



PRESS RELEASE

Paris, September 8th, 2022

SAINT-GOBAIN GLASS LAUNCHES ORAÉ[®], THE WORLD'S FIRST LOW CARBON GLASS

Saint-Gobain Glass is proud to launch **ORAÉ[®]**, a new glass substrate with the world's lowest carbon footprint. This landmark technical achievement follows the company's announcement in early July revealing its production of the **first low carbon glass for the construction market**. ORAÉ[®] has an estimated carbon footprint of only **7 kg CO₂ eq./m²** (for a 4mm substrate), a reduction of approximately **40%** compared to Saint-Gobain Glass European baseline clear glass.

What's in a name?

The name ORAÉ[®] is derived from Horae which, in Greek mythology, symbolises the change of time and seasons. Saint-Gobain Glass chose this name in the belief that its new product is a genuine game-changer, heralding a new era of sustainability by leading the market closer to decarbonisation.

Industrial expertise and innovative spirit

Saint-Gobain Glass's achievement is the culmination of a substantial R&D effort, a series of successful production trials and the excellence of its industrial teams. Several production campaigns were completed in the first half of 2022 combining use of **renewable electricity** and **high recycled glass content** (around 70% cullet out of which **55% external cullet**). This is made possible by the Saint-Gobain Glass Recycling initiatives across Europe and it increased the amount that could be declared as recycled content according to ISO 14021:1999, without affecting the cullet rate for regular production.

By taking all these steps, Saint-Gobain Glass succeeded in reducing the carbon footprint of its clear glass substrate without **compromising on the technical, quality or aesthetic performance of its products**.

ORAÉ® in the Saint-Gobain Glass product range

Saint-Gobain Glass is integrating the new low carbon glass substrate **ORAÉ®** in its portfolio of solutions, starting with **COOL-LITE® XTREME** solar control glass. **COOL-LITE® XTREME** was chosen as the first **ORAÉ®** application thanks to its advanced coating technology, which drastically reduces greenhouse gas emissions caused by cooling, heating and lighting when using the building. **COOL-LITE® XTREME ORAÉ®** is a perfect match of performance and sustainability, reducing both **operational and embodied carbon**.

A 2022 study conducted by Saint-Gobain Glass in partnership with Engineering consulting firm **Arup** revealed the importance of considering and acting upon these two parameters jointly in order to shrink the carbon footprint of buildings¹.

First low carbon glass offer for facades

COOL-LITE® XTREME
ORAÉ®

Performance meets sustainability



Coating

ORAÉ

Excellent energy efficiency

Lowest carbon footprint

In every project for which **COOL-LITE® XTREME ORAÉ®** is selected, **ORAÉ®** substrate will be available for all panes composing the insulating glazing units.

In order to ensure timely and reliable supplies of **ORAÉ®** low carbon glass, **production campaigns** were carried out in three countries: **France, Spain and Germany**. These pilot campaigns were successful in meeting production requirements in real-life conditions, and now new campaigns of **ORAÉ®** and **COOL-LITE® XTREME ORAÉ®** are already scheduled and integrate our regular production program with a dedicated service charter.

Saint-Gobain Glass is taking action to support customers further by supplying environmental data and certifications for this new glass. The detailed environmental data will be documented through third party-verified Environmental Product Declarations – **EPD** (or **FDES** in France) – which are currently under preparation and scheduled for availability in **early 2023**. As soon as the verified EPD are available, they will be integrated in **Calumen® Live**, Saint-Gobain Glass digital configuration tool, which already **estimates carbon footprint** for final glazing depending on glass substrates and coatings used, for both single glazing and insulating glass units.

Saint-Gobain Glass is also preparing its application for a **Cradle to Cradle certification**, with assessment expected in the first quarter of 2023.

¹ See study “Carbon footprint of façades: significance of glass.” conducted by Arup in partnership with Saint-Gobain Glass in 2022.

A significant opportunity for the construction sector

The **building industry** currently accounts for almost **40% of global greenhouse gas emissions** and is at the heart of the decarbonisation challenge.

Furthermore, according to the aforementioned joint study with Arup, façades represent up to 20% of a building's embodied carbon. By working on the overall impact of glass, we can achieve a significant reduction in the carbon footprint of buildings, while continuing to provide the essential benefits of natural light and thermal comfort for the occupants. This confirms the key role that **ORAÉ®** will play in promoting a sustainable industry and **accelerating the development of the circular and low carbon economy**.

Three major real estate partners – Bouygues Immobilier, Icade Santé and Nexity – have already committed to using COOL-LITE® XTREME ORAÉ® glass in their projects, an early demonstration of the market's enthusiasm for this exciting new resource. Bouygues Immobilier will implement it on its office building operation "Kalifornia" (Hauts-de-Seine, France). Icade Santé will install it on the "Le Parc Polyclinic" operated by the Elsan group in Caen (Calvados, France), while Nexity will use it on the "Carré Invalides" rehabilitation project (Paris, France). These three projects are all characterized by ambitious environmental objectives.

A window to the future

COOL-LITE® XTREME ORAÉ® is a first step towards an **expanded low carbon offer**. It is fully in line with **Saint-Gobain's Net Zero Carbon by 2050 commitment and its ambition to position the Group as the worldwide leader in light and sustainable construction**.