

**DECARBONISATION OF THE
BUILDING MATERIALS INDUSTRY:
THE EXAMPLE OF SAINT-GOBAIN**

OFATE, HANNOVER

17.04.2023

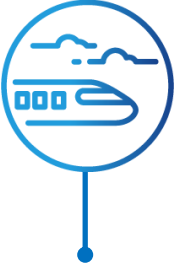


THE SAINT-GOBAIN GROUP'S MISSION

Be worldwide leader in light and sustainable construction, Saint-Gobain designs, manufactures and distributes materials and services for the construction and industrial markets.

Its integrated solutions for the renovation of public and private buildings, light construction and the decarbonization of construction and industry are developed through a continuous innovation process and provide sustainability and performance.

Saint-Gobain serves 3 main markets:



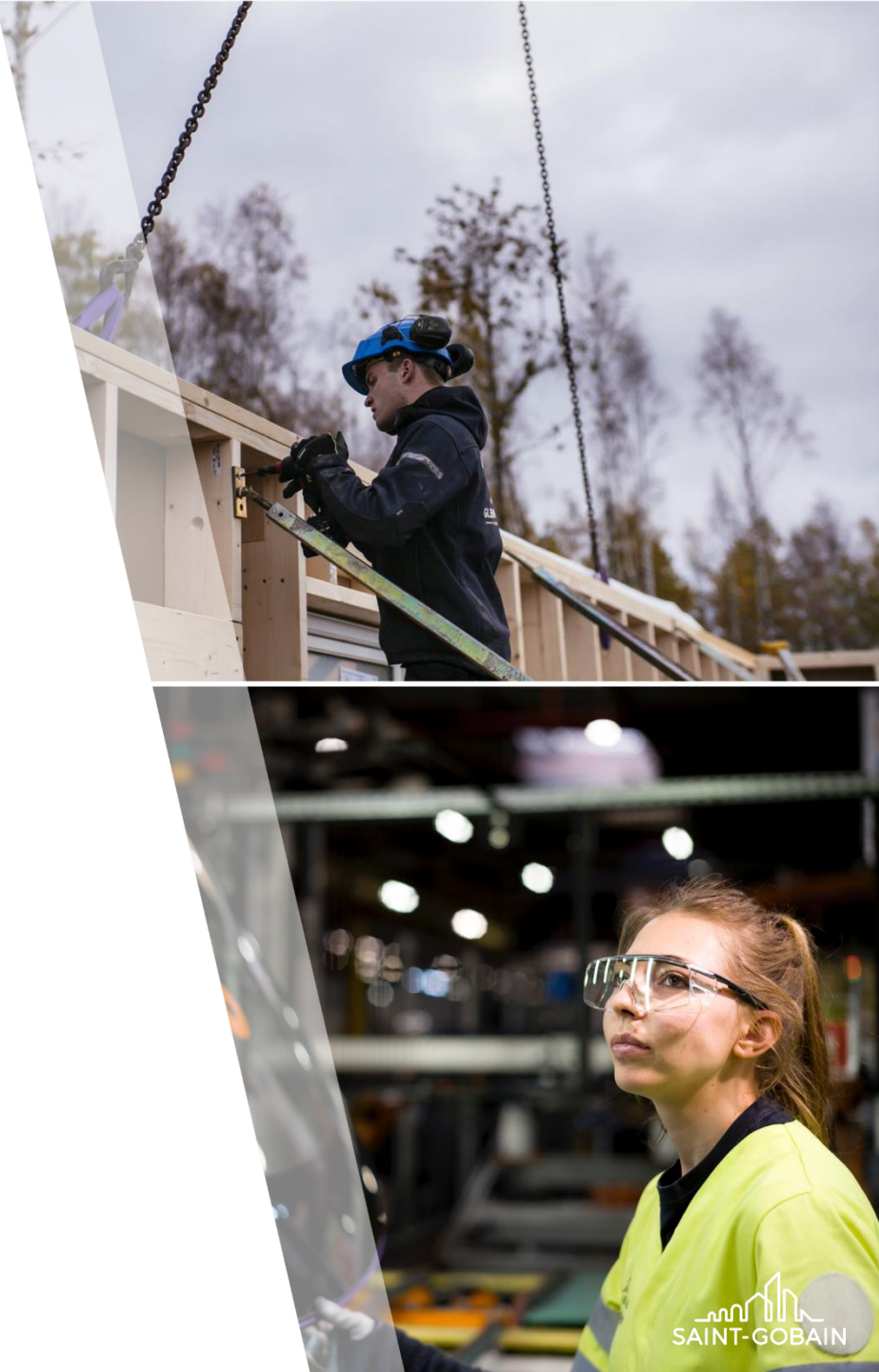
Mobility



Construction



Industry



A STRONG GLOBAL GROUP



Commitment to achieve
carbon neutrality in 2050



World or European leader
in most of our businesses

Founded over

350

years ago

Locations in

76

countries

Saint-Gobain Research

8

cross-business R&D centers

More than

166,000

employees

Approximately

800

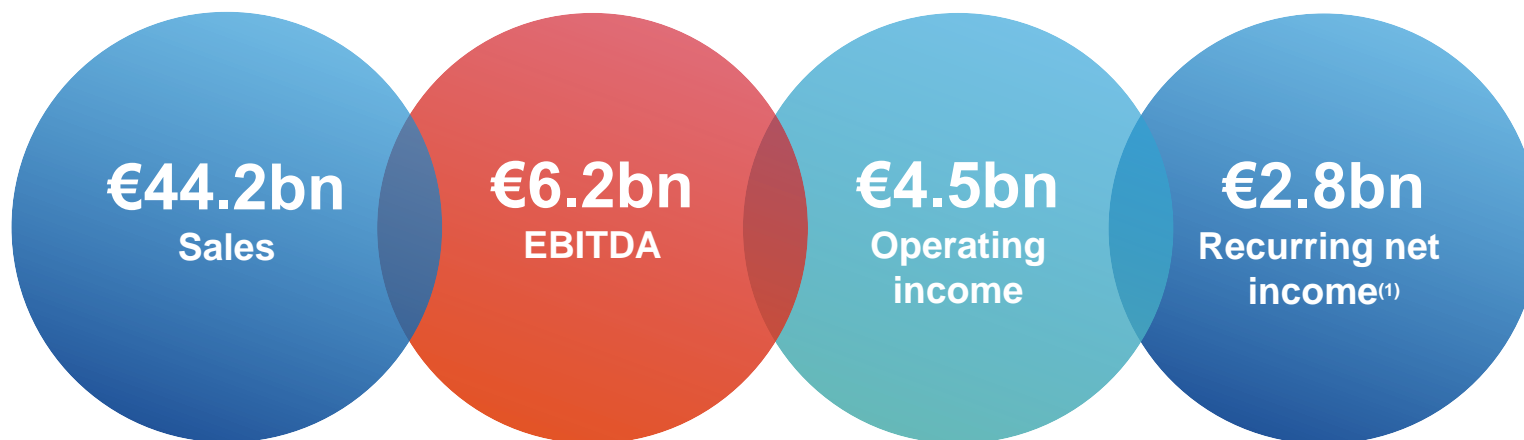
manufacturing facilities
around the world

Around

3,500

sales outlets

2021 FINANCIAL RESULTS



Free cash flow⁽²⁾

€2.9bn



Capital expenditure⁽³⁾

€1.6bn

- 1) Net income (Group share) from continuing operations excluding capital gains or losses on disposals, asset impairments and significant non-recurring provisions.
- 2) Free cash flow = EBITDA - amortization of rights of use + financial result + income taxes - tangible and intangible investments excluding additional capacities + change in working capital requirement.
- 3) Capital expenditure = tangible and intangible investments.



9 MAJOR MARKET SEGMENTS

Single-family home renovation



School or hospital renovation



Multi-family home renovation



Renovation and light construction in Europe



Multi-family home new build



Office new build

Construction in emerging markets

Multi-family home new build

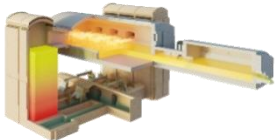


Single-family home new build

Construction in North America



Green mobility



Glass furnaces

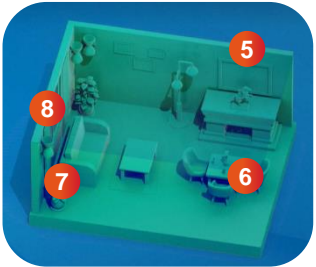
Industry decarbonization

AN EXAMPLE OF NEW CONSTRUCTION IN GERMANY



Solution use case
Multi-family home new build⁽¹⁾

21 Products and services



- 1 Waterproofing
- 2 External insulation
- 3 Window triple glazing
Climatop Eclaz
- 4 Ventilation duct
Climaver
- 5 Fiberboards
Gypsum
- 6 Air-tight solutions
Vario System
- 7 Floating screed
- 8 Ceiling



¹⁾ Benefits quantified versus German Energy Saving Ordinance (EnEV) building standard

3 months
time saved

Efficient new construction mode
Save **building time** thanks to off-site wood construction

60%
recyclable materials

Resource preservation and reversibility
Up to **90%** of the whole building can be deconstructed and **re-used**

+30 min/day
daylight autonomy increase

Performance attributes
High **visual, thermal** and **acoustic** performance products

AN EXAMPLE OF RENOVATION IN FRANCE



Solution use case
Single-family home renovation⁽¹⁾

33 Products and services

All sold and delivered by **POINT.P**
VOTRE RÉUSSITE COMMENCE ICI



- 1 Exterior insulation
Webertherm et Isonat
- 2 Attic insulation
Integra Vario
- 3 Double glazing
Climaplus Eclaz One
- 4 Interior partitions
72/48 partitions
- 5 Wall cover
Novelio Adfors
- 6 Waste collecting service



1) Benefits quantified versus energy efficiency performance of average building stock

274t
CO₂ eq
avoided with
Energy efficiency
Improvements*

Decarbonization

Through building **energy efficiency** and **sustainable products** and services

**(over 50 years)*

-70%
Energy bill
reduction

Energy efficiency

Reduced inhabitant **bill** and increased **property value** through **global renovation**

100%
solutions in
Saint-Gobain
network

Productivity and well-being

Improved **acoustic** and **air quality** comfort

OUR CSR ROADMAP: TOWARDS A POSITIVE CONTRIBUTION

Build a decarbonized world



Climate Change

Introduce circularity to our markets



Circular Economy

Be a forerunner of the most demanding standards



Health and Safety throughout the entire value chain

Foster an open and engaging work environment



Employee Engagement and Diversity

Reinforce our local ecosystems



Inclusive Growth

Act without compromise



Business Ethics

Recognized commitments



CONCRETE ACTIONS TO MAXIMIZE OUR CONTRIBUTION AND MINIMIZE OUR FOOTPRINT

Our solutions provide performance and sustainability

New modes of sustainable construction including lightweight construction
Decarbonization of our customers' industrial processes

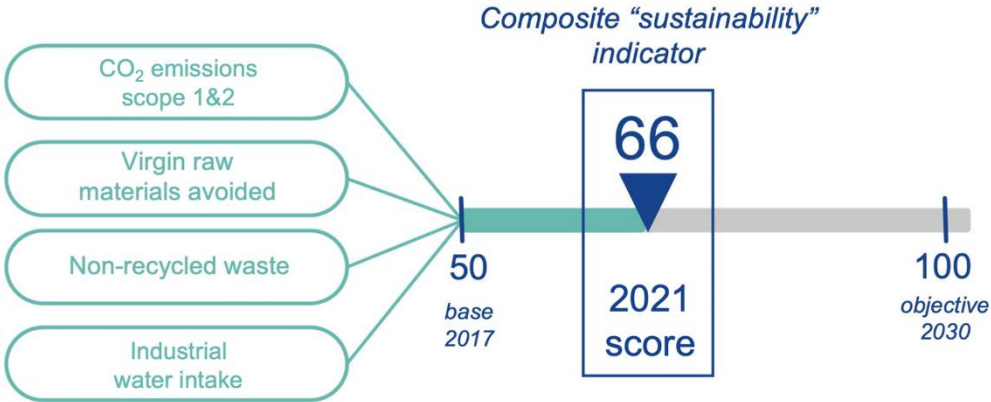


Towards
75% of sales
from sustainable
solutions in 2025
(72% in 2020)

Nearly 1.3 billion
tons of CO₂ avoided during
their lifetime⁽¹⁾

1) Internal methodology developed in partnership with EY Sustainable Performance & Transformation: avoided emissions calculated as the difference between the greenhouse gas emissions associated with the product's Life Cycle Assessment and the gains made by the product compared to a basic reference solution, multiplied by its lifespan (e.g. 30 years for insulation, 50 years for glass). Solution and reference scenario defined for each product in the portfolio.

2050 |
NET ZERO CARBON



€100m per year
(Capex and R&D costs)
for 10 years

TECHNOLOGY AND INDUSTRIAL PERFORMANCE TO MEET THE CHANGES IN OUR BUSINESS

Central teams share their expertise with all activities, facilitating synergies and economies of scale



- Strategic investments, allocation of capacities between countries



- Roadmap to reduce our CO₂ emissions



- Roadmap for industrial performance, technical standards, benchmark, 4.0, operational excellence programs (WCM, Supply Chain, quality, etc.)

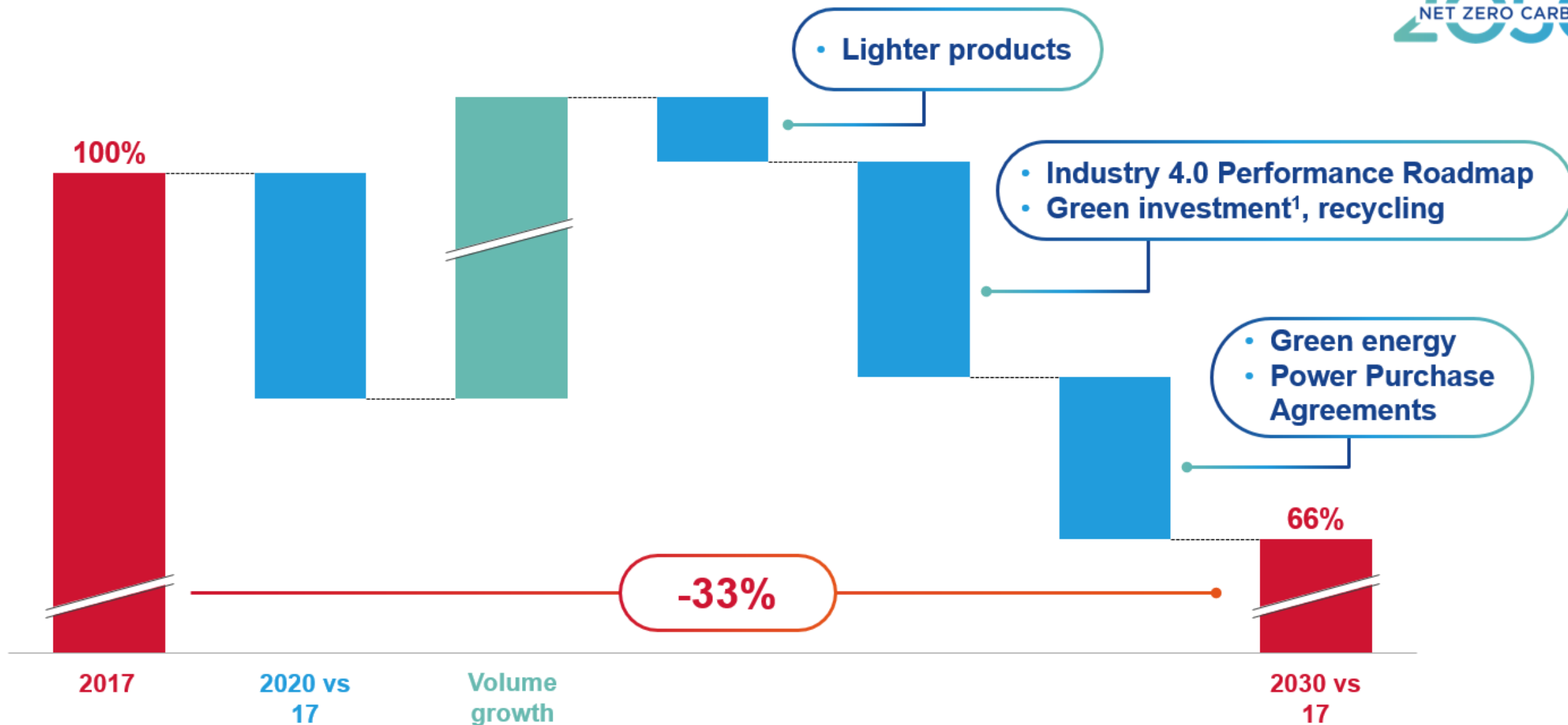


- R&D programs and intellectual property management for the construction market



WE HAVE ALL LEVERS NEEDED TO ACHIEVE -33% SCOPE 1+2 EMISSIONS BY 2030

2050
NET ZERO CARBON

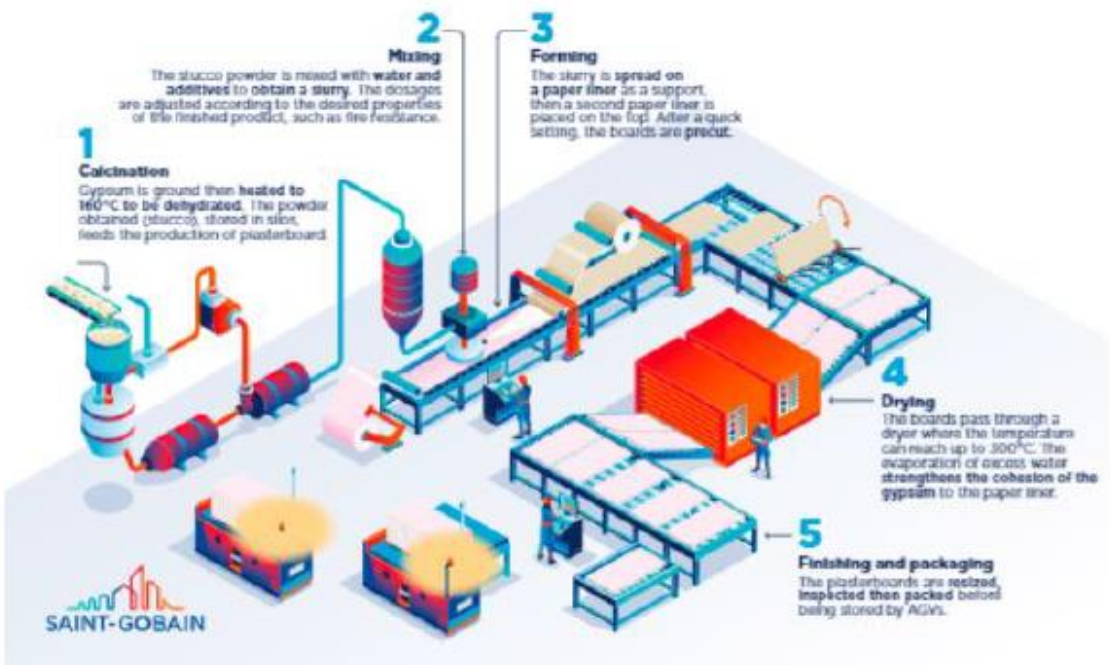


1. Enhanced by our 75€/t internal CO2 price for CapEx, 150€/t for R&D

WE PIONEER NET-ZERO CARBON FACTORIES



Net-Zero Carbon gypsum

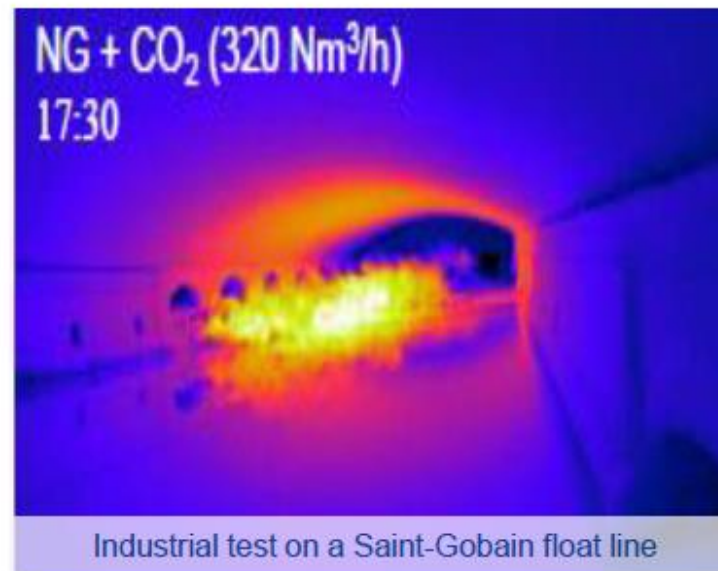


First Net-Zero Carbon gypsum plasterboard factory in Norway: 2023

Today, natural gas consumption (~30,000GWh) represents around two thirds of the energy consumption of the Group and the major source of our total annual scope 1 CO₂ emissions (~8Mt)



Net-Zero Carbon glass



Close collaboration with our ecosystems through partnerships

Advanced industrial trials with biomass and hydrogen in flat glass factories

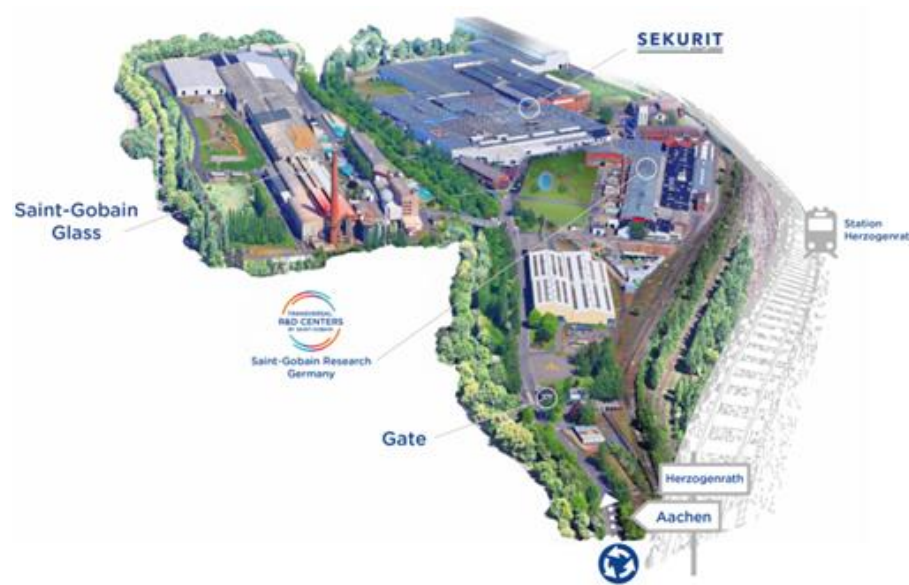


HERZOGENRATH, A FIRST GREEN FLOAT



Well in line with our 2030 milestone

Hybrid furnace fed by renewable **electricity** and **hydrogen**



Annual potential CO₂ reduction per installation of **50-100kt**

Financial support *



- Region
- Country **
- Europe **

Project collaboration



- Plant + R&D (Herzogenrath)
- Saint-Gobain R&D (Paris)

* Trials and installation, extra-capex and opex
** Expected



Thank you for your attention



**MAKING
THE
WORLD
A BETTER
HOME**

