

# Methodological choices for determining the list of sectors and subsectors deemed exposed to a significant risk of carbon leakage, for the period 2021-2030

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In 2014, the European Council provided [strategic guidance](#) regarding the 2030 framework for climate and energy and acknowledged the importance of the [EU Emission Trading System](#) (EU ETS) as the main instrument to achieve the emission reduction targets of the EU. The European leaders determined that free allocation to industry will continue after 2020 as long as no comparable efforts are undertaken in other major economies.

[Free allocation](#) is thus a transitional measure foreseen to address the risk of carbon leakage which is defined as the risk of an increase in global emissions following relocation of industry due to climate policies to third countries with no/limited carbon constraints.

The Commission with support of Member States will carry out an assessment of all relevant industry to determine the level of exposure and thereafter draw up a so-called carbon leakage list. Sectors and subsectors deemed to be most exposed to this risk receive a higher level of free allocation.

The framework for the carbon leakage assessment will be determined by the ETS Directive including the criteria and thresholds for the assessments and the types of assessments possible with respective conditions. These issues are thus not discussed in the present questionnaire, which instead focuses on a number of aspects that have to be clarified before the exercise can be undertaken. The outstanding issues are specific methodological choices: first for each of the two parameters of the assessment criteria i.e. emission intensity and trade intensity, and second, on operationalising the different types of assessments.

In this context, this consultation seeks the views of the stakeholders on the issues that remain to be decided before the Commission can determine the carbon leakage list for the period 2021 to 2030. The results of [this consultation](#) will be analysed, published and incorporated in the Impact Assessment that will accompany the decision on the carbon leakage list.

Wherever possible, it would be useful if stakeholders provided references to concrete evidence and facts in support of their answers.

Please note that the process of revising the ETS Directive is on-going and might, depending on the final outcome, impact the questions presented in this questionnaire.

## General information about respondent

\* Please choose your profile:

Non-governmental organisation

\* Please give your name if replying as an individual/private person, otherwise give the name of your organisation:

*Text of 3 to 200 characters will be accepted*

Sandbag Climate Campaign

If your organisation is registered in the [Transparency Register](#), please give your Register ID number:

*20 character(s) maximum*

94944179052-82

If your organisation is not registered, you can [register now](#). Please note that contributions from respondents who choose not to register will be processed as a separate category 'non-registered organisations/business'.

Please enter your contact details (address, email):

*500 character(s) maximum*

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\* Please give your country of residence/establishment:

Belgium

\* Please indicate your preference for the publication of your response on the Commission's website: (Please note that regardless of the option chosen, your contribution may be subject to a request for access to documents under [Regulation 1049/2001](#) on public access to European Parliament, Council and Commission documents. In this case the request will be assessed against the conditions set out in the Regulation and in accordance with applicable [data protection rules](#).)

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## I. General questions

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*This section includes general questions related to the carbon leakage list and free allocation.*

Phase 3 of the EU Emission Trading System covers the period from 2013 until 2020 included and is governed by harmonised [free allocation rules](#) and an [EU-wide limit on total emissions](#), as well as specific rules on addressing the risk of carbon leakage. What is your perception of the evolution of the risk of carbon leakage since the beginning of phase 3 of the EU Emission Trading System in 2013?

- Increased risk
- Decreased risk
- No significant change
- I don't know

If you wish, please motivate your answer:

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The risk has remained the same or even decreased since 2013, due to:

1) Increased global action, with 197 countries representing over 95% of global emissions (80% excluding the US) committed to emission reductions under the Paris Agreement. The ambition cycle should lead to increased, converging efforts over time. Carbon pricing is also spreading, with several regions applying higher prices than the EU.

2) Continued high levels of free allocation. Although we expect the CSCF to lead to a cumulative deficit for several (but not all) exposed sectors in phase 3, most of them received sufficient surplus allocations in phase 2 and credit entitlements to cover the projected shortfall. For both phases combined, we expect a cumulative surplus for the cement & lime, iron & steel, chemicals, pulp & paper and glass sectors, and a limited (<10%) deficit for coke ovens, mineral oil and non-ferrous metals.

3) A persistent low carbon price, which further limits the risk of carbon leakage.

The carbon leakage list and the higher level of free allocation granted to relevant sectors and sub-sectors because of it, has been in place throughout phase 3 of the ETS. Please share your views on your administrative experience with the system, in particular whether you see scope for reducing administrative burden and/or simplification:

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As a non-governmental organization, we don't have any direct experience with the administrative burden of the carbon leakage, and how it could be simplified. In any case, any administrative simplification should only be considered to the extent that it does not endanger the robustness or fairness of the carbon leakage assessment framework.

Both the inputs for as well as the results of the carbon leakage assessment should be made publicly available to increase transparency and allow for public scrutiny.

## II. Methodological choices

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*Please bear in mind that the main elements and criteria of the assessment to determine the carbon leakage list are foreseen in the provisions of the [EU ETS Directive](#). There are only certain methodological aspects left to be decided and they are the subject of this part of the consultation. In order to maximise the impact of the views expressed, you are therefore strongly encouraged to address the questions below while keeping in mind the aspects which are already decided on, as explained in the introductory part of this consultation.*

The emission intensity of a sector is part of the criteria for assessing its exposure to carbon leakage risk. The emission intensity takes into account both direct and indirect emissions. To calculate the indirect emissions (emissions linked to the electricity consumed by the sector), electricity consumption needs to be converted into emissions by using an electricity emission factor representing the emission intensity of the electricity generation. Please share your views on the electricity emission factor to be used (In this case, electricity emission factors can either refer to average values or marginal values. The average value refers to the amount of emissions relative to the electricity produced taking into account all the different emission intensities (linked to fuel used). The marginal value reflects the incremental change in CO2 emissions linked to the last unit of electricity consumed and differs from the average values due to the heterogeneous structure of the electricity production (certain power plants producing base load and others peak load.):

- average value – EU average emission intensity derived from electricity generated from the total fuel mix that includes all sources of energy in Europe
- average value – EU average emission intensity derived from electricity generated from fossil fuel
- marginal value – marginal emission factor for the electricity generation determined by the specific CO2 emissions of the 'last kWh electricity consumed'

If you wish, please motivate your answer:

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Option 2 fails to reflect the downward impact of renewable generation on wholesale electricity prices. It would also be inconsistent as it excludes low carbon baseload units but includes carbon-intensive baseload units (lignite).

An accurate approach under option 3 would be extremely complicated, and the required data (price-setting unit on an hourly basis) is not available.

Furthermore, the revised ETS directive no longer refers to carbon cost but to emission intensity as a criterion to determine the carbon leakage risk. The average carbon intensity of the electricity consumed is the best indicator to reflect this principle.

Finally, given the expected expansion of renewables and phase-out of carbon intensive generation units (due to an increased carbon price and/or complementary policies), the marginal emission intensity for 2021-2030 will decrease over time, moving it closer to the average intensity value as calculated based on recent years.

In your view, how would you assess international climate policy and action in 2018 compared to 2013, in particular in light of the Paris Agreement?

- Significant progress
- Some progress
- No progress
- I don't know

Assessing the exposure of a sector to the risk of carbon leakage includes calculating the trade intensity of the sector. In this context, it would be useful to have a reflection on whether climate policies in countries outside the EU can be considered comparable with the EU ETS at this stage since carbon leakage can by definition only occur when production moves to areas with less strict climate policies than the EU. Do you consider that countries or regions outside the EU have climate/energy policies that can be considered comparable with the EU ETS?

Please explain following the guiding sub-questions below.

1. Which countries or regions do you consider to have comparable policies to the EU ETS?
2. Which elements of climate/energy policies worldwide should be considered in determining the comparability to the EU ETS?
3. Which elements of climate/energy policies worldwide would you find more or less ambitious than the EU ETS?
4. What do you think is the optimal way to reflect developments in climate policies in countries and regions outside of the EU in view of the facilitative dialogue and the global stocktake mechanisms foreseen under the Paris Agreement, as well as other relevant initiatives (e.g. Action agenda)?

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For many industries, competitiveness is determined by more important factors than carbon prices, for which no mechanisms are in place to bridge (often significant) differences with non-EU regions. Whereas we understand the need to address significant differences in carbon constraints, we see no justification for full compensation in case of minor differences. The Commission should therefore take into account policies that are overall comparable - even if specific design elements are not 100% identical to the EU ETS.

The following elements are relevant to assess comparability:

- the scope and legal nature (direct or indirect mandatory coverage of industrial sectors)
- the overall ambition level (with the carbon price and/or quantified targets as indicators);
- measures in place to shield industries from the resulting costs (e.g. allocation rules);
- the emission-intensity performance of industry.

We consider the Swiss ETS, the systems under the WCI and the South Korean ETS to be overall comparable or even more ambitious (in terms of carbon price), although there are sectoral differences when comparing allocation rules (e.g. not all sectors are covered by comparable benchmarks). The mandatory energy efficiency benchmarks in Japan are partially comparable. The launch of the national ETS in China is a promising development, but more clarity on its design is needed for a final assessment.

Trade flows to and from countries/regions with comparable climate policies should be excluded from the trade intensity parameter (or discounted in case of partially comparable policies). Exports to countries with lower sector emissions intensity should also be excluded. To prevent new distortions, the EU should coordinate the phase out of free allocation for impacted sectors with other regions. In view of future reform, Border Adjustment Measures would allow for a better, tailor-made alternative to account for efforts outside the EU.

In your view, how would you assess the improvement of carbon emission intensities in production in manufacturing industry, in the EU compared to worldwide, including as regards the evolution of low-carbon investments and innovation?

- More progress in the EU compared to worldwide
- Less progress in the EU compared to worldwide
- Same level of progress

I don't know

Please explain:

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Our 'State of the EU ETS 2017' report has looked into the emission intensity of some of the major emitting sectors under the ETS, by comparing verified (=direct) emissions with production data. As data on production levels by ETS installations is unfortunately not publicly available, we've used data per NACE Rev2 code from the Eurostat database as an approximation. The results suggested that for several highly emitting sectors, the (direct) emission intensity has been flatlining since the start of phase 3. This is an indication that the EU ETS is not providing sufficient incentives to improve carbon efficiency nor to invest in new, low carbon installations in these sectors. Better data availability regarding the impact of the scope extension in 2013, production levels per installation under the EU ETS and a better mapping of NACE codes per installations would allow a more accurate analysis on a like-for-like basis to confirm (or adjust) this conclusion.

For most sectors we do not have comparable information on emission intensities in other parts of the world. Given the expansion of climate policies in several other industrialized regions (and the increasing ambition level under those policies, such as increasing floor prices), we would assume that the emission intensity is improving in those regions.

The cement industry is the only industry publishes global data on emissions and emissions intensity based on a common protocol developed under the CSI. The GNR database shows that the emission intensity of cementitious products in the EU has decreased steadily until 2011, but has flatlined since. In terms of gross emission intensity (including fossil emissions from Alternative Fuels such as waste stream) EU producers are now performing at a level comparable to the world average. In terms of net emission intensity (excluding fossil emissions from Alternative Fuels), the EU is still performing better as the world average.

The EU ETS Directive foresees the possibility for qualitative assessments of sectors in view of determining their exposure to the risk of carbon leakage. The criteria and the eligibility for these assessments are laid down in [the Directive](#). In order to ensure that such assessments are as robust, fair, transparent and equitable as the default assessments (where quantitative criteria and thresholds clearly indicate which sectors should be included in the carbon leakage list), what would you consider a good approach in terms of process? Please explain:

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The three-step approach as described in the 2013 study supporting the work on the 2014-2019 Carbon Leakage list provides a good framework. In line with this approach, the qualitative assessment should assess:

- 1) to what extent the sector concerned is impacted by the carbon cost emanating from the EU ETS;
- 2) the ability of a sector to pass through that carbon cost (see also below);
- 3) the extent to which cost passthrough would result in carbon leakage. For this, the Commission should assess the ability to absorb the carbon cost (based on profit margins) as well as product substitutability and the availability of lower-carbon substitutes. In case the cost passthrough would result in substitution by lower-carbon products, this should not be considered as a risk of carbon leakage. In that case it would be better not to provide free allocation for the higher-carbon product, and to incentivize/stimulate the use of the lower-carbon alternative through complementary policies such as product standards.

The assessment should also consider the reduction potential of a sector, based on Best Available Technologies rather than just Best-in-use Technologies. This can be done either in step 1 (to determine the carbon cost) or in step 3 (to determine the ability to absorb or avoid the carbon cost). When assessing the associated costs of reduction measures, the Commission should also take into account associated cost savings due to reduced energy or resource use, improved process efficiency, etc. ...

To increase transparency and allow public scrutiny, the Commission should consult all stakeholders during the assessment process. The final assessment framework as well as the detailed results of the sectors assessed should be made publicly available (see also above).

Which parameters would you consider as most relevant to assess the ability of a sector to pass through carbon costs into product prices beyond trade intensity? Please explain:

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We consider the following parameters to be relevant (without any views on their respective relative relevance):

- current trade intensity, tradability and transportability of the product (both in terms of technical feasibility as the associate cost of transport);
- market structure and bargaining power, including whether the producer is a price-setter or a price-taker;
- homogeneity of the product and product substitutability;
- the proportion of the possible carbon cost in case of non-carbon leakage status, compared to the overall production cost.

As mentioned above, not only the ability to pass through costs, but also the ability to absorb costs is relevant when assessing the risk of carbon leakage.

The EU ETS Directive foresees the possibility to assess products and sub-sectors rather than sectors in certain cases. The criteria, eligibility and level of assessment are laid down in [the Directive](#). In such cases of lower levels of disaggregation, there is no official publicly available data. In order to ensure that such assessments are as robust, fair, transparent and equitable as the default quantitative assessments, what would you consider as a good approach for assessment of products and sub-sectors? Please explain:

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An assessment on PRODCOM level should only be allowed in case the NACE code covers a heterogenous group of products, and in case the applicant can provide the complete and independently verified data required for the quantitative assessment.

The data and the data source must be made public (as is also the case for assessments on the NACE level), as well as the results of the assessment.

## **Contact**

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