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# Industrial Decarbonisation Accelerator Act

## Keeping administrative burdens light to balance with marginal benefits expected from new labels

The announced proposal for an Industrial Decarbonisation Accelerator Act (IDAA) aims at accelerating the decarbonisation of energy-intensive industries. It envisages creating lead markets for European-made low-carbon products and faster permitting procedures for industrial projects.

In the recent years, all **European-based flat glass manufacturers have successfully developed flat glass products with minimal embedded carbon**. These products have the same aesthetics, quality and technical performance as traditional flat glass products. While they have been commercially available for a few years, their market share remains however limited[1].

The European flat glass sector shares the objective of boosting demand but also production for glass and glazing products primarily made in Europe with minimal environmental impacts.

Based on the flat glass sector's experience, **Glass for Europe calls on the European Commission to carefully balance the extra administrative burden of introducing new labels and requirements with the marginal benefits expected** from such measures.

- **The creation of a label for low-carbon products and other non-financial instruments will, at best, have a very marginal impact on the demand for and availability of European-made low-carbon flat glass products.**

Based on the flat glass sector's experience in launching low-carbon products, demand for these products is hampered by a variety of factors among which price premium, misconceptions on the product, risk aversion slowing down adoption of new products in the construction industry. Labels and non-financial instruments will not address any of these hurdles.

It must also be noted that regardless of demand signals, there are many structural challenges that limit the industry's capacity to scale up the manufacturing of lower-carbon flat glass thus resulting in higher production costs. Labelling of low-carbon products will have no effect on these structural challenges, i.e. the difficult and costly access to hydrogen, renewable electricity, biofuels and recycled glass (cullet) which is an essential input material to produce glass with lower embedded carbon.

- **A vast array of sustainability data already exists and other EU policy instruments under development will promote low-carbon glazing in the building sector more efficiently.**

Nearly all flat glass products destined for the building sector, i.e. 80% of the output, is placed on the market with Environmental Performance Declarations (EPDs) based on EN standards. These EPDs will become mandatory with the implementation of the new Construction Products Regulation, and they will be required for the calculation of building's whole life-cycle impact foreseen with the new Energy Performance of Buildings Directive. These two regulatory instruments are expected to drive demand for low-carbon glazing products hence the limited need for additional labelling.

[1] Refer to Annex I for more information on the manufacturing of these products, their limited availability and hurdles to market adoption.

In the other sectors supplied by the flat glass industry, i.e. automotive, solar, appliances, etc. flat glass is a business-to-business material, which is incorporated into a much broader final product. Neither the carbon content nor the European origin of the glass component will have big impact on the carbon content or European assembly of the final product, nor it is likely to be a driver of customer choice.

- **Any new labelling of products must not create additional administrative complexities when simplification and cutting red tape is a policy priority of the European Commission.**

Should a label be anyhow developed on flat glass products, it is essential that the definition of low-carbon and subsequent requirements are based on existing performance-based methodologies for the product concerned. This entails that no new methodology should be developed. It also means that a label cannot be based on the EU Emissions Trading System's $CO_2$ benchmarks, which is an indicator of emissions by industrial installations regardless of the final product manufactured and its embedded carbon.

In the building segment where the full life-cycle impact of product is a more relevant scope than the sole embedded carbon value, the use of EPDs would be the most relevant approach. *See page 3 for recommendations.*

- **An instrument to identify the European origin of materials and goods could be beneficial and serve in procurement criteria, if complexities of value-chains are apprehended.**

Defining whether flat glass and its downstream products are made in Europe could contribute to supporting European production, although marginally. The actual place where glass is melted could serve as a prime indicator. *See page 3 for recommendations.*

It must be borne in mind however that flat glass manufacture is an industry structured at continental level yet it sometimes relies on plants outside Europe for specialised production. Manufacturers therefore source from multiple plants, including the United Kingdom and further away, depending on stock availability, logistics, and project timelines. Procurement criteria based on origin should not be overly rigid and in any case should not prevail over performance and sustainability.

- **While any simplification of permitting procedures is welcome, the greatest support to industrial decarbonisation in flat glass manufacturing will come from other policies.**

To accelerate the decarbonisation of the flat glass manufacturing industry, it is essential to tackle bottlenecks hindering high-performance manufacturing and to ensure the competitiveness of EU installations. It is in the following three policy areas that decisive actions are needed: first on circularity to enhance the availability of glass available for recycling, second, energy to ensure greater availability of low-carbon energy sources at a competitive price, and third, climate policy and the EU ETS to recreate a business case for sustainable flat glass manufacturing in Europe.

Regarding permitting, the flat glass sector wishes to stress that most delays and extended processes are usually due to additional requirements demanded by the Member States, on top of EU obligations. Cutting these extra national and regional obligations would be beneficial.

*Glass for Europe is the trade association for Europe's flat glass sector. Flat glass is the material that goes into a variety of end products, primarily in windows and facades for buildings, windscreens and windows for automotive and transport as well as solar energy equipment, furniture and appliances. Glass for Europe brings together multinational firms and thousands of SMEs across Europe, to represent the entire building glass value-chain. It is composed of flat glass manufacturers, AGC Glass Europe, Guardian, NSG-Group, Saint-Gobain Glass Industry and Şişecam, and works in association with national partners gathering thousands of building glass processors and transformers all over Europe.*

## FLAT GLASS PRODUCT LABELS – CONCRETE RECOMMENDATIONS

Glass for Europe calls for flat glass products not to be prioritised in the development of labels for low-carbon products. If labels are developed, the following must be taken into consideration:

### 1. Labelling of **low-carbon** flat glass products

- **Low-carbon labelling must be based on performance metrics and agreed EN standards for Environmental Product Declarations (EPDs) and Life Cycle Assessment (LCA).** It is essential to avoid creating additional bureaucracy and reporting with a new methodology. EPDs are known and required by a large majority of customers in Europe. They are coherent with the existing assessment systems such as Level(s), BREEAM and LEED.

- **A full life-cycle approach must be adopted for products which contribute to reducing $CO_2$ emissions.** Rather than focusing solely on embedded carbon, labelling and regulatory requirements must also account for the product's overall environmental benefits. In the case of buildings, where approximately 80% of flat glass production is used, flat glass acts as a net carbon avoidance product. The $CO_2$ emitted during the production of energy-efficient double glazing is typically offset within 6 to 20 months through the energy savings it provides once installed. Such benefits must be considered.

### 2. Labelling of **European-made** flat glass products

- **European-made glass must be defined as '*glass that has been melted in Europe*'**. This material-based approach is essential to ensure that future requirements apply across the entire value chain. Without such a definition, the system can be easily circumvented, for example, by importing float glass produced outside the EU and merely shaping or processing it within Europe. Flat glass manufactured in Europe will typically be shaped and processed within Europe when intended for EU-based projects However, a product assembled in Europe does not automatically guarantee that the glass used was melted in Europe.

- **Both primary material flat glass (NACE code 23.11) and shaped and processed glass (NACE code 23.12) must be classified as European-made, provided the glass was melted in Europe**. All products under NACE code 23.12 are flat glass products, which have been slightly transformed, e.g. mirrored, toughened, bend, assembled as an insulating glass unit. Should a European content label be introduced, they should be within the scope of a label with the same origin definition than previously outlined, i.e. 'glass that has been melted in Europe'.

- **Consider expanding the scope to additional downstream products predominantly made of glass.** To be fully effective, lead markets could include certain downstream products, such as windows or car windshields, provided they meet European content criteria. Specifically, products composed of more than 80% of glass by weight or volume, and where glass serves as the primary functional component, could be considered.

- **Adopting a European-made and not solely European Union-made approach is necessary**. The flat glass industry operates on a continental scale and, for certain specialised products, even at a global level. Recognising UK glass production as *European content* is therefore particularly important to avoid significant disruptions in established supply chains. UK manufacturing conditions are closely aligned with EU standards, and excluding UK-produced glass would uselessly undermine the efficiency of the supply chain.

# ANNEX I

Lower carbon flat glass is characterised by significantly reduced embodied carbon compared to conventional alternatives, achieved primarily through **advanced manufacturing technologies** and **increased use of cullet** (recycled broken or rejected glass) in float glass production.

The **higher cullet content contributes to reducing the consumption of raw materials and energy** used in production and thus embodied $CO_2$ emissions. Currently, in a standard air-fuel fired furnace, approximately 30% of the flat glass sector carbon emissions come from the calcination reaction in the melting process of our raw materials hence part of the impact of cullet to lower this share of carbon emissions.

Lower carbon glass available on the market offers the same aesthetics, quality and technical performance as traditional float glass products. However, the uptake of low carbon products remains limited due to several key barriers:

- **Limited supply capacity**: Access to key enabling technologies, such as hydrogen, renewable electricity, and alternative fuels, remains uneven across Europe. Moreover, the availability of cullet on the market is insufficient to meet growing industrial demand, making it both difficult and costly to source the quantities required for low-carbon production. Price for cullet can vary widely (based on availability, proximity, demand etc.) and has been increasing over the last years hence higher production costs for these products.
- **Lack of clear 'low carbon' definitions**: There is no EU-wide definition of what constitutes a "*low carbon product*" making it difficult to compare offerings and hold suppliers accountable.
- **Product comparison tools**: Environmental Product Declarations (EPDs) are voluntary tools already made available by the flat glass industry. They offer transparency but are time-consuming and costly to prepare from a manufacturer's perspective. Their understanding by customers needs to be improved.
- **Cost considerations**: Price nowadays dominates decision-making from clients, especially in today's depressed markets, leading to value engineering that can easily remove low carbon options down the supply chain.
- **Low sustainability literacy**: Understanding of sustainability varies widely across the construction sector, even within companies, limiting informed decision-making.

According to a study conducted by a Glass for Europe member regarding architectural glass, 41% of UK-based architects and specifiers considered **cost compared with standard products as one of the main barriers**. A third (33%) said that a **lack of information or awareness** about sustainable glass options was a barrier, while the same proportion reported **resistance from clients**.