7606 11
7606 12
7606 91
7606 92
7607 – Aluminium foil (whether or not printed or backed with paper, paper-board, plastics or similar backing materials) of a thickness (excluding any backing) not exceeding 0,2 mm:
7607 11
7607 19
7607 20
7608 – Aluminium tubes and pipes:
7608 10
7608 20
7609 – Aluminium tube or pipe fittings (for example, couplings, elbows, sleeves):
7609 00

## **ANNEX II**

### **Countries and territories outside the scope of this Regulation**

1. This Regulation shall not apply to goods originating in the following countries:
  - Iceland
  - Liechtenstein
  - Norway
  - Switzerland
2. This Regulation shall not apply to goods originating in the following territories:
  - Büsingen
  - Helgoland
  - Livigno
  - Campione d'Italia
  - Ceuta
  - Melilla

**ANNEX III**  
**Approach to calculating embedded emissions**

**Simple goods**

For determining the installation-specific value of the specific embedded emissions of a simple good, the following equation is to be applied:

$$SEE_g = \frac{AttrEm_g}{AL_g}$$

Where  $SEE_g$  are the specific embedded emissions of good G, in terms of CO<sub>2</sub>e per ton,  $AttrEm_g$  the attributed emissions of the good G, and  $AL_g$  the activity level of the good. The activity level is the amount of good produced in the reporting period in that installation, applying the good definitions given in the implementing act pursuant to Article 7.

‘Attributed emissions’ mean the part of the installation’s direct and indirect emissions during the reporting period that are caused by the production process resulting in the good G applying the system boundaries of the process defined by the implementing act pursuant to Article 7. Attributed emissions shall be calculated using the following equation:

$$AttrEm_g = DirEm + Em_{H,imp} - Em_{H,exp} + G_{corr,imp} - G_{corr,exp} + Em_{el} - Em_{el,exp}$$

Where  $DirEm$  are the direct greenhouse gas emissions from the process within the system boundaries given in the implementing act pursuant to Article 7,

$Em_{H,imp}$  are the indirect emissions accounted for heat imported to the installation and consumed within the system boundaries of the process,

$Em_{H,exp}$  are emission equivalents of heat exported from the process system boundaries,

$G_{corr,imp}$  is a correction factor taking into account imports of waste gases or greenhouse gases used as process input,

$G_{corr,exp}$  a similar correction factor for exports of such gases from the system boundaries of the process,

$Em_{el}$  are the indirect emissions accounted for electricity consumed within the system boundaries of the process,

$Em_{el,exp}$  are emission equivalents of electricity exported from the process system boundaries.

$E_{mH}$  is to be calculated using the emission factor for heat given in the implementing act pursuant to Article 7,  $Em_{el}$  is to be calculated using the emission factor for electricity given in that act. For  $G_{corr}$  the implementing act shall specify the types of gases and of their use eligible for corrections, and relevant calculation factors.

**Complex goods**

For determining the installation-specific value of the specific embedded emissions of a complex good, the following equation is to be applied:

$$SEE_g = \frac{AttrEm_g + EE_{InpMat}}{AL_g}$$

Where  $EE_{InpMat}$  are the embedded emissions of the input materials (precursors) consumed in the production process. Only materials listed as relevant to the system boundaries of the production process as specified in the implementing act pursuant to Article 7 are to be considered. The relevant  $EE_{InpMat}$  are calculated as follows:

$$EE_{ImpMat} = \sum_{i=1}^n M_i \cdot SEE_i$$

Where  $M_i$  is the mass of input material  $i$  used in the production process, and  $SEE_i$  its specific embedded emissions for the input material. For  $SEE_i$  the operator of the installation shall use the actually monitored value of the installation from where the input material has been received, provided that that installation's data complies with the requirements of Article 7. If such actual monitoring data cannot be used, the default value given in the implementing act pursuant to Article 7 shall be used.

### **Determination of default values**

For the purpose of the Commission determining default values for all relevant parameters relevant according to Article 7, only actual values shall be used for the determination of embedded emissions of simple goods. However, in the absence of actual data, default values or literature values may be used for the parameters outside the control of the reporting installations.

For emission factors of heating and cooling, and of electricity, and for the approach taken to correct for waste gases or greenhouse gas used as process material, the Commission shall publish guidance before collecting the data required to determine the relevant default values.

### **Default values in Article 7(2)**

Default values as referred to in Article 7(2) shall be determined according to the methods set out above and based on data collected in the context of Article 11 of Directive 2003/87/EC. They shall be set at a level corresponding to the emissions of the 10 percent worse performing sites in the EU for each of the processes involved in the production of goods.

### **Default values for imported electricity**

Default value for electricity represent the CO<sub>2</sub> emission factor, in tonne of CO<sub>2</sub> equivalent per Megawatt/hour, which means the weighted average of the CO<sub>2e</sub> intensity of electricity produced from fossil fuels in the EU. The weight reflects the production mix of the fossil fuels in the EU. The CO<sub>2</sub> factor is the result of the division of the CO<sub>2</sub> equivalent emission data of the energy industry divided by the gross electricity generation based on fossil fuels in Terawatt/hour.

The default value should be established based on the data of a previous year.

Where a third country, or a group of third countries having significant exchange of electricity with the EU, demonstrate to the Commission, on the basis of reliable data, that the average CO<sub>2e</sub> emission factor of price-setting sources in the third country or group of third countries are lower than the default value, a different default value based on this average CO<sub>2e</sub> emission factor can be established for this country or group of countries. Where specific values are defined for a third country or a group of third countries, electricity imported from other third countries into the third countries subject to the specific value may not be re-exported to the Union using the specific value defined.

### **Conditions to opt for actual emissions in electricity**

A declarant may require to apply actual emissions instead of default values for the calculation referred to in Article 7 if the following cumulative criteria are met:

- (a) the declarant has concluded a power purchase agreement with a producer of electricity located in a third country for an amount that is equivalent to the amount of electricity for which the use of individual values is claimed;



- (b) When the electricity is produced by an installation emitting lower values of emissions than the default value or country-specific value using renewable sources, that installation became operational after [date of entering into force of this Directive] or by the increased capacity of an installation that was repowered after that date;
- (c) The installation producing electricity is either directly connected to the EU transmission system or it can be demonstrated that at the time of export, there was no physical network congestion at any point in the network between the installation and the EU transmission system;
- (d) an equivalent amount of electricity to the electricity for which the use of individual values is claimed has been firmly nominated to the allocated interconnection capacity by all responsible transmission system operators in the country of origin, the country of destination and, if relevant, each third country of transit, and the nominated capacity and the production of electricity by the installation referred to in point (b) refer to the same period of time which shall not be longer than one hour;
- (e) meeting the above criteria is certified by a verifier. The verifier shall receive at least monthly interim reports demonstrating how the above criteria are fulfilled.

The accumulated amount of electricity under the power purchase agreement and its corresponding embedded emissions shall be excluded from the calculation of the country CO<sub>2</sub> average intensities used for the purpose of the calculation of indirect electricity embedded emissions in goods as per Article 7.

#### **Default values for electricity indirect emissions**

Unless an individual assessment is claimed for the calculation of indirect electricity emissions embedded in goods produced in that third country, the average CO<sub>2</sub> intensity of a third country electricity mix shall be used.

The average CO<sub>2</sub> intensity of all the countries of origin should be established by the Commission on a yearly basis based on previous years' data.

#### **Default values Article 41 (transitional regime)**

Default values referred to in Article 41 shall be determined according to the methods set out above and based on data collected in the context of Article 11 of Directive 2003/87/EC. They shall be set at a level corresponding to the average emissions in the EU to produce similar goods.

Default values may be revised periodically through implementing acts based on the most up-to-date and reliable information, including on the basis of information provided by a third country or group of third countries.

Where a third country, or a group of third countries demonstrate to the Commission, on the basis of reliable data, that the average emission intensity of a product in the third country or group of third countries are lower than the default value, a different default value based on such emissions data can be established for this country or group of countries. Where specific values are defined for a third country or a group of third countries for a specific good, such good imported from other third countries into the third countries subject to the specific value may not be re-exported to the Union using the specific value defined.

**ANNEX IV**  
**Reporting requirements**

1. Minimum data to be reported for an imported good:
  - (a) Data identifying the authorised declarant:
    - (i) name,
    - (ii) a unique identifier assigned by the CBAM authority;
  - (b) Data on the imported good(s):
    - (i) Type and quantity of the good;
    - (ii) Country of origin;
    - (iii) Whether actual specific effective embedded emissions or default values are used
  
2. Minimum data to be declared for claiming the use of actual effective embedded emissions  

For each import of a good for which the CBAM importer indicated under point 1 that actual emission data is to be used, the following additional data has to be reported:

  - (a) Identification of the installation where the good was produced;
  - (b) contact information of its operator;
  - (c) identification of the applicable verified emissions report submitted to the CBAM authority;
  - (d) the value used for the specific effective embedded emissions of the relevant material imported.
  
3. Minimum content of an emission report for demonstrating actual effective embedded emissions:
  - (a) name of the installation;
  - (b) unique ID of the installation as assigned by the CBAM authority, if available; (to be communicated to the installation after the first submission of an emission report)
  - (c) name of the operator;
  - (d) country, address, and contact data of a contact person;
  - (e) name of the verifier, contact data;
  - (f) the applicable reporting period;
  - (g) (direct) emissions of the installation in the reporting period;
  - (h) quantities of consumption, production and exports of electricity, heating and cooling;
  - (i) the applicable emission factors for electricity, heating and cooling;
  - (j) quantities of each good produced in the reporting period; Aggregated values may be reported for all good types falling under the same category according to Annex I of this Regulation;

- (k) a short explanation how the installation's emissions, quantities of electricity, heating and cooling are attributed to the different goods;
- (l) quantitative information on goods, emissions and energy flows not associated with goods;
- (m) in case of complex goods:
  - (i) quantities of relevant input materials (precursors) used;
  - (ii) the specific effective embedded emissions values used;
  - (iii) in case other values than the default values published in accordance with Article 8 are used: Identification of the installation where the input material has been produced and reference to the associated emission report submitted to the CBAM authority.

**ANNEX V**  
**Verification principles**

1. Verifiers referred to in this Regulation are:
  - verifiers accredited pursuant Article 15 of Directive 2003/87/EC;
  - verifiers in third countries with which the Union has an agreement for recognising accreditation of such verifiers;
  - verifiers accredited by the CBAM authority in accordance with Article 18.
2. Relevant EU legislation shall be applied to the verification of emission reports to determine effective embedded emissions in accordance with Annex III. The implementing acts to be adopted by the Commission in accordance with Article 8 shall build upon existing legislation for the verification of emissions and activity data for stationary installations covered by Directive 2003/87/EC, in particular the acts adopted pursuant to Article 15 of that directive.
3. The following principles shall apply for verifications requested by this Regulation:
  - (a) verifiers shall carry out verifications with an attitude of professional scepticism;
  - (b) an emissions report shall be verified as satisfactory only if the verifier finds with reasonable assurance that the report is free of material misstatements, the report is free of material non-conformities with the calculation rules of Annex III;
  - (c) installation visits by the verifier shall be mandatory except where specific criteria for waiving the installation visit are met. Those criteria shall be specified by the implementing acts adopted in accordance with Article 9;
  - (d) for deciding whether misstatements or non-conformities are material, the verifier shall use thresholds given by the implementing acts adopted in accordance with Article 8. For parameters for which no such thresholds are defined, the verifier shall use expert judgement to whether misstatements, individually or when aggregated with other misstatements, justified by their size and nature, have to be considered material, i.e. whether they could affect the treatment of the report by the intended users, in particular the CBAM Authority.
4. A verification report shall include, at least, the following information:
  - (a) identification of the installation, and its operator;
  - (b) the reporting period;
  - (c) information on the verifier:
  - (d) name of the verifier;
  - (e) name of the lead verifier;
  - (f) ID of accreditation, name of the Accreditation Body;
  - (g) the date of the site visit, if applicable, or the reasons for not carrying out an installation visit;
  - (h) the verification opinion statement;
  - (i) information on material misstatements found and not corrected, if applicable;

- (j) information of non-conformities with calculation rules of Annex III.