Saint-Gobain carbon neutrality: leading towards sustainable Building & Industry
THE CHALLENGE IS TO MEET GROWING NEEDS WITH LESS CARBON & RESOURCES

40% of CO₂ emissions due to buildings

x 2 Raw material use by 2060

+12% in Energy demand by 2030

x 3 Passenger transport 2015-2050

Saint-Gobain’s solutions play a critical role in addressing these challenges

Sources: IEA, World Bank, OCDE, BCC research
Our CO$_2$ Roadmap

Embedded in our CSR Roadmap

Solidifies our status as an ESG leader
# SUSTAINABILITY: A LONG-STANDING COMMITMENT FOR SAINT-GOBAIN

<table>
<thead>
<tr>
<th>Before 2015</th>
<th>2015 - 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>2015</td>
</tr>
<tr>
<td>Saint-Gobain Principles of Conduct and Action</td>
<td>Setting of <strong>ambitious targets</strong> by 2025:</td>
</tr>
<tr>
<td>2003</td>
<td>-20%</td>
</tr>
<tr>
<td>Signature of the UN Global Compact</td>
<td>CO$_2$ emissions vs. 2010 at iso-production</td>
</tr>
<tr>
<td>2009</td>
<td>-80%</td>
</tr>
<tr>
<td>Compliance program formalization</td>
<td>water discharge</td>
</tr>
<tr>
<td>2009</td>
<td>-50%</td>
</tr>
<tr>
<td>Sustainable habitat roadmap</td>
<td>non-recovered waste</td>
</tr>
<tr>
<td>2014</td>
<td>2019</td>
</tr>
<tr>
<td>Sustainable habitat roadmap</td>
<td>Signature of UN Global Compact pledge targeting carbon neutrality by 2050</td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td><a href="#">Sustainable Development GOALS</a></td>
<td></td>
</tr>
</tbody>
</table>

Next step: Setting out the path to reach net-zero carbon by 2050
ON OUR WAY TO CARBON NEUTRALITY, 2030 IS OUR NEXT MILESTONE

**Objective 2050**

ZERO CARBON

**Science-Based Targets**

- **Scope 1 + 2** (Direct + Indirect) -33%
- **Scope 3** (Value chain) -16%

Absolute emission reduction vs. 2017

**In our processes**

- Offer the best low-CO₂ and sustainable solutions in our markets
- Enable our customers to decarbonize their processes

**In our solutions offering**
WE ACT UPON ALL 3 EMISSION SCOPES

Scope 1 (Direct) 8Mt
- 15% Raw materials
- 85% Energy

Scope 2 (Indirect) 2.7Mt
- 27% Asia-Pacific
- 28% Americas
- 13% Southern Europe MEA

Scope 3 (Value chain) ~24Mt
- 39% Raw materials + energy - industry
- 22% Purchasing - Distribution
- 37% Transport

2019 CO₂ emissions
8Mt 85%
2.7Mt 27%
~24Mt 39%

Levers for action
- Innovate on our processes: industrial, product design
- Optimize/reduce our energy use
- Transition to carbon free energy
- Suppliers & Logistics: raw materials & transports
INNOVATE ON OUR PROCESSES: LEVERAGE OUR UNIQUE GREEN INNOVATION CAPABILITIES

Scope 1 & 2

Industry 4.0

- Deploy widely 4.0 technology including sensors and data acquisition tools
- Leverage data collected to streamline and optimize processes

Recycling

- Accelerate on material disposal locations for our customers in our distribution outlets
- Improve our product design to facilitate recycling
- Adapt our production processes to accommodate higher proportion of recycled content

Raw material reduction

- Accelerate on light products
- Substitute with low carbon alternatives keeping same mix
- Accelerate on recycled content
- Rethink our formulations or processes

Carbon Capture

- Develop CCU\(^1\) technologies to be integrated in our production processes
- Validate technical solutions, gradually deploy them across industrial footprint

Cleantech at the core of our innovation and R&D

\(^1\) Carbon Capture Utilization
REDUCE ENERGY USE/TRANSITION TO CARBON FREE ENERGY: OPTIMIZE NOW, SHIFT TO CLEAN ENERGY FOR MEDIUM TERM

**Short Term**
- Reduce consumption
- Maximize energy efficiency
  - Leveraging industry 4.0 and data analytics
  - Implementing heat capture and reuse

**Medium and Long Term**
- Develop technology to transition away from fossil fuels
- Shift our mix to green electricity

**Fuel & others**
- Natural Gas: 45%
- Electricity: 50%
- 2020f Energy bill: ~€1.1bn

- Transition according to local energy mix
  - Fossil fuels
  - Biofuel (biogas, biomass…)
  - Green hydrogen or synthetic fuel
  - Direct electrification
  - "Boosting" (electricity, oxygen…)

**Market mechanisms**
- Green Certificates
- Power purchase agreements (PPA)

**Direct investments in renewables**
- Glass plant in India: Solar panels on roof producing ~4GWh for plant

18% of total electricity consumption in 2019
**SUPPLIERS & LOGISTICS: TACKLE EMISSIONS IN SUPPLIERS & TRANSPORT**

**Scope 3**

**Engage all our suppliers**
- Responsible purchasing charter
- SBT approach adoption
- Data transparency
- Benchmarking, selection criteria

**Reduce emissions from transport**
- Optimize logistics
- Improve fuel efficiency
- Use decarbonized fuels
- Replace road by rail & water

**Levers**

**Key actions**
- Benchmark suppliers, select them taking into account CO₂ emissions
- 89% of non-trade suppliers & 86% of trade suppliers covered by Supplier charter
- Gather detailed CO₂ emissions and other sustainability data (questionnaires, common approach + testing)
- Engage large emitters to adopt SBT approach (focus on cement, soda ash, paper, distribution suppliers)

**Examples of key actions**
- **Fret21**: part of COP21, to push carriers to cut CO₂ emissions
- **Evoluvert**: NGV¹-fueled trucks in Point.P distribution centers
- **Control Tower**: truck filling rate monitor, route optimization in LATAM

**Leverage our impact on the value chain**

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1. Natural Gas Vehicle
STRONG COMMITMENT TO SUPPORT OUR PATHWAY TO CARBON NEUTRALITY

INCENTIVES

ESG metrics part of long term management incentives
• CSR targets relative weight at 20% in 2020 up from 15% with CO₂ emissions accounting for 10% (vs. 5% previously)

CARBON PRICE

Internal carbon prices
• 30€/t for industrial investments
• 100€/t for R&D investment in breakthrough technology

INVESTMENTS

€100m

Annual CAPEX and R&D investments over the next ten years
Embedded in our CSR Roadmap

Our CO$_2$ Roadmap

Solidifies our status as an ESG leader
WE PLACE CORPORATE SOCIAL RESPONSIBILITY AT THE HEART OF OUR BUSINESS MODEL

OUR CSR ROADMAP

1. BUSINESS ETHICS
   To share our values with our stakeholders to build together over the long term

2. HEALTH & SAFETY
   Our first responsibility is to guarantee the health and safety of our employees and our stakeholders

3. CLIMATE CHANGE
   To contribute to the emergence of a low-carbon economy capable of preserving the common good

4. CIRCULAR ECONOMY
   To change the way we design, produce and distribute our products and solutions to develop the circular economy

5. INCLUSION & DIVERSITY
   To have broadly diverse teams to build an open and engaging corporate culture

6. LOCAL & INCLUSIVE VALUE CREATION
   To be a corporate citizen everywhere
### Our achievements

#### Ethics
- **93%** of new managers trained in Principles of Conduct & Action

#### Responsible purchasing
- **89%** Non-trade suppliers covered by the supplier charter
- **86%** Trade suppliers covered by the supplier charter

#### Compliance
- **100%** of managers trained in competition law
- **89%** of new managers trained in anti-corruption program

#### Health & Safety for all the employees
- **2.2 Total Recordable Accident Rate (TRAR)**
  - down from 9.9 in 2010*
  - Committed to reduce our TRAR below 2 by 2025

#### For and with our stakeholders
- **Main priority during pandemic crisis**
  - Adapted our processes to interact safely amongst our employees, with our suppliers, welcome our customers in strict adherence to sanitary measures

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* 2019 includes contractors, 2010 only internal employees
WE ARE MAKING PROGRESS ON ALL OUR PILLARS (2/3)

<table>
<thead>
<tr>
<th>Climate change</th>
<th>Circular economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribute to the emergence of a low-carbon economy capable of preserving the common good</td>
<td>Change the way we design, produce and distribute our products, solutions to develop the circular economy</td>
</tr>
</tbody>
</table>

### Our achievements

#### Products & Solutions contributing

- **Largest EPD¹ issuer:** 1,300+ verified EPD in >31 countries; Best-in-class

#### Operations & supply chain

- **-14.5% CO₂ emissions (scope 1 + 2)**
  vs. 2010 at iso-production

#### New objectives from our 2030 roadmap

**-50%** Industrial water withdrawal, with no discharge in drought areas vs. 2017

**100%** Life Cycle Analyses for 100% of Group product ranges

**-33%** Scope 1 + 2

**-16%** Scope 3

SBT-approved vs. 2017 emissions on an absolute basis

#### Integrate recycled materials in our products and solutions, adapt manufacturing processes

- **8.5Mt** Virgin raw materials avoided in 2019

- **11.5%** Reduction of non-recovered waste vs. 2010

#### Create collection networks / services to upcycle wastes

- **120** Collection points in our distribution network

#### New objectives from our 2030 roadmap

**+30%** Avoided virgin raw materials vs. 2017

**-80%** Non-recovered waste vs. 2017

**100%** Recyclable packaging

**>30%** Recycled or bio-sourced content on packaging

---

¹. Environmental Product Declaration
**CLIMATE CHANGE: WE ARE IDEALLY POSITIONED TO PLAY A MAJOR ROLE IN THE EUROPEAN RENOVATION WAVE**

- **-55%** greenhouse gas emissions*
- **-18%** energy consumption for heating and cooling*
- **x2** building energy efficiency renovation rate objective
- Renovation wave: **35m buildings** to be renovated by 2030, priority to public buildings, such as schools and hospitals
- **€275bn** Annual additional investment needs in building renovation

* Compared to 1990

Source: European Commission, October 2020

**Renovation in the EU: >€10bn annual sales for Saint-Gobain**
CLIMATE CHANGE: DECARBONIZED SOLUTIONS PROVIDER

- **~60%** Sales contributing directly or indirectly to lower CO₂ emissions
- **~50%** Sales for the renovation market*
- **+42%** Growth in electric vehicle mobility**

---

**Eclaz Glass**

- +20% energy efficiency
- +10% thermal insulation
- +10% solar gain

**New glass wool**

- -40% CO₂ emissions thanks to energy savings

**External thermal insulation**

- 30% heating savings
- Gain of up to 3 energy classes

**Sekurit solutions**

- Thermally insulating glazing for greater autonomy of electric vehicles
- +30km autonomy

* Estimation
** In 2019
A typical ISOVER glass wool product has amortized the CO₂ emitted in its production, transport & disposal just 3 months after installation.

Saint-Gobain CO₂ emissions in one year (scope 1+2)

10.8Mt

Avoided emissions thanks to our insulation solutions sold in a year

-1,200Mt

1. Internal methodology developed in partnership with EY Sustainable Performance & Transformation: Avoided emissions calculated as difference between greenhouse gas emissions associated with product Life Cycle Analyses & gain unlocked by the product vs. a reference basic solution multiplied by its lifespan (e.g. 30 years for insulation, 50 for glass). Reference solution & scenario defined for each product in portfolio.
## WE ARE MAKING PROGRESS ON ALL OUR PILLARS (3/3)

### Our achievements

<table>
<thead>
<tr>
<th>Inclusion &amp; diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have broad diversity within the teams to build an open and engaging corporate culture</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Increase diversity</th>
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</thead>
<tbody>
<tr>
<td>91.4% Global Diversity Index</td>
</tr>
<tr>
<td>24.2% women managers vs. 17.5% in 2010</td>
</tr>
<tr>
<td>17.1% women senior managers vs. 5% in 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Promote diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Women In Network’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Be inclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloomberg Gender-Equality Index</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New diversity objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>30% Women on average on all our business ExCos by 2025</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For and with our employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>78% Employees responding to satisfaction survey</td>
</tr>
<tr>
<td>79.1% Employees received training in 2019</td>
</tr>
<tr>
<td>9% of shares held by employees through PEG¹</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>With local communities as recognized trusted local partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 65,000 beneficiaries of the Saint-Gobain Foundation programs in 15 countries</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For and with the families of our employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social protection program launched for all the employees and their families</td>
</tr>
</tbody>
</table>

¹: Group Savings Plan
Our CO₂ Roadmap

Embedded in our Sustainability Roadmap

Solidifies our status as an ESG leader
## OUR ACTIONS ARE REFLECTED IN POSITIVE ESG RATINGS

<table>
<thead>
<tr>
<th>Agency</th>
<th>Saint-Gobain rating</th>
<th>Comparative elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainalytics</td>
<td><strong>LOW</strong> ESG risk</td>
<td>Rank 7/124 in building materials industry group</td>
</tr>
<tr>
<td><strong>MSCI</strong></td>
<td><strong>A</strong></td>
<td>Among top 10% in industry</td>
</tr>
<tr>
<td>ISS-oekom</td>
<td>Prime (C+)</td>
<td>Ranked 3/26 in sector</td>
</tr>
<tr>
<td><strong>Vigeo Iris</strong></td>
<td>52/100, Robust</td>
<td>Only 325 companies globally included in index</td>
</tr>
<tr>
<td><strong>Bloomberg</strong></td>
<td>Included in <strong>Gender-Equality Index</strong></td>
<td>182 companies globally in list &gt;8,300 participating</td>
</tr>
<tr>
<td><strong>CDP</strong></td>
<td>Member of <strong>« Climate Change A list »</strong></td>
<td>Out of more than 5,500 publicly traded businesses assessed</td>
</tr>
<tr>
<td><strong>WSJ</strong></td>
<td>20th on list of Top 100 most sustainably managed companies</td>
<td>2019 Constituent MSCI ESG Leaders Indexes</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>FTSE4Good</strong></td>
</tr>
</tbody>
</table>

**Indexes**

**Third party collaboration**
## CONCLUSION: SAINT-GOBAIN, AN ESG LEADER

### Environmental
- **A key solution provider** for energy efficiency and lower carbon alternatives
- **Net-zero Carbon** by 2050, with new 2030 targets: -33% scope 1+2, -16% scope 3
- **Circular economy:** +30% avoided virgin raw materials by 2030 by further increase in recycled content; -80% non recovered waste; 100% recyclable packaging; >30% recycled or bio-sourced content on packaging

### Social
- **Safety:** accident reduction
- **Social Protection program:** ‘CARE by Saint-Gobain’
- **Diversity:** 30% women on average on all our business ExCos by 2025
- **Business Ethics training:** for 100% new managers in first year
- **Social dialogue:** 1,437 social agreements in 2019
- **Foundation:** 40 projects sponsored in 15 countries; more than 65,000 beneficiaries of the Foundation programs

### Governance
- **Independent directors:** 73% of the board & Lead Independent Director
- **Diversity:** 45% women on Board
- **2 employee directors** on Board and one representative of the employees shareholders
- **Management compensation includes ESG objectives**
- **Corporate Social Responsibility Board Committee**
- **Specific training for board members:** climate change, circular economy, biodiversity
Appendix
SBT VALIDATED OUR OBJECTIVES

Science-Based Targets

- Platform set up during COP21
- 4 partner organizations:
  - Scenarios developed to help organizations define their medium term objectives (5 to 15 years)
  - >1,000 companies involved of which 500 have mid-term objectives approved
  - Long term approach to reach carbon neutrality in line with 2019 pledge
  - Saint-Gobain commitment:
    - Trusted organization considered as reference (TCFD, …)

A rigorous process to validate targets

1. Initial screening
   - To determine if all necessary information is provided and if the target meets the basic criteria.
2. Lead reviewer desk review
   - Lead reviewer performs the desk review to assess the target against the SBT criteria and sends questions if needed.
3. Appointed approver review
   - Appointed approver reviews the assessment done by the lead reviewer.
4. Target validation team discussion
   - Target validation team discusses the target and the desk review completed by the lead reviewer in a weekly meeting.
5. Communicating decisions and feedback
   - For each assessment, one target validation report and a decision letter will be delivered within 30 working days.

Source: SBT communication

Commit to Net Zero carbon by 2050 & follow at least the path of “Well below 2°C” scenario
MATERIAL ISSUES ARE MAPPED AND MONITORED CLOSELY

Matrix built in 3 stages

- Identification of the key challenges based on a review of publicly available information published by the Group, relative to its activities and its environment
- Sharing these challenges with key stakeholders
- Ranking the challenges by comparing stakeholder expectations with the vision of Group management

Used as a basis for our CSR Roadmap
Global warming potential by product at equivalent insulation performance: the lower the better

<table>
<thead>
<tr>
<th>Material</th>
<th>Global Warming Potential (GWP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass wool</td>
<td>0.1</td>
</tr>
<tr>
<td>Stone wool</td>
<td>0.7</td>
</tr>
<tr>
<td>EPS</td>
<td>1.5</td>
</tr>
<tr>
<td>XPS</td>
<td>2.2</td>
</tr>
<tr>
<td>PU foam</td>
<td>3.0</td>
</tr>
<tr>
<td>PF foam</td>
<td>3.7</td>
</tr>
<tr>
<td>Foam glass</td>
<td>4.5</td>
</tr>
<tr>
<td>Cellulose</td>
<td>5.2</td>
</tr>
</tbody>
</table>

1. Global warming potential (kg CO₂ eq / functional unit)