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## **Technical updates of the Emissions Trading Scheme (ETS) State aid guidelines – inclusion of technical glass**

As the central organisation of the German glass industry, BV Glas (Federal Association of the German Glass Industry) represents the environmental, economic and energy policy interests of around 80 per cent of German glass manufacturers. Germany has more energy-intensive glass manufacturers than any other European country. BV Glas is their mouthpiece. We expressly welcome the fact that flat glass, hollow glass, glass fibres (NACE 23.11, 23.13, 23.14) are being considered in the draft Communication of the Commission.

We have, however, noted that the technical glass sector (NACE 23.19/new NACE 23.15) and the sector shaping and processing of flat glass (NACE 23.12) has not been included into the draft of the extended sector list. We understand that the underlying reasoning of the Commission for this probably rests on the following factors:

- Sectors have only been added to the list if they meet both of the following criteria: a trade intensity above 20% AND an indirect emission intensity of 0.32 kgCO<sub>2</sub>/€, resulting in an indirect carbon leakage indicator above 0.064 (calculated from multiplying trade intensity and indirect emissions intensity).
- According to the data from the carbon leakage list of 2019, drawing on data of the years 2013-2015, the sector 23.19 does exceed the required ICLI (0.097) and the threshold for trade intensity (48,5%), but emissions intensity remained below 0.32 kgCO<sub>2</sub>/€, namely at 0.199 kgCO<sub>2</sub>/€.

In the following, we will provide evidence and reasons that suggest that this assessment should be reconsidered in the light of more recent data.

Firstly, we would like to note that the dual conditioning of eligibility on surpassing the trade intensity and indirect emission intensity threshold is a departure from the previous approach, where one of the criteria had to be met and the ICLI had to surpass a threshold. We regard this approach as reasonable because the ICLI can reflect the carbon leakage impact of one of two factors being far above the threshold, even if the other factor remains under the threshold. The present approach practically renders the ICLI obsolete, as the ICLI threshold will automatically be surpassed if both necessary thresholds of trade intensity and indirect emissions intensity are surpassed. We strongly suggest keeping this long-standing approach consistent.

Secondly, we believe that the underlying data (2013-2015) for indirect emission intensity do not adequately reflect the current situation anymore. While we fully acknowledge the difficulty of compiling up to date information, in the following, we make the case that according to the currently available data, sector 23.19 may at times exceed the threshold, depending on which time period is taken as reference. Data on gross value added per factor cost were taken from Eurostat, while power consumption data of sector 23.19 are from Germany, as there are no suitably disaggregated and comparable data on the sector on EU level. Data from Germany also have high significance on EU level, as Germany accounted for nearly 30% of EU-wide value added by sector 23.19 in 2023. The following table shows the development of indirect CO<sub>2</sub> emission intensity from 2013 to 2023.

<b>Indirect emission intensity</b>											
23.19 Manufacture and processing of other glass, including technical glassware											
<i>Assumed Emission factor: 0,376 kg/kWh</i>											
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<i>Indirect CO<sub>2</sub> emissions. (kg/€)</i>	0.184	0.155	0.154	0.140	0.244	0.216	0.232	0.305	0.409	0.295	0.232

As the data series shows, indirect emissions per unit of value added have been higher than in the reference period 2013-2015 since 2017 and in 2021 exceeded the threshold of 0.32 kgCO<sub>2</sub>/€ given in the recent Commission communication. In 2020 and 2022 it was close to this threshold.

Moreover, the ICLI for the years 2020-2023 range between 0.12 and 0.22 (assuming a trade intensity of 50% in 2023 based on previous years due to lack of data). Thus, they clearly exceed the threshold of 0,064 in all years. This is another indication that despite its close oscillation above and below the emission intensity threshold, the sector merits carbon leakage protection due to its high trade intensity, especially if following the previous logic of the ICLI.

Beyond these data-based reasons, we also emphasize that technical glass is a strategically important sector that produces essential components of critical sectors such as digital infrastructure, semiconductors, health, and defence equipment. It is in the strategic interest of Europe to retain its manufacturing capacities of technical glass by keeping it cost competitive and preventing its decline and substitution by imports via potentially unreliable supply chains. The most important applications are as follows:

**Digital infrastructure:**

- Glass fibre networks
- 5G and 6G expansion (glass fibre connects antennae and data hubs)
- Wiring in data centres
- Next generation glass fibres;
  - o hollow core fibres (30% faster data transmission, critical for data centres, AI, autonomous driving)
  - o multi core fibres (significantly increases bandwidth per fibre for data centre connections, submarine cables and local telecommunications networks)

**Semiconductors:**

- Critical components for lithography machines of the newest generation (manufacturer: ASML)
- Chip production
  - o among other, critical precursor product for etching chambers
  - o precursor product for chip lighting

**Health:**

- Glass for pharmaceuticals packaging
- Precursor products for medical devices
- Precursor products for UV disinfection

**Defence equipment:**

- Precursor product for night vision goggles

- Glass fibres for fibre optic drones
- Glass fibres and optics for fibre-based lasers (next generation air defence)
- Supply parts for weapon manufacturing, e.g., components for heads of guided missiles

This list shows the critical importance of technical glass in sectors that are vital to Europe's competitiveness, infrastructure, health, and security. The production of technical glass in Europe should not be imperiled by loss of competitiveness from high indirect carbon costs.

Lastly, indirect carbon costs may increase further for the glass industry as it continues its low-carbon transformation via electrification. The glass industry is at the heart of the transformation towards a climate-neutral economy and has already outlined specific decarbonisation pathways with the publication of a CO<sub>2</sub> roadmap in 2022. The first companies are already implementing fully electric and hybrid melting furnaces, thereby pioneering climate-friendly industrial production. Nevertheless, the industry is particularly affected by rising energy and electricity costs, as its production processes are both very energy-intensive and increasingly electricity-intensive. In Germany, these costs are permanently two to three times higher than the international level and are further exacerbated by burdens from EU emissions trading. As long as electricity is not fully decarbonised, indirect CO<sub>2</sub> costs from electricity generation will be passed through to unprotected industries. This poses an acute risk of carbon leakage: without effective compensation for indirect CO<sub>2</sub> costs, there is a threat of production relocations, investment freezes and structural decline in a key industry that is indispensable for numerous value chains.

The glass industry is an essential part of the European circular economy. Its products are durable, fully recyclable and can be reused indefinitely without any loss of quality. Glass thus makes a decisive contribution to resource conservation, waste prevention and the achievement of European climate and circular economy goals. Glass is also indispensable for key industries such as food supply, medicine, construction, the automotive and defence industries, and high-tech applications – and is therefore an important factor for industrial resilience in Europe.

The long investment cycles are particularly relevant for the transformation: melting tanks run for up to 15, in some cases even 20 years, 24 hours a day, 365 days a year – and tie up considerable funds in the double-digit million range. Every investment decision made today will determine production structures for decades to come. That is why the industry needs competitive electricity prices and reliable framework conditions now in order to be able to use climate-friendly technologies. This is the only way to avoid lock-in effects that would otherwise lead to renewed investment in fossil fuel technologies.

With regard to decarbonisation, the industry's electricity demand is expected to triple by 2045. Extending electricity price compensation fully to the entire glass industry is therefore a crucial lever for making this transformation process economically viable. It ensures the competitiveness of the glass industry, stabilises companies in the current tense situation and creates the basis for the industry to permanently fulfil its role as a driver of the circular economy, innovation and climate protection.

As outlined above, eligibility for compensation for indirect ETS-related costs in electricity consumption will become increasingly important. However, the criteria for this eligibility should be transparent and reflect the criteria for carbon leakage in general.

From the perspective of the German industry, it should be added that a qualitative assessment of expanding eligibility for indirect carbon cost compensation also should take into account that the electricity emission factors in Germany and many other EU states exceed the EU-wide emission factor of 0.376 kgCO<sub>2</sub>/kWh underlying the previous eligibility considerations. Therefore, the actual indirect emission intensities and resulting costs tend to be underestimated in the current approach establishing eligibility. We therefore ask the commission to include all glass sectors NACE 23.1 in the list of sectors eligible for indirect compensation.

Kind regards,



Christiane Nelles