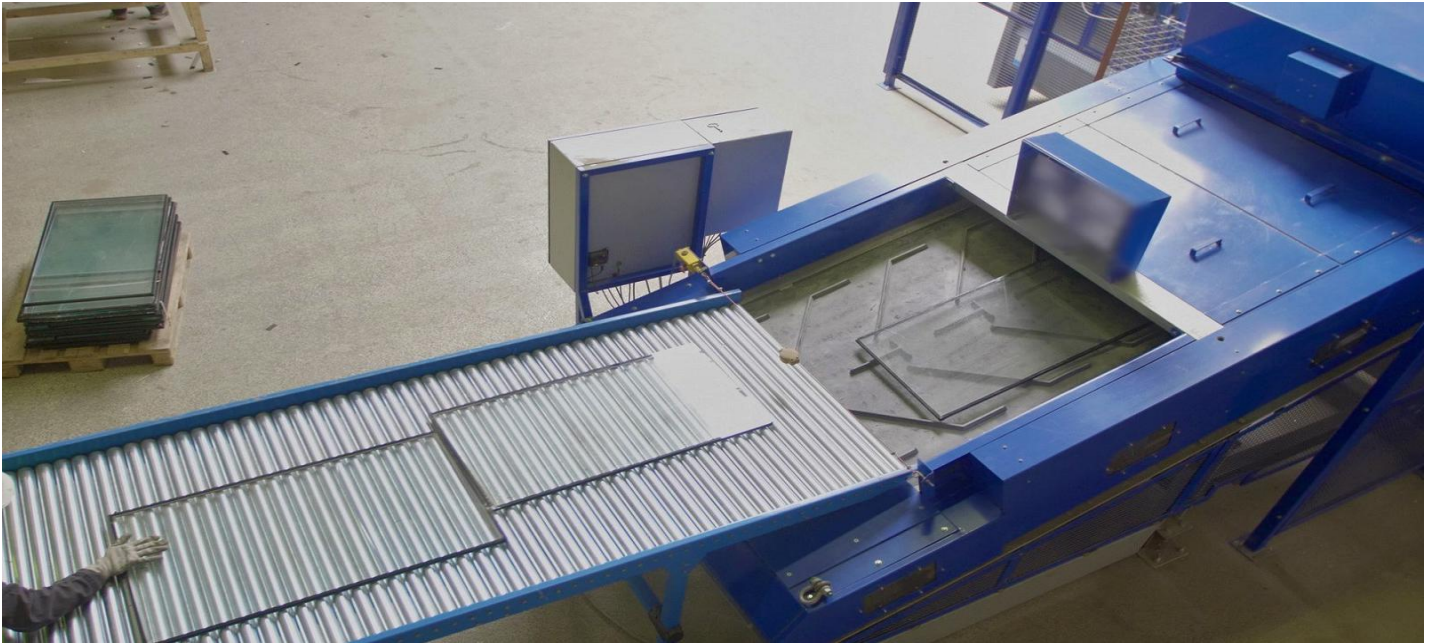


SAINT-GOBAIN GLASS RECYCLING



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Global resource consumption is expected to double by 2060¹ as the global economy is rapidly expanding, resulting in resources shortage and significant environmental impacts. Addressing the issue of scarce resources is necessary to reduce the extraction and use of virgin raw materials.

At Saint-Gobain Glass, we put circularity at the heart of our activities. We commit to reducing our consumption of raw materials by **30%** for the year 2030 (compared to 2017 volumes) by implementing a circular model for the production and manufacturing of our glass solutions.

What is circularity?

Circularity refers to the circular economy, a model of production and consumption that ensures extended lifecycles of products, reduced use of raw materials and effective waste management. This model promotes reusing, refurbishing and recycling existing products and materials for as long as possible. Therefore, when a product reaches its end-life phase it can be recycled partly or fully to produce new products.

How do we act?

At Saint-Gobain Glass, we aim to preserve natural resources through the sustainable management of raw materials. We promote end-of-life glass recycling to generate cullet (scraps of glass) which has many environmental virtues.

Glass has a long life; it can be recycled endlessly or what is so-called closed-loop recycling. It is also possible to manufacture glass with 100% of recycled content without any change in the quality or characteristics of the produced glass. For instance, using 1 tonne of cullet for production avoids the extraction of **1.2** tonnes of raw materials, including **850kg** of sand. It can also help to save 700kg of CO2 emissions (Scopes 1, 2 & 3).

Saint-Gobain Glass recycling

At Saint-Gobain Glass, we recycle pre-consumer cullet which is glass waste coming from glass sheet transformation and from products that have not yet been delivered to the final client... However, following our sustainability roadmap, we took the initiative to go beyond by collecting cullet from end-life glass. This post-consumer cullet is generated after the delivery to the final client. In the construction industry, post-consumer cullet mainly comes from renovation projects or building dismantling. We aim to have **40%** cullet in our production for the year 2030, by increasing the amount of cullet coming from external sources.

In 2022, we created a network of partners for closed-loop recycling of flat glass in France, as a first step towards the implementation of glass recycling for our floats' production all over the world. This network consists of more than 30 partners committed to closed-loop recycling of glass through collecting and dismantling end-life glass products. With such partners, we work hand in hand to decarbonise the flat glass industry and preserve natural resources.

By joining our glass recycling network, our partners are committed to:

- Favour the recycling of glass in a truly circular model with Saint-Gobain Glass
- Provide the expertise and tools needed to enable closed-loop recycling of glass
- Organise the sorting and separation of different types of glazing

- Issue a closed-loop recycling certificate

Closed-loop recycling in 4 steps

1. Glazing diagnosis

A specific diagnosis is needed to properly classify the different types of glass before starting the dismantling process. Organizing the flow of glass is crucial to guarantee a good quality of the cullet so that it can be 100% compatible with the production of flat glass. Given the demanding nature of glass, we created a list “cullet or not cullet” of what can or cannot be considered as cullet to make it easier for our partners to identify and exclude all types of glazing that are incompatible with closed-loop recycling.

2. Storage of windows and façade glazing

The company in charge of dismantling the windows or facades need to ensure that the glass collected is suitable for closed-loop recycling. The quality of glass should be entirely preserved to avoid dust and contaminants for producing clean cullet.

3. Transport of windows and façade glazing

It is important to be cautious during the transportation of the dismantled glass to avoid any breakage or pollution otherwise it can't be recycled.

4. Transforming windows and façade glazing into cullet

We receive the cullet collected and processed by our partners in our float plants. We then proceed to perform a quality check of the cullet. If the quality is good, we reintroduce it into our furnaces. The produced flat glass can be re-processed into new windows and facades for construction or renovation projects. Additionally, our partners must issue a certificate at the end of the process stating the amount of the cullet collected and then the amount received by our floats.

¹ OECD: Global Material Resources Outlook to 2060, Economic Drivers and Environmental Consequence

Documents

- [Specifications for closed-loo... Thu, 12/22/2022 - 13:00](#)
- [Cullet or not cullet Thu, 01/26/2023 - 13:00](#)