

Calculations for the determination of the cross-sectoral correction factor in the EU ETS in 2013 to 2020

Explanatory paper prepared by DG Climate Action¹

Introduction and background

The number of allowances that may be handed out to industry in phase three (2013-2020) is limited to a specific amount. Broadly speaking this represents the share of emissions from industry in phase one (2005-2007) in total ETS emissions. Because the aggregate amount of preliminary free allocation calculated by Member States on the basis of benchmark formulas exceeds the maximum amount of allocation available to industry, the allocation for all installations is reduced by the same proportion through the application of the cross-sectoral correction factor.

The maximum amount of free allocation is also relevant for the auctions of allowances as all phase three allowances that are not allocated for free will be auctioned.²

Further to the information provided in the document “Questions and answers on the cross-sectoral correction factor (CSCF)”³, this note provides an overview of how the maximum amount of free allocation of 809 315 756 allowances for 2013 has been derived and explains in more detail questions raised in relation to the determination of the level of free allocation.

The maximum amount of free allocation

The maximum is composed of two elements:

- Element 1: The share of emissions for phase one (2005-2007) from the industrial installations⁴ included in the EU ETS in phase two (2008-2012), multiplied by the average annual allocations to all installations under the EU ETS in phase two (Article 10a(5), point a). This is thus a figure based on the share of industry within the scope of the EU ETS as it was before phase three.
- Element 2: Verified emissions in 2005-07 from installations included in the EU ETS only from 2013 onwards under the system's expanded scope (Article 10a(5) point b). This is thus an absolute amount, based on industry emissions due to the expanded scope in phase three.

¹ This information is of a general nature only and is not intended to address the specific circumstances of any particular individual or entity. The European Commission accepts no responsibility or liability whatsoever with regard to the information in this document. Only European Union legislation published in paper editions of the Official Journal of the European Union is deemed authentic.

² See Article 10(1) of Directive 2003/87/EC

³ Available at http://ec.europa.eu/clima/policies/ets/cap/allocation/docs/20130905_faq_en.pdf

⁴ Installations that are not electricity generators, i.e. installations that, on or after 1 January 2005, have produced electricity for sale to third parties and in which no activity listed in Annex I is carried out other than the ‘combustion of fuels’.

Element 1: The share of historical emissions in relation to average allocations in phase two

To determine the first element, installations meeting the following criteria had to be identified:

- installations not qualifying as electricity generator⁵, and
- included in the EU ETS during phase two (“...emissions...from installations covered by the Community scheme in the period from 2008 to 2012...”)

Member States classified each EU ETS installation as electricity generator or non-electricity generator by filling out a specially developed template, containing the verified emissions from phase one for all installations in each Member State, taken from a CITL extract from 2009. A guidance paper on how to classify electricity generators was discussed and agreed with Member States in March 2010⁶.

The completed templates were made available by Member States to the Commission by April 2011 and updated by September 2012.

On the basis of these templates, the data were processed as follows:

- Emissions from "installations covered by the Community scheme in the period from 2008 to 2012" were identified in the EUTL (<http://ec.europa.eu/environment/ets/>) and taken into account. With regard to installations that closed in phase two, emissions from these installations (both electricity generators and non-electricity generators) were disregarded where the installation was closed before 30 June 2011. While emissions from all installations that were closed in phase two could have been disregarded, it was agreed with Member States to use the end of June 2011 as a cut-off date to allow for data processing before the end of phase two (end December 2012).
- Comments submitted by Member States were also taken into account and resulted in further exclusion of certain installations (e.g. bankruptcy; instances where installations were closed, but the installation's registry account still appeared in the EUTL etc.).

These calculations were shared with each Member State individually by means of an official information request letter with a deadline for comments beyond which the outcome of the calculation was deemed to be confirmed. Where justified, modifications were made to the calculation base following Member States' response to the letter. Where, in very few cases, installations did not have any verified emissions in phase one, they were not taken into account.

⁵ Installations not covered by Article 10a(3); for the definition of electricity generator, refer to Article 3(u) of Directive 2003/87/EC

⁶ Available at http://ec.europa.eu/clima/policies/ets/docs/guidance_electricity_generators_en.pdf

This resulted in a share of verified emissions for relevant installations of 34.78289436%. Applied to the average annual allocations in phase two (Article 9 of Directive 2003/87/EC) reduced by the linear reduction factor of 1.74% leading to 1 976 784 044 allowances for 2013, this resulted in the first element namely the maximum free allocation, which amounts to **687 582 706 allowances in 2013**.

Element 2: Taking into account the extended scope of phase three

The quantity determined under element 1 needed to be increased to take into account the extended scope of the EU ETS from 2013. It required a nominal figure to be determined.

To determine this figure, the Commission based itself on the notifications from Member States pursuant to Article 9a(2), i.e. the adjustment of the cap to reflect the extended scope. The total verified emissions were taken into account, regardless of whether a Member State had notified "a lower amount of emissions according to the emission reduction potential" of "installations emitting greenhouse gases other than CO₂" in line with Article 9a(2). Where no complete data covering the emissions of the new sectors and gases for phase one were available and after having informed Member States, data for the missing years were established by assuming emissions had reduced in line with the linear reduction factor of 1.74%.

Following the agreement under the UNFCCC on the new Global Warming Potentials (GWP) for some greenhouse gases covered by the EU ETS from 2013, these GWPs were applied when converting the emission figures of the new gases into CO₂ equivalents.

EEA-EFTA States were treated in the same way as EU Member States. Croatia also contributed on the basis of its submission under Article 9a(2).

Consequently, the Commission added **121 733 050 allowances** to the result of element 1 explained above. The total limit for 2013 was thus calculated to be **809 315 756 allowances** set by Article 10a(5) of Directive 2003/87/EC.

The amount of preliminary free allocation⁷

On the basis of the harmonised allocation rules, Member States submitted to the Commission their National Implementation Measures (NIMs), listing all preliminary free allocations at installation and sub-installation level. This preliminary amount of free allocation was compared to the maximum amount available, as outlined above.

The preliminary amount for each installation is the result of two factors – the benchmark value and the production value it is multiplied by. Each installation had the opportunity to choose between two production values based on different baseline periods (2005 to 2008 or 2009 to 2010) for the activity levels and was entitled to select the baseline period leading to the higher allocation.

⁷ See also Question and Answers on the Commission's decision on national implementation measures (NIMs) at http://ec.europa.eu/clima/policies/ets/cap/allocation/docs/20130905_faq_en.pdf

In accordance with Article 15(3) of the harmonised allocation rules⁸, the value used for calculating the cross sectoral correction factor was based on all installations being subject to carbon leakage.

The NIMs were notified based on the situation in September 2011. Some installations closed after that date. In order not to include allocations for installations that would not be entitled to receive any allowances in phase three, the Commission requested Member States to provide the list of installations that had ceased operations by 31 December 2012. Based on this information, around 300 industrial installations have been excluded from the calculations, corresponding to an allocation of some 9 million allowances annually over phase three. Similarly, the allocation relating to installations excluded from the EU ETS under Article 27, corresponding to some 5 million allowances annually over phase three, has also been excluded.

Specific issues on waste gases, heat transfers and industrial electricity production

The total quantity of emissions from electricity generators includes emissions from combustion of waste gases (mostly generated in the steel sector and sometimes transferred by the steel plant to an electricity generator for electricity generation), to the extent that such gases were indeed used to generate electricity. These emissions are thus registered as coming from electricity generators, and there is no legal possibility to reclassify any of these emissions as industrial emissions.

Nevertheless, the preliminary allocations for e.g. steel production included a large part of the emissions from electricity production from waste gases, based on a specific provision in the ETS Directive (Article 10a(1))⁹ that authorises free allocation for a large part of such emissions. This asymmetry with regard to waste gas is inherent in the rules laid down in the ETS Directive and the harmonised allocation rules and there is no legal basis to modify it.

As regards heat produced by electricity generators, and transferred to industrial ETS installations, these industrial installations are eligible for free allocation although the emissions are released into the atmosphere by the heat-producing electricity generators. This is the consequence of the harmonised allocation rules, where the main aim was to ensure that the free allocation is distributed as closely as possible to the producers of the final products. There is no legal basis to reclassify any of the emissions from electricity generators as industrial emissions.

Finally, it can be noted that within the quantity of industry emissions is also included emissions from electricity production by industrial installations. No free allocation is provided for this electricity production. These emissions thus increase the maximum amount of allowances that can be handed out to industry, while these emissions do not translate into any free allocation. These emissions therefore reduced the stringency of the cross sectoral correction factor.

⁸ Commission Decision 2011/278/EU

⁹ "No free allocation shall be made in respect of any electricity production, except for... and electricity produced from waste gases"