

LETTER TO SHAREHOLDERS

H1 2018
SALES

€20,787m

+4.9% like-for-like

H1 2018
OPERATING INCOME

€1.47bn

+1.7% like-for-like

H1 2018
RECURRING* NET INCOME

€0.80bn

+6.8%

* Recurring net income excl. capital gains and losses on disposals, asset write-downs, material non-recurring provisions and Sika income.

"The second quarter marks a return to supportive trends in all our main markets. After a disappointing first quarter, affected by harsh winter weather in Europe which weighed on results, the second quarter was far more encouraging in terms of volumes and prices. The Group succeeded in further raising sales prices amid continued raw material and energy cost inflation. Despite a combination of temporary one-off factors, our first-half results progressed once again.

Saint-Gobain is therefore confirming its objectives for full-year 2018 and for the second half expects the like-for-like increase in operating income to be clearly above the level achieved in the first half.

After having agreed a transaction with Sika on excellent financial terms, the Group will accelerate the implementation of its strategy: the roll-out of a divestment program representing at least €3 billion in sales by the end of 2019, the continuation of its policy of value-creating acquisitions, and the launch of a review of the Group's organizational structure in order to give greater priority to the regional dimension of its businesses with the aim of enhancing its agility to drive growth and reinforce its competitiveness."

PIERRE-ANDRÉ DE CHALENDAR,
Chairman and Chief Executive Officer
of Saint-Gobain

FOCUS...

FOSTERING INNOVATION

P.3

FOCUS...

ARTIFICIAL INTELLIGENCE
AND BIG DATA:
THE FUTURE IS NOW

P.4-5



**Saint-Gobain fits out
TF1's new tv news set**

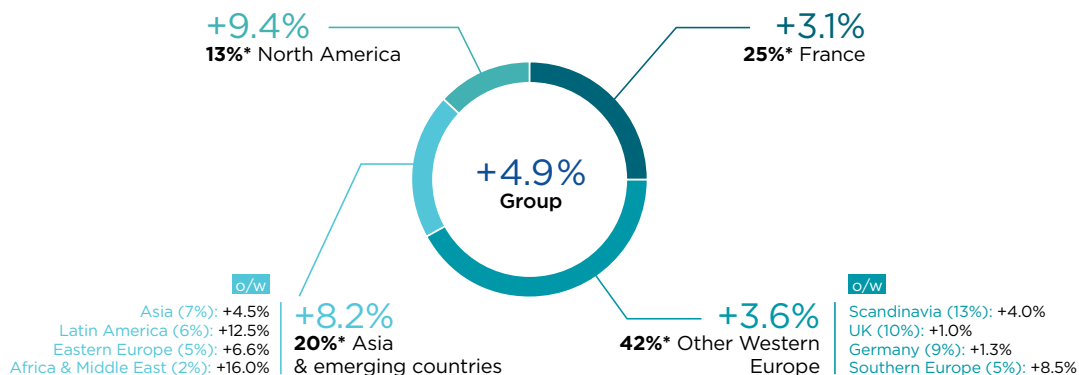
PAGE 6

**Saint-Gobain Weber
helps design 3D houses**

PAGE 7

SALES TRENDS BY REGION

(% change in H1-2018/H1-2017 like-for-like sales)



*Breakdown of H1 2018 sales

RESULTS BY BUSINESS SECTOR

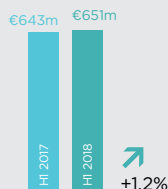
INNOVATIVE MATERIALS

H1 2018 SALES

€5,282m

25% of Group sales

H1 2018
OPERATING INCOME



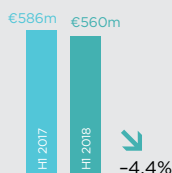
CONSTRUCTION PRODUCTS

H1 2018 SALES

€6,476m

29% of Group sales

H1 2018
OPERATING INCOME



BUILDING DISTRIBUTION

H1 2018 SALES

€9,550m

46% of Group sales

H1 2018
OPERATING INCOME



OUTLOOK

Saint-Gobain confirms its objective for full-year 2018 of a like-for-like increase in operating income and for the second half expects the like-for-like increase to be clearly above the level achieved in the first half.

After having agreed a transaction with Sika on excellent financial terms, the Group will continue and accelerate the roll-out of its strategy:

- Acceleration in divestments by the end of 2019, representing sales of at least €3 billion, with a positive impact of around 40 basis points on the operating margin.
- Ongoing value-creating acquisitions policy representing over €500 million per year on average through to 2020, with three

focuses: Asia and emerging countries, new niche technologies and services, and the consolidation of the Group's strong positions.

- Launch of a review of the Group's organizational structure to give greater priority to the regional dimension of construction businesses in order to: increase market proximity, enhance agility in order to drive growth, leverage new opportunities from our digital transformation programs and reinforce our competitiveness, while maintaining business synergies. The new organizational structure that results from this review will be unveiled before the end of 2018. In line with our culture of social dialog, employee representative bodies will be kept informed.

FOSTERING INNOVATION

Innovation has always been an integral part of Saint-Gobain's DNA. But innovation also occurs outside our walls. The Group has therefore launched challenges for start-ups and students in France, Russia, China and Brazil to find new sources of innovation.

Pierre-André de Chalendar, Chairman and Chief Executive Officer of Saint-Gobain: *"As part of our open innovation approach, we are stepping up our cooperation with players outside the Group in order to complement our own expertise".* Open innovation is a process in which a company calls on external ideas and expertise in innovation-focused research and development.

How can we improve the 'renovation experience' for French people?⁽¹⁾

This was the question submitted by the Saint-Gobain **Business Challenge** in **France** in 2017. A total of 443 students divided into 134 teams presented 115 projects designed to improve the competitiveness of small businesses (SMEs). A further 56 start-ups unveiled the innovative solutions they are currently developing. Saint-Gobain experts worked with the shortlisted teams to refine or work on their pitch, which could potentially win them one of the prizes totaling about €15,000. *"Our innovation processes are increasingly open to external ecosystems, which are a source of wealth and inspiration. The business challenges are one example of what we want to increasingly extend worldwide and*

are designed to lead to partnerships and in situ tests," explains Mathilde Hébert, Deputy Marketing Director for the Group.

The Geniaxes start-up won the jury's vote for its "selfAdom", a



digital self-assessment system enabling homeowners to review the security and comfort of their home and to tap into concrete solutions for change with the possibility of being put into contact with tradesmen.

PUSHING THE ENVELOPE ON INNOVATION

Innovation offers many different avenues for Saint-Gobain

to explore, with the potential of increasing its visibility as a central player in the innovation ecosystem as well as among the general public. In **China**, for example, the competition was open only to start-ups and focused on new materials, energy conservation and environmental protection. Attractive issues designed to *"increase awareness of Saint-Gobain as an innovative company in China among incubators and the general public,"* points out Catherine Liu, Communication Director for **Asia-Pacific**. Of the 100 candidate start-ups, HiPaint stood out for its materials designed to replace blackboards in universities that can be endlessly written on and cleared.

In **Brazil**, more than 150 professionals and students working in various fields of digital and technology innovation competed to design connected-object solutions for Saint-Gobain companies. The winning project – a **fire hydrant with a geolocation function that collects urban data** – has opened the door to discussions within the Brazilian Pipe business about **smart cities⁽²⁾** and about improving the performance of facilities through big data.

"The experience has spurred us on to step up our relations with start-ups and to introduce our own start-up acceleration program," said Lucile Charpentier, Digital Strategy and Marketing Director, Saint-Gobain Brazil. These challenges are fantastic opportunities for us to stretch our ideas and step up our development programs. ■

1. "One in every two people in France are not wholly satisfied with their renovation experience" according to the survey conducted by TNS Sofres in August 2015 in France and the UK and in 2016 in Germany and Sweden. 2. Smart cities are urban areas that develop solutions and technologies that can meet the needs of their population, while protecting resources and the environment (see page 3 of the Letter to Shareholders No. 83, November 2017).



ARTIFICIAL INTELLIGENCE AND BIG DATA: THE FUTURE IS NOW

Artificial intelligence (AI) is quickly becoming a critical technology for business growth and development. AI is already used in the Saint-Gobain Group in trade, purchasing, human resources, finance and production.

What is artificial intelligence?

Artificial intelligence is a set of theories and techniques implemented to produce machines capable of simulating intelligence. It developed along with the emergence of leading digital technology firms to process massive volumes of data (known as 'big data').

Algorithms were designed to make machines more efficient as their experience grows, in the same way as humans progress through learning. This is what we call 'machine learning'. *"The computing power provided by the cloud⁽¹⁾ and the evolution of learning algorithms have enabled artificial intelligence to make a quantum leap,"* says Frédéric

Verger, Vice-President Information Systems. *"The next stage which we are currently seeing involves reusing these algorithms".*

What are the potential immediate uses for Saint-Gobain?

A key analytical marketing technology

In the sales and marketing field, artificial intelligence can be used to improve how customer needs are processed and to automate sophisticated and personalized interaction on e-commerce sites.

1. A cloud bundles storage and digital data sharing services. Users can store personal content on the cloud and access it anywhere in the world from any connected device.

MOVING TOWARDS INDUSTRY 4.0

In manufacturing plants, artificial intelligence is one of the key technologies for industry 4.0. Around 20 industrial sites have begun trial projects. The lines can be equipped with sensors to collect essential data in order to automatically optimize production inputs and improve quality, or to issue a warning in the event of a deterioration for the purposes of predictive maintenance.



The Group's Building Distribution Sector is beginning to use AI in its **product recommendation engines on its e-commerce sites** and to estimate the purchasing potential of its customers and so improve how it guides the sales approach. Artificial intelligence can also provide assistance to Group employees in direct contact with customers: rather than delve into databases to look for the answer to a question, they only have to ask the system to get an answer.

Human resources, finance, purchasing

There are also an increasing number of applications in human resources (talent management, candidate selection assistance, etc.) and in finance (automation of tasks in Shared Service Centers [SSC] and analysis support for audits).



Michel Magot, Vice-President Executive Career Management for the Group, explains: *"We use machine learning to expand our talent pool in the Group. The next stage will perhaps involve semantic analysis to help identify future talent."*

The potential is huge. *"We can collect all data in all languages on the thousands of suppliers we use worldwide. And then we can analyze them to make sure they are complying with the Responsible Purchasing Charter,"* explains Frédéric Verger.

The Group is also working on a **desktop chat assistant** slated to start up with 1,000 users. *"We are not dealing with a passing fad; it is a major priority for the company,"* says Verger. *"However, no data means no artificial intelligence. We have to work on collecting it, both internally and externally, and then organizing it into 'data lakes'."*

"We are now witnessing the appearance of the first artificial intelligence call centers combining various modules," says Frédéric Verger. *"An artificial call center is an artificial voice solution able to read text with ultra-realistic pronunciation*

similar to human pronunciation: translation of the telephone call into text, content interpretation, and formulation of a response then rendered in an artificial voice".

MACHINE LEARNING

Specialized skillsets are also required to process the data fed into learning machines internally or via partnerships with major players or start-ups. The Group already employs around 20 **data scientists** in the Datalab⁽¹⁾ at Saint-Gobain Recherche in Aubervilliers (France), and other Saint-Gobain subsidiaries are also recruiting similar specialists, especially in the area of e-commerce.

At a time when the **smart city**⁽²⁾ model is becoming the norm for streamlining costs and organization while improving citizens' well-being, and for which there are a growing number of data sources from housing and from the practices of inhabitants in both urban and non-urban areas, artificial intelligence is a major priority. It will enable the Saint-Gobain Group to continuously develop comfortable and sustainable solutions for the widest possible population. ■

1. Saint-Gobain created a Datalab at Saint-Gobain Recherche in Aubervilliers (France), an R&D hub staffed with data scientists designing innovative products and services to meet tomorrow's energy and environmental challenges. 2. See the footnote on page 3.

SAINT-GOBAIN NEWS



INNOVATION SAINT-GOBAIN WEBER HELPS DESIGN 3D HOUSES



In the Netherlands, Saint-Gobain Weber Beamix is involved in the world's first housing project based on 3D concrete printing. Named *Project Milestone*, it will build five houses tailored to occupants' comfort requirements. The mortar developed by Weber together with six other partners including Eindhoven University of Technology, will help create a variety of complex shapes and limit waste.

PROJECT SAINT-GOBAIN DISTRIBUTION BÂTIMENT FRANCE FITS OUT BUSES TO PROMOTE AUTONOMY

Saint-Gobain Distribution Bâtiment France's (SGDB France) buses to promote autonomy are traveling around France to reach out to stakeholders working with seniors. Designed to resemble showhomes with a surface area of 9 to 14 sq.m., the buses are entirely fitted out with SGDB France products intended to make the home safer and more comfortable. Home accessibility teams travel with the buses. SGDB France aims to make the 'autonomy buses' available to its teams and to raise awareness among tradesmen of the need to create adaptable homes that provide seniors with autonomy and quality of life.

DELIVERY SAINT-GOBAIN FITS OUT THE NEW TV NEWS SET OF FRENCH NETWORK TF1 WITH SAGEGLASS ELECTROCHROMIC GLASS

The new TV news set of French national network TF1, unveiled on August 27, 2018 by presenter Jean-Pierre Pernaut, is fitted with Saint-Gobain electrochromic glass. *SageGlass Blue* dynamic glass, which tints or clears on demand while remaining transparent, was chosen by TF1 as an elegant, premium visual component for its new-look news set.

The glass guarantees the blue visual identity of the TF1 news program. Lighter at 1:00pm and tinted at 8:00pm, it creates a visual contrast between the network's two news editions. Installed in interior partition walls by Verre Solutions in Saint-Etienne du Rouvray, northern France, the 12 sq.m. of glass reveal the designer editorial room behind. This breakthrough technology heightens the studio's physical impact, turning a glazed material into smart glass.



MULTI-COMFORT WHEN SAINT-GOBAIN REINVENTS HOMEBUILDING

DIGITAL POINT.P MATÉRIAUX DE CONSTRUCTION UNITES TRADESMEN WITH AN APP

In France, *Génération Artisans*, a community of several homebuilding stakeholders, now has its own app for the 8,500-plus tradesmen members of the program and Point.P Matériaux de Construction employees.

The app aims to strengthen the community network of building tradesmen in France. These professionals can use the app's messaging function to share technical information and needs, and check construction market news, regulations and innovations introduced by Point.P's industry partners.

They can also access events and training programs in their local area.

In Italy, Saint-Gobain has introduced *XYLIVING*, an innovative construction method based mainly on installing timber modules lined with Saint-Gobain ISOVER *glass wool* and Saint-Gobain Gyproc *plasterboard*, thereby avoiding the use of traditional materials such as brick and cement. *XYLIVING* also includes home automation, an insulation system and external PV panels to improve energy performance. This new, fast and easy construction method also has the advantage of withstanding earthquakes and consumes 75% less energy than traditional housing. From now on, it will only take three days to build a 150 sq.m. house, using 100%-recyclable materials, which will be transported by truck in a single journey, thereby optimizing the project's carbon footprint.

PROJECT SAINT-GOBAIN ISOVER AND SAINT-GOBAIN PLACO® RENOVATE 80 APARTMENTS IN PARIS

In France, Saint-Gobain ISOVER and Saint-Gobain Placo® helped refurbish an apartment building that no longer complied with current energy regulations and acoustic requirements.



The building, which dated from the 1960s and belongs to a religious congregation, was retrofitted with the new **F4 façade**, which combines fiber-cement cladding⁽¹⁾, a metal frame and glass wool insulation layers. Chosen for its rapid installation and lightweight properties along with its acoustic and environmental performance, this innovation has increased the usable surface area of some of the apartments by transforming the balconies into interior living spaces. As a result, the building will comply with the targets of the Paris Climate & Energy Action Plan and the operation will be awarded *Patrimoine Habitat et Environnement* (Habitat and Environment Heritage) certification under France's *BBC Renovation* energy efficient building label.

INNOVATION SAINT-GOBAIN SEKURIT FRANCE REVOLUTIONIZES COMFORT IN THE WORKPLACE

In France, Saint-Gobain Sekurit has improved the ergonomics of operators' workstations at its Société Verrière d'Encapsulation (SVE) site using virtual reality and 'cobots' (collaborative robots). Faced with problems of repetitive movements involving back and torso rotation, employees worked with ergonomists on how to improve their working conditions. Two workstations were fully digitalized in an immersive 3D cube, where employees were able to test their current posture and identify the changes needed. Now, a cobot will perform all strenuous tasks instead of the operators. This initiative has reduced risks and increased throughput. It will now be used as a basis for Saint-Gobain Sekurit lines currently under construction worldwide, and will be systematically modeled in 3D so that employees' posture can be analyzed using a virtual reality system.

INNOVATION OVERLENGTH: 18-METER TALL GLASS



OVERLENGTH is the new glazing range up to 18m in length and 3.21m wide, a fitting response to the trends in architecture and construction, which increasingly favor huge glazed surfaces.

This solution offers an exceptional view of the surrounding landscape and generates a unique sense of space. It lets in more light while reducing installation time and construction costs.

OVERLENGTH can be used in all kinds of combinations for maximum design flexibility: single pane or insulating assembled glazing, **PLANICLEAR** base glass or coated glass for insulation and solar control (**PLANITHERM II**, **COOL-LITE SKN II** and **XTREME II**), safety, tempered and laminated glass. **OVERLENGTH** can undergo cutting, hole-drilling, beveling, printing, and so on.

PROJECT LUXURY, TRANSPARENCY AND COMFORT BY SAINT-GOBAIN EXPROVER

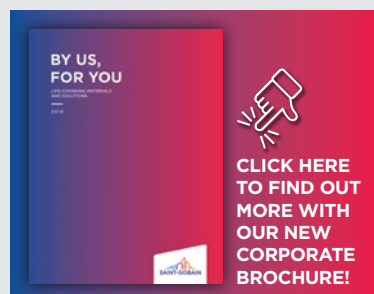
Saint-Gobain Exprover has supplied several solutions for TEK, a luxury apartment complex in Dakar, Senegal. **sgg PLANISTAR SUN** double-glazing was selected to ensure the buildings' energy efficiency in this subtropical region, while **sgg STADIP SILENCE** was chosen as acoustic glazing for optimum acoustic insulation. The contemporary facades of the project's three buildings echo the art of African weaving and provide the complex with a unique aesthetic appearance.

PROJECT SAINT-GOBAIN GLAZES EUROPE'S FIRST LEED PLATINUM-CERTIFIED HOTEL

In the Netherlands, Saint-Gobain has supplied solar control glazing for QO Amsterdam. Jointly designed by Paul de Ruiter Architects, Mulderblauw Architects and Arup, QO Amsterdam is Europe's first hotel to be awarded LEED Platinum status, the sustainable development excellence standard. The 258 sq.m. of curved **sgg COOL-LITE SKN 165 II** and **sgg CONTOUR Planitherm XN II** were produced and processed by Glassolutions' Döring facility in Berlin, and the project was led by teams at Saint-Gobain Gevelbouw Arnhem and Blitta in the Netherlands.

The transparent floor-to-ceiling glazing is designed to optimize solar energy use. The dynamic façade is made up of 819 individually mobile panels, whose orientation and position can be adjusted to indoor and outdoor temperatures, saving up to 65% of the energy needed for heating.

The building also has a waste-to-energy recovery system, and a greenhouse on the top floor supplying fruit and vegetables to the restaurant. QO was designed to have a positive environmental impact.



1. An exterior insulating solution.

SHAREHOLDER'S NOTEBOOK

DATES FOR YOUR DIARY

SHAREHOLDER MEETINGS

Friday November 23 at 3:00pm
Salon Actionaria trade show in Paris
Thursday December 6 at 6:00pm
in Strasbourg

SITE VISITS

Thursday December 13, 2018,
2:00pm-4:00pm
Sekurit plant visit at Chantereine (60)

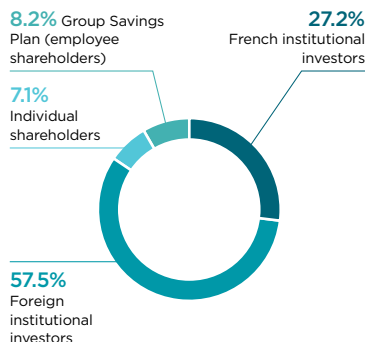
TOTAL NUMBER OF SHARES

(at June 30, 2018)

552,595,547

OWNERSHIP STRUCTURE

(at June 30, 2018 - % estimated)



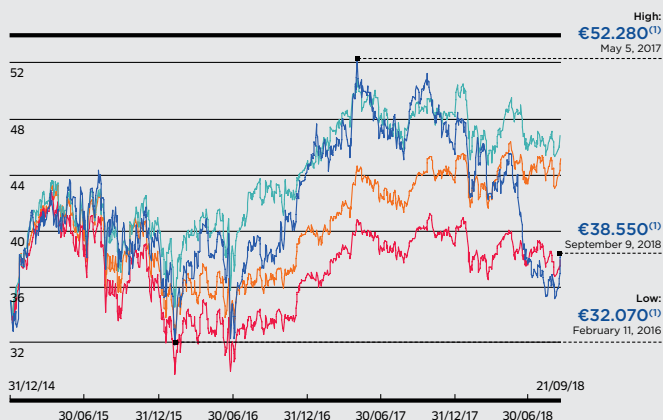
SALON ACTIONARIA

THURSDAY NOVEMBER 22 AND FRIDAY NOVEMBER 23
AT THE PALAIS DES CONGRÈS IN PARIS

Come and visit our stand to discover the Group's main brands and take part in our meeting for individual shareholders led by Guillaume Texier, Group CFO, in the Salle Bleue on Friday at 3:00pm. For a free invitation, please visit the *Inscription gratuite* page of the Actionaria website (in French only) and enter the code STG018.

SAINT-GOBAIN SHARE PERFORMANCE 31/12/2014 - 21/09/2018

Performance over the period: Saint-Gobain: +9.4% CAC 40: +28.6%



— (1) Saint-Gobain share price — CAC 40
— DJ EURO STOXX 50 — DJ EURO STOXX 600 Construction

Recent performance at September 21, 2018 (€38.550) in %	Saint-Gobain share price	CAC 40	DJ Euro Stoxx 50	DJ Euro Stoxx 600 Construction
Trailing month	+6.0%	+1.6%	+0.6%	+1.2%
Trailing 3 months	-0.9%	+3.4%	+0.8%	+0.2%
Trailing 6 months	-14.3%	+4.9%	+0.9%	+0.9%
Trailing 12 months	-22.4%	+4.3%	-3.1%	-3.5%

YOUR CONTACTS

Saint-Gobain's Shareholder Relations Department will be pleased to answer any enquiries. Please feel free to contact them:

• By dialing:

0 800 32 33 33 from France (calls free of charge from landlines)

or 0033 (0)1 47 62 33 33 from outside France

• Online, at www.saint-gobain.com

• By e-mail, at actionnaires@saint-gobain.com

• Via the Saint-Gobain Shareholder App



• By post:

Compagnie de Saint-Gobain
Service Actionnaires
Les Miroirs
18 avenue d'Alsace
92096 La Défense Cedex

• Reuters: SGOB.PA



FSC
www.fsc.org

MIX
From responsible
sources
FSC® C112677

Managing Editor: Guillaume Texier
ISSN No. 1245-3978
Design: *tamata*

Photo credits: Fotolia (p.1, p.2, p.3, p.4); Saint-Gobain Weber, Photothèque Saint-Gobain (p.6); Saint-Gobain Isover, Photothèque Saint-Gobain (p.7).

Printed by: Gilbert Clarey Imprimeurs certified Imprim'Vert and FSC on FSC-certified paper, using recycled paper and pulp from sustainably managed forests.

