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(Information)

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# **EUROPEAN COMMISSION**

# Commission Notice Preliminary Carbon Leakage List, 2021-2030 (Text with EEA relevance)

(2018/C 162/01)

#### 1. Introduction

Auctioning is the general method for allocating emission allowances to companies participating in the EU Emissions Trading System.

The free allocation of emission allowances is an exception to that rule, which applies only during a transitional period. It covers a decreasing share of allowances. The transitional free allocation of emission allowances is not intended as a way of granting subsidies to the producers concerned, but of reducing the economic impact of the immediate and unilateral introduction by the European Union of an emission allowances market.

As such, free allocation is provided to well-defined industry sectors as a safeguard measure against a significant risk of carbon leakage until comparable climate policy measures are undertaken by other countries. Carbon leakage refers to the situation that occurs if, for reasons of costs related to climate policies, businesses in certain industry sectors or subsectors were to transfer production to other countries with less stringent emission constraints. This could lead to an increase in their total emissions globally, mitigating the effectiveness of the EU's emission mitigation policies while reducing the economic output of energy intensive EU companies due to a loss in market share.

The free allocation addresses validated competitiveness concerns by lowering the effective carbon costs for industry sectors and subsectors retaining financial resources that can be used to invest in low-carbon technologies.

The recently revised EU Emissions Trading System (EU ETS) Directive (¹) sets the rules for the system of free allocation for the period 2021-2030 and empowers the European Commission to adopt a delegated act to supplement the Directive concerning the sectors and subsectors exposed to the risk of carbon leakage.

Preparatory work has begun for the Carbon Leakage List that will be valid for the entire period of 10 years from 2021 to 2030. This will provide industry with a high level of system security and certainty relevant to their long-term investments. The purpose of this notice is to make public the results of the first-level assessment (hereafter the 'preliminary Carbon Leakage List') so as to allow the industry sectors or subsectors concerned sufficient time to prepare their applications in line with eligibility criteria as explained in the section 4.2 and sufficiently in advance of the deadline set in the revised EU ETS Directive (30.6.2018 for application via 'MS route').

<sup>(</sup>¹) Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814. http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\_.2018.076.01.0003.01.ENG&toc=OJ:L:2018:076:TOC

# 2. EU Emissions Trading System for 2021-2030

The Carbon Leakage List is a prerequisite for other legal acts (¹) to implement the post-2020 reform of the EU ETS system that will serve to determine the free allocation that industries will receive to protect against the risk of carbon leakage. To be ready for the start of the fourth trading period on 1 January 2021, these legal acts must be adopted sequentially and enough time needs to be factored-in for stakeholder involvement. The carbon leakage list for 2021-2030 must be published before the data to update the technical benchmark values and determine the free allocation is submitted by industry via the Member States.

The revised EU ETS Directive contains provisions to ensure that the Carbon Leakage List will be more focused (shorter) than the previous carbon leakage decisions to ensure that the sectors that are in a high risk of carbon leakage will receive an adequate number of free allocation. This will also ensure the EU compliance with the WTO obligations. Concretely, the revised EU ETS Directive sets out in a detailed manner how the free allocation rules and the carbon leakage list are to be established.

The placement of a sector or subsector on the Carbon Leakage List grants to each installation in those (sub)sectors 100% of their calculated free allocation based on the benchmarks (²), whereas those not on the list will receive 30% (up to 2026), gradually phased out by 2030. Consequently, the Carbon Leakage List will have an economic significance as free allowances have a substantial financial value.

#### 3. Process

During the online consultation from November 2017 until February 2018, stakeholders were invited to provide their views on the methodological choices for determining the Carbon Leakage List. Respondents included sector associations (102), individual companies (43), NGOs (5), government institutions (5) and 1 citizen. In total, 156 stakeholders provided their feedback. The respondents were in favour of the second-level assessments that aim to reproduce the level of robustness, fairness, transparency and equity of the first-level quantitative assessments. They expressed a support for a uniform assessment framework that relies upon the involvement of stakeholders. Industries argued for their consultation before the assessment is finalised.

The ad hoc meetings on preparation of the carbon leakage list with Member States on 22 February and on 22 March 2018 discussed the carbon leakage process and further work regarding the necessary assessments to be carried out.

On 2 March 2018 a workshop was organized to give an overview to stakeholders on the revised legal framework and the implementation process of the EU ETS with regard to free allocation and carbon leakage. The main issue discussed was the process, content and criteria for the assessments in preparation of the Carbon Leakage List for period 2021-30. Another stakeholder event is scheduled for 16 May 2018 where the results of the preliminary Carbon Leakage List will be discussed with industry sectors and other stakeholders (Member States, NGOs, think tanks etc.) at European level.

# 4. Criteria to define the Carbon Leakage List (2021-2030)

To determine the exposure to the risk of carbon leakage, the Commission is required to undertake an assessment of all relevant industrial sectors and subsectors by using the criteria set out in the EU ETS Directive.

The carbon leakage assessment is carried out in two subsequent steps:

1. Quantitative first-level assessment at NACE-4 (³) level (see section 4.1): A sector can be deemed to be exposed to a significant risk of carbon leakage if the 'carbon leakage indicator' exceeds the 0,2 threshold (Article 10b, paragraph 1 of the EU ETS Directive).

<sup>(1)</sup> Other legal acts are: revising rules for free allocation, updating benchmark values on progress in industrial installations, establishing rules for adjustments to free allocation due to activity changes, determining free allocations for each installation.

<sup>(2)</sup> Free Allocation = Benchmark x Historical Activity Level x Carbon Leakage Exposure Factor x Correction Factors; for more — Guidance document no. 5 – guidance on carbon leakage: https://ec.europa.eu/clima/sites/clima/files/ets/allowances/docs/gd5\_carbon\_leakage\_en.pdf

<sup>(3)</sup> Eurostat, Statistical classification of economic activities in the European Community, NACE Revision 2.

2. For a limited number of cases with clearly established eligibility criteria (see section 4.2), a 'second-level assessment' can be carried out, either as a qualitative assessment with specified criteria or as quantitative assessment at a disaggregated level (¹). These cases are specified in paragraph 2 and 3 of the Article 10b of the EU ETS Directive.

#### 4.1 First-level assessment

The 'first-level' quantitative assessment is performed by using a Statistical Classification of Economic Activities in the European Community. All mining and manufacturing industries in the activity sections B (Mining and quarrying) and C (Manufacturing) have been assessed, as all EU ETS installations are classified within these two sections. A NACE-4 digit level of disaggregation has been used as a starting point.

The carbon leakage indicator is defined in Article 10b of the EU ETS Directive as the product of the sector's intensity of trade with third countries and the sector's emission intensity. Sectors and subsectors where the carbon leakage indicator exceeds 0,2 shall be deemed to be at risk of carbon leakage.

Intensity of trade with third countries is defined in the revised EU ETS Directive as the ratio between total value of exports to third countries plus the value of imports from third countries and the total market size for the European Economic Area (annual turnover plus total imports from third countries).

Emission intensity is measured in kg CO<sub>2</sub> per euro of gross value added and is expressed as the sum of direct and indirect emissions for the sector concerned, divided by the gross value added (GVA).

The data in the European Union Transaction Log ('EUTL') are considered to be the most accurate and transparent source of  $CO_2$  emissions data at installation level and have therefore been used to calculate the direct emissions for sectors. Installations have been attributed to sectors at NACE-4 level based on installation information provided by Member States in the National Implementation Measures (NIMs) pursuant to Decision 2011/278/EU (²).

As regards the assessment of electricity consumption used for calculation of indirect emissions, due to unavailability of the data at EU-28 level, the data collected directly from Member States is considered as the most reliable available source (3). The electricity consumption is converted into indirect emissions with the use of the electricity emission factor. The calculation is the same as in the past two carbon leakage exercises, where the average total electricity generation mix is the reference value based on the EU average emission intensity derived from electricity generated from the total fuel mix accounting for all sources of energy in Europe divided by the corresponding amount of electricity generation.

The electricity emission factor has been updated by the Commission taking into account the decarbonisation of the electricity system and the increasing share of renewables. The value used in the previous two Carbon Leakage Lists uses 2005 as reference year and the new value is referenced to 2015 which is aligned with the 'data for the three most recent calendar years available' (2013-15) as referenced in the EU ETS Directive Art 10b paragraph 5. On this basis, the updated value is set at 376 grams of carbon dioxide per kWh.

# 4.2. Eligibility to apply for second-level assessment

The revised ETS Directive provides detailed rules for eligibility of specific sectors and subsectors for a second assessment, in case they fail to meet the main carbon leakage criterion for inclusion on the carbon leakage list.

The revised ETS Directive makes it clear that the inclusion of sectors and subsectors in the carbon leakage list under the second-level assessment is a decision of the Commission. Indeed, the ETS Directive clearly distinguishes between eligibility to apply to the second-level assessment, the assessment process and its criteria and the actual inclusion of a sector in the list. This preliminary list concerns the eligibility to apply.

<sup>(1)</sup> Disaggregated level means at a level lower than NACE-4, e.g. PRODCOM-8.

<sup>(2)</sup> Commission Decision 2011/278/EU of 27 April 2011 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 130, 17.5.2011, p. 1).

<sup>(3)</sup> An ad hoc data collection was necessary to obtain electricity consumption data at NACE 4-digit level used for the calculation of indirect costs per sector. Such data collection was also done for the previous carbon leakage lists in 2009 and in 2014.

In cases where the carbon leakage indicator is between 0,15 and 0,2, a qualitative assessment may be requested to be carried out according to the criteria outlined in Article 10b paragraph 2, by providing the evidence on abatement potential, market characteristics and profit margins.

Sectors and subsectors with an emission intensity (as used for the calculation of the carbon leakage indicator, see section 4.1) exceeding 1,5 are eligible to apply for either a qualitative assessment or a quantitative assessment at disaggregated level (PRODCOM-6 or 8 level).

Sectors and subsectors for which free allocation is calculated on the basis of the refineries benchmarks are also eligible to apply for both types of assessments.

Those sectors and subsectors which are listed at PRODCOM -6 or 8 level in the Carbon Leakage List for 2015-2020 (¹) are eligible to submit applications for a quantitative assessment at a disaggregated level.

The eligibility criteria for the 'second-level' assessments are set in the revised Directive under Article 10b paragraph 2 and 3 and summarized in the table 1 below:

Table 1

Overview of the eligibility criteria to apply for the 'second-level' assessments

Criteria		Article	Assessment process
A	Carbon leakage indicator between 0,15 and 0,2	Art 10b (2)	Qualitative assessment
В	Emission intensity exceeds 1,5	Art 10b (3)	Qualitative assessment OR Quantitative at Disaggregated level
С	Free allocation is calculated on the basis of the refineries benchmarks	Art 10b (3)	Qualitative assessment OR Quantitative at Disaggregated level
D	Listed in the EU ETS 2015-20 CLL at a 6-digit or 8-digit level	Art 10b (3)	Quantitative at Disaggregated level

#### 5. The Preliminary Carbon Leakage List for 2021-2030

The result of the first-level assessment that covers all industrial sectors is the preliminary carbon leakage list. It includes the sectors deemed exposed to the significant risk of carbon leakage for the EU ETS period 2021-2030 in table 2 in the Annex to this Notice. The sectors and subsectors which are deemed to be eligible to apply for a further assessment according to the four eligibility criteria set out in the revised EU ETS Directive (elaborated in section 4.2 above) are presented in tables 3, 4, and 5 in the Annex to this Notice.

#### 6. Next steps

Sectors and subsectors eligible to apply for second-level assessments under criteria A, B or C may submit applications to the European Commission at the latest three months after the publication of this Preliminary Carbon Leakage List. Applications, together with the relevant evidence, shall be submitted electronically to CLIMA-CARBON-LEAKAGE@ec.europa.eu

Furthermore, Member States can request by 30 June 2018, based on applications submitted to Member States from sectors and subsectors eligible for second-level assessments under criterion D, such sectors and subsectors to be integrated into the Carbon Leakage List if the carbon leakage indicator exceeds the 0,2 threshold. Applications from any such sectors and subsectors may be submitted to Member States, containing duly substantiated, complete, verified and audited data for the five most recent years, and should include any other relevant data. Further framework guidance is to be published by the Commission.

<sup>(1)</sup> Commission Decision 2014/746/EU.

On the basis of the results of these assessments and the proportional Impact Assessment carried out by the Commission, the Commission intends to adopt by end of 2018 the Carbon Leakage List for the period 2021-2030.

# ANNEX

# Preliminary list of sectors deemed to be at risk of carbon leakage

The preliminary list of the sectors and subsectors at NACE4 level which, pursuant to Article 10b(1) of the EU ETS Directive, deemed to be at risk of carbon leakage, contains 44 sectors.

Table 2

Quantitative criterion: Carbon leakage indicator exceeds 0,2

NACE Code	Description
0510	Mining of hard coal
0610	Extraction of crude petroleum
0710	Mining of iron ores
0729	Mining of other non-ferrous metal ores
0891	Mining of chemical and fertiliser minerals
0899	Other mining and quarrying n.e.c.
1041	Manufacture of oils and fats
1062	Manufacture of starches and starch products
1081	Manufacture of sugar
1106	Manufacture of malt
1310	Preparation and spinning of textile fibres
1395	Manufacture of non-wovens and articles made from non-wovens, except apparel
1411	Manufacture of leather clothes
1621	Manufacture of veener sheets and wood-based panels
1711	Manufacture of pulp
1712	Manufacture of paper and paperboard
1910	Manufacture of coke oven products
1920	Manufacture of refined petroleum products
2011	Manufacture of industrial gases
2012	Manufacture of dyes and pigments
2013	Manufacture of other inorganic basic chemicals
2014	Manufacture of other organic basic chemicals
2015	Manufacture of fertilisers and nitrogen compounds
2016	Manufacture of plastics in primary forms
2017	Manufacture of synthetic rubber in primary forms

NACE Code	Description
2060	Manufacture of man-made fibres
2311	Manufacture of flat glass
2313	Manufacture of hollow glass
2314	Manufacture of glass fibres
2319	Manufacture and processing of other glass, including technical glassware
2320	Manufacture of refractory products
2331	Manufacture of ceramic tiles and flags
2351	Manufacture of cement
2352	Manufacture of lime and plaster
2399	Manufacture of other non-metallic mineral products n.e.c.
2410	Manufacture of basic iron and steel and of ferro-alloys
2420	Manufacture of tubes, pipes, hollow profiles and related fittings, of steel
2431	Cold drawing of bars
2442	Aluminium production
2443	Lead, zinc and tin production
2444	Copper production
2445	Other non-ferrous metal production
2446	Processing of nuclear fuel
2451	Casting of iron

# Sectors and subsectors eligible for a qualitative assessment (criterion A)

The sectors and subsectors at NACE4 level listed in Table 3 are, pursuant to Article 10b(2) of the EU ETS Directive, eligible to apply for a qualitative assessment.

Table 3

Criterion A — Carbon leakage indicator exceeding 0,15

NACE Code	Description
0893	Extraction of salt
1330	Finishing of textiles
2110	Manufacture of basic pharmaceutical products
2341	Manufacture of ceramic household and ornamental articles
2342	Manufacture of ceramic sanitary fixtures
2343	Manufacture of ceramic insulators and insulating fittings
2344	Manufacture of other technical ceramic products

NACE Code	Description
2611	Manufacture of electronic components
2720	Manufacture of batteries and accumulators
2731	Manufacture of fibre optic cables

#### Sectors and subsectors eligible to apply for a qualitative or disaggregated quantitative assessment (criterion B)

The sectors and subsectors at NACE4 level listed in table 4 are, pursuant to Article 10b(3), first subparagraph, of the EU ETS Directive, eligible to apply for a qualitative or disaggregated quantitative assessment.

Table 4

Criterion B — Emission intensity exceeding 1,5

NACE Code	Description
0520	Mining of lignite
2332	Manufacture of bricks, tiles and construction products, in baked clay

#### Sectors and subsectors eligible to apply for a qualitative or disaggregated quantitative assessment (Criterion C)

Pursuant to Article 10b(3) of the EU ETS Directive sectors are eligible to apply for a qualitative assessment or disaggregated quantitative assessment if free allocation is calculated on the basis of refineries benchmarks. The possible sectors eligible to apply are deemed to be at risk of carbon leakage based on the quantitative criterion and already included in table 2. Therefore, no further assessments are needed.

#### Sectors and subsectors eligible to apply for a disaggregated quantitative assessment (Criterion D)

The sectors and subsectors at PRODCOM 6 or 8 level listed in table 5 are, pursuant to Article 10b(3), fifth subparagraph, of the EU ETS Directive, eligible to apply for a disaggregated quantitative assessment via the 'Member State route'.

This list contains 16 sectors or subsectors. Furthermore, there are 6 additional subsectors for which the corresponding sector at NACE4 level is already included in the table 2 and therefore, no further assessments are needed.

Table 5

Criterion D — Listed in the 2015-2020 carbon leakage list at disaggregated level (PRODCOM 6 or 8 level)

NACE Code	Description
081221	Kaolin and other kaolinic clays
08122250	Common clays and shales for construction use (excluding bentonite, fireclay, expanded clays, kaolin and kaolinic clays); and alusite, kyanite and sillimanite; mullite; chamotte or dinas earths
10311130	Frozen potatoes, prepared or preserved (including potatoes cooked or partly cooked in oil and then frozen; excluding by vinegar or acetic acid)
10311300	Dried potatoes in the form of flour, meal, flakes, granules and pellets
10391725	Concentrated tomato puree and paste
105121	Skimmed milk powder
105122	Whole milk powder
105153	Casein

NACE Code	Description
105154	Lactose and lactose syrup
10515530	Whey and modified whey in powder, granules or other solid forms, whether or not concentrated or containing added sweetening matter
108211	Cocoa paste, whether or not defatted
108212	Cocoa butter, fat and oil
108213	Cocoa powder, not containing added sugar or other sweetening matter
10891334	Bakers' yeast
203021	Prepared pigments, opacifiers and colours, vitrifiable enamels and glazes, engobes, liquid lustres and the like; glass frit
25501134	Open die forged ferrous parts for transmission shafts, camshafts, crankshafts and cranks etc.