CHANGING OUR VIEW OF COMFORT.

2017 CORPORATE BROCHURE
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BY DESIGNING MATERIALS THAT CONTRIBUTE TO CREATING SPACES WHERE EVERYONE FEELS GOOD: AT HOME, AT WORK, AT SCHOOL OR IN THE CITY. EVERYWHERE.

BY NOT THINKING OF COMFORT AS JUST A PERSONAL NEED BUT AS A COLLECTIVE REQUIREMENT: CONSUME LESS, RECYCLE AND IMPROVE THE USE OF RESOURCES, WHILE CATERING TO AN EVER-GROWING NUMBER OF PEOPLE LIVING IN CITIES...

SUCH IS THE YARDSTICK THAT WE USE TO MEASURE COMFORT FOR EACH INDIVIDUAL AND FOR ALL OF US. FOR A SMARTER, MORE ACCESSIBLE AND INCREASINGLY SUSTAINABLE HABITAT.
TO REINVENT HABITAT AND IMPROVE DAILY LIFE IS TO MAKE EACH PERSON’S COMFORT THE ANSWER TO THE COLLECTIVE CHALLENGES THAT LIE AHEAD OF US.

— Pierre-André de Chalendar, Chairman and Chief Executive Officer of Saint-Gobain
In 2016, we rethought the Saint-Gobain brand to strengthen it and focus it more squarely on the consumers and end-users of our solutions. We have reasserted our mission: create great living places and improve daily life. We are helping create comfortable and sustainable living spaces that combine individual needs for wellbeing and the collective challenges that lie ahead: increased world population, growing urbanization, scarcer resources and climate change.

Innovative materials are now providing us with access to comfort and wellbeing at home and in the office, in the car or in airplanes, wherever we are in the city. We have adopted a concerted approach determined by and for the customer, and we place the users of our solutions at the heart of our R&D and digital services. The digital transformation, that affects all our businesses, is providing Saint-Gobain with the opportunity to work more closely with industrial clients and the habitat segment, not least of which construction professionals, but also increasingly those who specify our solutions, and homeowners who are sensitive to the comfort and energy efficiency of their home.

Saint-Gobain also leverages its innovative strength to stand out on growing markets, such as life sciences and sustainable mobility. For industrial markets, our teams utilize their expertise in materials with a high technological content, such as abrasives, ceramics, performance plastics and technical fabrics. Worldwide, Saint-Gobain works increasingly closely with its clients to ensure that its ambition mirrors local needs as closely as possible.

The Saint-Gobain brand is the promise of materials devised for the wellbeing of each of us and the future of all in response to the major challenges of the decades ahead. This promise is reflected in our corporate social responsibility and our solutions for growth that protect the environment. Comfort in living places can no longer be separated from a responsible and sustainable view of the world. It must be devised at the collective level. That is the mission Saint-Gobain has given itself.
A GLOBAL GROUP

NET SALES
€39.1 BN

RECURRING NET INCOME
€1.398 BN

SALES MADE IN THE CONSTRUCTION MARKET
OVER 80%

EMPLOYEES WORLDWIDE
172,696

PATENTS FILED IN 2016
390

CROSS-BUSINESS R&D CENTERS
8

RESEARCHERS
3,700
NORTH AMERICA
13% of sales
14,335 employees
Canada
United States of America

LATIN AMERICA
6% of sales
17,959 employees
Argentina
Brazil
Chile
Colombia
Mexico
Peru
Venezuela

FRANCE
25% of sales
42,530 employees

OTHER WESTERN EUROPEAN COUNTRIES
42% of sales
58,547 employees
Germany
Austria
Belgium
Denmark
Finland

Greece
Italy
Luxembourg
Netherlands
Norway
Portugal
Republic of Ireland
Spain
Sweden
Switzerland
United Kingdom

CENTRAL AND EASTERN EUROPE
4% of sales
15,736 employees
Albania
Bulgaria
Czech Republic
Estonia
Hungary
Latvia
Lithuania
Poland
Romania
Russia
Serbia
Slovakia
Slovenia

AFRICA AND MIDDLE EAST
2% of sales
4,567 employees
Algeria
Botswana
Egypt
Ghana
Jordan
Kuwait
Lebanon
Morocco
Oman
Qatar
Saudi Arabia
South Africa
Tanzania
Turkey
United Arab Emirates
Zimbabwe

ASIA AND OCEANIA
8% of sales
19,022 employees
Australia
Bhutan
China
India
Indonesia
Japan
Malaysia
New Zealand
Singapore
South Korea
Thailand
Vietnam
OUR BUSINESSES

SAINT-GOBAIN IS ORGANIZED INTO THREE SECTORS AND HAS STRATEGIC COMPLEMENTARY POSITIONS IN MATERIALS TECHNOLOGY FOR CONSTRUCTION AND INDUSTRY.

NET SALES BY SECTOR

- **25%** INNOVATIVE MATERIALS
- **28%** CONSTRUCTION PRODUCTS
- **47%** BUILDING DISTRIBUTION
CONSTRUCTION PRODUCTS
The Construction Products Sector designs and develops innovative solutions to increase the comfort of buildings: plaster, acoustic and thermal insulation, façade render, roofing, and pipe systems.

- Plaster and plasterboard
- Insulation (all types of insulation products)
- Tile adhesives
- Mortars
- Ductile cast iron pipe
- Façade render
- Siding

INNOVATIVE MATERIALS
Comprising Flat Glass and High-Performance Materials, the Innovative Materials Sector holds a unique portfolio of materials and processes relating to habitat, transport, healthcare and industry markets.

- Flat Glass
  - No.1 IN EUROPE
  - No.2 WORLDWIDE
  - Present in 33 countries
  - Over 33,000 employees

- High-Performance Materials
  - No.1 WORLDWIDE
  - Present in 36 countries
  - Over 27,000 employees
  - Ceramic Materials
  - Abrasives
  - Performance Plastics
  - Saint-Gobain ADFORS

BUILDING DISTRIBUTION
The Building Distribution Sector brings the Group a thorough understanding of customers’ needs, be they building professionals, private project owners or large companies. It serves the new building, renovation and home improvement markets.

- Distribution of building materials
  - No.1 IN EUROPE
  - Present in 24 countries
  - Over 61,000 employees
  - Around 4,100 sales outlets

- Plumbing-heating-sanitaryware market
  - MAJOR PLAYER
A REGIONAL ORGANIZATIONAL STRUCTURE BASED ON DELEGATIONS

14 GENERAL DELEGATIONS REPRESENT THE GROUP IN THE COUNTRIES WHERE IT IS ACTIVE AND COORDINATE THE VARIOUS COMPANIES’ ACTIONS
OUR MARKETS

Construction

84% OF SALES

STRATEGIC MARKETS: RESIDENTIAL AND COMMERCIAL CONSTRUCTION (NEWBUILD AND RENOVATION), INFRASTRUCTURE

Flat Glass

Insulation

Renders and mortars

Acoustic ceilings

Plasterboard and gypsum

Interior and exterior solutions

Technical textiles

Complete pipe systems

KEY DISTRIBUTION AND SERVICE BRANDS

France

Europe

United Kingdom

Scandinavia

Germany and Central Europe

Brazil

SPECIALIST BRANDS

Fire resistant glass

Electrochromic glazing

Window film

Architectural membranes
**Industry** 16% OF SALES

**STRATEGIC MARKETS: MANUFACTURING, TRANSPORT, HEALTHCARE, ENERGY**

- Automotive glazing
  - Sekurit
- Abrasives
  - Norton
- Polymer seals
  - Winter

**SPECIALIST BRANDS**

- Flexible tubing
  - Tygon
- Bearings
  - Norglide
- Adhesive foams
  - Norbond
- Polymer seals
  - Omniscale
- Ceramics for energy
  - Norpro
- Refractories
  - Sepro

**THE GROUP’S MARKETS AS A % OF SALES – 2015 DATA**

- Building renovation 43%
- New residential construction 21%
- New non-residential construction 12%
- Civil engineering and infrastructure 8%
- Industry 16%

Saint-Gobain 2017
COMFORT MEANS...
...WELLBEING WHEREVER YOU ARE.

TOMORROW’S LIVING PLACES WILL INCORPORATE EVERY COMFORT. TO GUARANTEE THEM EVERYWHERE – AT HOME, AT WORK OR IN ALL PLACES OF LEARNING – SAINT-GOBAIN COMBINES ALL ITS EXPERTISE IN A UNIQUE APPROACH DESIGNED TO ENSURE THE WELLBEING OF EACH OF US.
CREATING COMFORT IS WHAT WE DO. AT SAINT-GOBAIN, WE WORK ON A UNIQUE APPROACH TO COMFORT. IT IS A GLOBAL APPROACH TO PROVIDE A NEW WAY OF DESIGNING, BUILDING AND BEING IN LIVING PLACES.

TOMORROW’S “MULTI-COMFORT” HABITAT

More than a concept, “Multi-Comfort” is the tangible expression of our vision for an innovative habitat that meets the most stringent regulations. This vision is reflected in a promise we make to each user: low or positive-energy comfortable living spaces that are easy for everyone to access. It is also a labeled approach that places the user and uses at the heart of the innovation process. Here, comfort is viewed as a whole. Together, the solutions and materials contribute to improving the quality of life and protecting people’s health. This approach is unique on the market and can be duplicated everywhere in the world; it demonstrates Saint-Gobain’s capacity to provide a new type of habitat that is attractive, comfortable, economical and sober. Delivering progress for each of us, the “Multi-Comfort” concept is also a strong differentiator for Saint-Gobain.
DID YOU KNOW?
We spend 90 percent of our time indoors, in buildings and in transportation.
Understanding the impact of comfort on occupants’ wellbeing is the key to inventing even more effective solutions.
THE “MULTI-COMFORT” CONCEPT IS BASED AROUND FIVE TYPES OF COMFORT: THERMAL, ACOUSTIC, VISUAL, AIR QUALITY, AND MODULARITY.

SEE, BREATHE, FEEL AND HEAR

It is essential to feel good in your home. Through their configuration and the materials used, living spaces contribute directly to the sense of wellbeing people feel in their home. Saint-Gobain’s “Multi-Comfort” approach addresses this issue by providing solutions that interact with our senses - an approach that acts simultaneously on five types of comfort. The quality of the building’s insulation determines ideal comfort in all seasons. Occupants’ health comfort, which depends on the quality of indoor air, is maintained through the use of low-emission materials and good ventilation. A home’s noise insulation, crucial for ensuring quality sleep and good health in general, guarantees an excellent level of acoustic comfort. Comfort over the longer term can also be viewed from the angle of modularity, which allows the home to be adapted to each stage in life. The overall harmony is the result of an interior and exterior aesthetic approach and the importance given to natural light. The “Multi-Comfort” concept, which is a living approach, takes into account all these aspects of comfort.

“The Multi-Comfort house is an environmental commitment, a quality of life promise and an architectural model.”

Fabrice Didier
Vice President Marketing of Saint-Gobain
“MULTI-COMFORT” HOUSES

A successful alliance between energy performance and aesthetics, the “Multi-Comfort” houses makes tomorrow’s living spaces available today. With its materials in the forefront of technology, its thermal insulation and its architecture, it produces more energy than it consumes. Innovative solutions like the ground-coupled heat exchanger, a network of buried pipes acting as an earth-to-air heat exchanger, contribute directly to occupants’ thermal comfort and the quality of indoor air. Light, spacious and modular, it provides circulation tailored to all degrees of mobility. Built on the basis of a common reference framework, it can be adapted to the regulations applicable in each country and is applicable for individual or collective housing, and for tertiary sector buildings. Emblematic projects, ambassadors of Saint-Gobain’s “Multi-Comfort” concept, “Multi-Comfort” houses are built around the world. The first was built in 2011 in France. They are now found in several European countries, as well as in the United States, more recently in China and soon in the Middle East.

2011

Construction of the first “Multi-Comfort” house

27

“Multi-Comfort” projects worldwide
Three “Multi-Comfort” houses built by the Optimera and Dahl brands in Norway.
Light significantly conditions people’s quality of life and productivity at work. Crucial for health and mood, a good level of exposure to exterior light improves sleep and learning. For these reasons, the “Multi-Comfort” concept places considerable emphasis on large openings to allow natural light and the sun to enter homes, living and work spaces – without blinding users or affecting the interior temperature. Glass is at the center of this approach because of its ability to allow natural light into living spaces. In particular, Saint-Gobain relies on its dynamic glazing technology developed by SageGlass® and its smart glass that changes tint at the flick of a switch to adjust to the level of sunlight to ensure an optimum level of visual and thermal comfort at all times. For its North American headquarters in Malvern, Pennsylvania, Saint-Gobain used this innovative technology for the building’s façades to bathe working spaces in natural light while adjusting light levels and filtering out the sun’s heat.

“Innovative products like SageGlass® are helping to create beautiful spaces that also improve the overall health and wellbeing of buildings’ occupants. From our offices, we enjoy the wonderful view of the Dubai skyline, even when the sun is shining directly on our windows.”

Joe Barchini,
Director of Operations, Swiss International Scientific School Dubai
In living spaces, noise pollution comes from many sources: traffic, people walking and talking, appliances, etc. To limit interior and exterior noise pollution, Saint-Gobain develops and distributes high-performance insulation and acoustic correction solutions. It provides a wide range of noise insulating double-glazing, noise absorbing mineral wool and plasterboard, turnkey modular products like modular ceilings and acoustic partitions, and solutions specifically for renovation-decoration operations such as paintable wall coverings. The sound environment is particularly important in places of learning, such as schools, where it is crucial to control background noise, provide a differentiated response to the diversity of needs and use healthy products. For these spaces, Saint-Gobain Ecophon, a specialist in ceiling systems and wall panels, has, for example, developed a customized acoustic design approach. It involves organizing the acoustics of interior spaces to suit the specifics of the activity (cafeteria, classroom, gym, corridors, etc.), people (age, number and any disabilities) and of the space itself (volume, configuration, equipment, materials, etc.) - to make learning easier, and less stressful and tiring for teachers and students alike.
COMFORT MEANS...
...CONSUMING LESS ENERGY.

THE MULTI-COMFORT HOUSE IS A TANGIBLE APPLICATION OF SAINT-GOBAIN’S SUSTAINABLE HABITAT STRATEGY. THE GROUP HAS GIVEN THIS STRATEGY CONCRETE FORM BY DEVELOPING INSULATING MATERIALS AND INNOVATIVE SERVICES TO IMPROVE THE ENERGY PERFORMANCE OF BUILDINGS AND TRANSPORTATION VEHICLES.
SAINT-GOBAIN’S SUSTAINABLE HABITAT STRATEGY INVOLVES PROMOTING SUSTAINABLE CONSTRUCTION FOR ALL AND SUPPLYING TECHNICAL SOLUTIONS AND INNOVATIVE SERVICES FOR ITS IMPLEMENTATION. THIS STRATEGY STIMULATES RESEARCH PROJECTS LEADING TO AN INCREASINGLY DIFFERENTIATED OFFERING.

SUSTAINABLE HABITAT

Given the urgent need to change how we consume and produce in order to slow global warming, the construction industry is a prime concern because of its impact on the climate. The ever-growing body of regulations and the ramp-up of environmental certifications are proof of its role. Saint-Gobain has a responsibility to draw the entire profession in its wake, by acting in an exemplary manner and by promoting sustainable practices and materials to all construction industry stakeholders in order to speed up the energy transition. This dynamic is also, and above all, a fantastic opportunity to drive Saint-Gobain’s growth given the wealth of its portfolio of innovative and sustainable solutions, the quality of its R&D and the relevance of its advice and services. Since September 2016, Saint-Gobain has been included in the 2016 Dow Jones Sustainability Index. The Group is one of the top three global companies and the industry leader in Europe for construction products.

“Saint-Gobain’s strategic positioning on the habitat market demands exemplary responses to environmental and sustainable development issues.”

Pierre-André de Chalendar,
Chairman and Chief Executive Officer of Saint-Gobain
DID YOU KNOW?
The Bosco Verticale in Milan (Italy), the most beautiful skyscraper in the world in 2015, uses Saint-Gobain insulation solutions.
That is the period of use needed for our insulation solutions to offset the emissions associated with their production.
WHETHER FOR NEW CONSTRUCTION OR RENOVATION PROJECTS, THERMAL INSULATION IS FUNDAMENTAL. IT WILL DETERMINE THE OCCUPANTS’ COMFORT, THEIR BUDGET BALANCE, THE CONSERVATION OF RESOURCES AND THE PROTECTION OF THE ENVIRONMENT.

EVER BETTER INSULATION

Consuming available energy differently to reduce expenses and protect the environment is a prime concern for consumers and public authorities. The energy efficiency of buildings plays a major role in improving comfort, reducing needless expenses and fuel poverty, and limiting the emissions responsible for climate change. This particularly applies to the existing building stock. In the vanguard of this fight, Saint-Gobain provides professionals and consumers with access to high-performance materials and products that insulate against cold and heat. For example, the Group’s innovation focus is on the effectiveness of mineral wools and insulating glazing. As a result, one out of every three homes in Europe is now insulated with a Saint-Gobain product. In Milan (Italy), glass wool panels manufactured by Saint-Gobain ISOVER have been used on the ventilated façades of the prestigious Bosco Verticale building. Saint-Gobain constantly improves its insulating glazing. The most recent innovations include ECLAZ glass. When combined in double or triple-glazing, it provides windows with the highest degree of energy efficiency available on the market, combining thermal insulation, maximum solar gain and optimum natural light transmission.

The energy savings generated by the Group’s insulation solutions are 90 times greater than its greenhouse gas emissions.
TO HELP BUILDING PROFESSIONALS AND HOMEOWNERS WITH THEIR PROJECTS, SAINT-GOBAIN PROVIDES A WIDE RANGE OF TOOLS AND SERVICES TO RAISE AWARENESS ABOUT ENERGY EFFICIENCY AND TO BRING THE INDUSTRY’S STAKEHOLDERS INTO CONTACT WITH EACH OTHER.

IMPROVING THE ENERGY EFFICIENCY OF BUILDINGS

To simplify homeowners’ construction, renovation or decoration projects, Saint-Gobain’s distribution brands provide online and offline (sales outlets) services creating a virtuous ecosystem. In their outlets, the brands educate customers about thermal regulations and provide simulation tools, such as POINT.P Matériaux de construction and its Energy Efficiency Counters. In the United Kingdom, the Greenworks Training Academy runs a series of training modules to provide the skills needed to install high-performance energy-saving products.

120 outlets with Energy Efficiency Counters.
(Source: Saint-Gobain website)

DID YOU KNOW?

The rise in electricity production from renewable sources has raised the issue of its storage. By developing ceramic cores for fuel cells and storage materials, Saint-Gobain is gaining a foothold on this new market.
WHERE TRANSPORTATION IS CONCERNED, IT IS BETTER TO TRAVEL LIGHT. SAINT-GOBAIN DEVELOPS TECHNOLOGICAL MATERIALS THAT MAKE ALL THE DIFFERENCE FOR THE MAJOR AUTOMAKERS.

LIGHTER WEIGHT MATERIALS FOR TRANSPORTATION BENEFIT THE ENVIRONMENT

Reducing the energy consumed by the transportation industry requires lowering vehicle weight, among other factors. Saint-Gobain is well-placed on this market, largely with its glazing solutions. For the world’s automakers, Saint-Gobain continues to develop lighter weight glazing that incorporates a growing number of optical properties and safety functions. Saint-Gobain Sekurit and Corning Incorporated, the creator of the innovative Gorilla® Glass technology, recently announced they would work closer together to develop lightweight laminated glazing to help reduce fuel consumption. Saint-Gobain is also sharing its expertise with French carmaker Renault to reduce the weight of vehicle glazing by 30 to 50 percent, while guaranteeing the same acoustic and mechanical properties. Together, they have developed a laminated windshield that is just 3 mm thick. These advanced solutions provide automakers and their original equipment manufacturers with the means to develop the vehicle of the future.

110 million vehicles
produced worldwide by 2020 compared with 87 million in 2014
(Source: Global Automotive Survey, KPMG, 2015)
Comfort means living in smart cities...
...LIVING IN SMART CITIES.

INNOVATION - OPEN AND NETWORKED - IS REVOLUTIONIZING USES. WE HAVE WELL AND TRULY ENTERED THE ERA OF THE CONNECTED CITY AND HOME.
CONNECTED DEVICES ARE IN OUR HOMES, OFFICES AND CITIES HELPING IMPROVE ALL FORMS OF COMFORT AND HELPING REDUCE ENERGY CONSUMPTION. SAINT-GOBAIN IS CONTRIBUTING WHOLLY TO THIS DIGITAL REVOLUTION.

CONNECTED DEVICES AND SMART MATERIALS

Connected objects can now be found in our cars, homes and infrastructure and are revolutionizing our habits. Today, the Group is including sensors in its materials: in ceilings to detect smoke or to measure the ambient temperature; in floors to register a person falling; and even in plaster and partitions to report breaking and entry. Another example is the development by SageGlass® of a mobile app to allow users to control the tint of their windows and maximize their home’s energy performance. Our smartphones are becoming a multifunction remote control, notably for home appliances. We can set up a variety of configurations and include interaction — a particularly interesting function for limiting the home’s energy consumption. With connected devices, it is now possible to collect data and analyze it. For this purpose, Saint-Gobain has developed its “Comfort-meter,” a small object designed to create a direct link between tangible components, i.e. materials, and personal perceptions of comfort. Thousands of Group employees record temperature, noise, light and air quality data. The Comfort-meter utilizes the power of big data to establish standards while taking into account the cultural specifics and habits of each person. In addition to this tool, experts in physiology, psychology and sociology have joined Saint-Gobain’s teams to better understand the notion of comfort. The aim here is to diagnose an existing building’s level of comfort or to check the quality of a technical improvement following a renovation.
Smart materials are also being used to reinvent mobility. Saint-Gobain Performance Plastics supplies quartz fiber radomes for aircraft. These composite-material cupolas protect meteorological radar and satellite communication system antennas. Passengers can now surf the Internet and watch live TV during their flight.

In the automotive market, Saint-Gobain Sekurit is already supplying head-up display windshields for vehicles that display driving data without drivers having to take their eyes off the road. The new digital “Touch Control” windshield incorporates numerous functions, such as demisting, that can be activated by simply touching the windshield. Tomorrow’s mobility is already here today.

220 billion
connected devices worldwide in 2020
(Source: IDC)

“Our materials can be found in all buildings, or almost. The challenge now is to make them smart.”

Claude Imauven,
Chief Operating Officer of Saint-Gobain,
in charge of the digital transformation

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THE DAYS OF INNOVATION EXCLUSIVELY DEVELOPED BEHIND CLOSED DOORS ARE LONG GONE. SAINT-GOBAIN IS INCREASING THE NUMBER OF PARTNERSHIPS WITH THE ACADEMIC WORLD AND YOUNG ENTREPRENEURS. WELCOME TO THE ERA OF OPEN INNOVATION.

WORKING WITH START-UPS

Open – or shared – innovation is a crucial approach to increasing the capacity for innovation, to speeding up time-to-market and improving the customer experience. It stimulates research, generates user-focused innovation and promotes the Group’s businesses to a new generation of entrepreneurs. At Saint-Gobain, the NOVA unit has been detecting and supporting young start-ups in the Group’s priority areas of interest since 2006. Its aim is to form win-win partnerships and encourage the market release of increasingly innovative solutions. This approach is also evident through partnerships formed with start-up incubators. Such is the case, for example, in the United States with Greentown Labs, North America’s largest start-up incubator specializing in green technology. SageGlass® and CertainTeed recently contributed to the extension of its innovation center in Massachusetts, a space designed for collaborative R&D projects.

In France, Saint-Gobain is also a partner in the Impulse Labs incubator, which focuses on the construction and energy industries. The Group holds Business Challenges that bring together groups of students and start-ups to compete against each other. In 2016, in France, Saint-Gobain ran a challenge in partnership with the social network Pinterest to transform the home renovation experience using digital technology: 38 start-ups and 146 student groups competed. The jury gave its top awards to the participative e-showroom developed by the DatchMe start-up, and the 360° visualization interface developed by a group of students from the Institut de l’Internet et du Multimédia de Paris La Défense, which allows the user to track a worksite’s progress remotely.
DID YOU KNOW?
With its “Saint-Gobain Intrapreneurs” charter, the Group encourages its employees to engage in their own entrepreneurial adventure.
Comfort means being well supported...
BEING WELL SUPPORTED.

INDUSTRY 4.0, E-COMMERCE, SOCIAL NETWORKS...
DIGITALIZATION IS TRANSFORMING CONSUMERS’ HABITS AND HOW WE LIVE. SAINT-GOBAIN Responds to the expectations these changes are creating by paying particular attention to the smooth customer journey.
Train, configure, simulate, cost, order... the brands are increasing the range of services provided in outlets and online to simplify their customers’ everyday and boost their satisfaction levels.

A Multi-Channel Approach to Support All Customers

Saint-Gobain is developing apps and services to assist decision-making, simplify the purchasing process and ensure customer loyalty. For example, Saint-Gobain Sekurit introduced its Sekurit Experience mobile app that places users virtually in a vehicle so that they can experience a range of automotive glazing. In the United States, Saint-Gobain ADFORS developed Scene Weaver, its first augmented reality app to display its range of insect screens. The Group innovates for its professional construction industry clients. In France, POINT.P Matériaux de Construction invented Avantages Pro, a suite of about 10 e-services to boost trade professionals’ performance. For example, it includes Solu+, a worksite configurator to examine and compare different costed solutions; and CAP RENOV+, an energy performance and fiscal aid simulator. In several European countries, the MyGlassolutions platform is used by trade professionals to configure, calculate and order customized glass solutions and obtain an immediate costing and delivery date. In Brazil the Brasilit and Telhanorte brands are focusing on virtual reality for their customer support. While in Denmark, the Brøndre Dahl brand is testing the iBeacons technology. This geolocation beacon transmits targeted data (videos, technical advice, etc.) about products using a smartphone app when the customer passes near products.
BIM

BIM (Building Information Modeling) models building data at all stages in its life cycle to provide a huge array of services. BIM initiatives are being developed at a rapid pace and Saint-Gobain has seized this opportunity to create libraries of virtual objects so that architects and designers can download the Group’s products. The result for these professionals is greatly expanded possibilities, and improved efficiency and profit. While for Saint-Gobain, it promotes the Group’s solutions and is a source of interaction with purchasing advisors right from a project’s design phase.

In 2016, Saint-Gobain reported increases for all its industrial and distribution businesses combined:

17% more traffic on its main websites, that is almost

114 million connections a year.
MANAGING A RENOVATION PROJECT CAN BE FRAUGHT WITH DIFFICULTIES. TO MAKE THE EXERCISE EASIER, SAINT-GOBAIN IS WORKING MORE CLOSELY WITH HOMEOWNERS TO DELIVER CUSTOMIZED SERVICES.

HELP HOMEOWNERS RENOVATE THEIR HOME

Showrooms, online tutorials, in-store advice and, the latest innovation and intermediation platforms: Saint-Gobain is stepping up its direct relations with homeowners to simplify their renovation, decoration or construction project. The innovation here lies in putting homeowners and professionals into contact with each other. The Group recently introduced Homly You in France. This platform helps homeowners carry out the work from the initial idea through the project’s implementation, without forgetting visualization of the solutions and budgeting, and putting them into contact with the best qualified and reliable professionals. In the United States, Saint-Gobain has formed a partnership with Sweeten, a start-up that provides a free online service to help homeowners find contractors. The solution developed by the young French company Mon Mètre Carré, in which Saint-Gobain is a shareholder, provides homeowners with access to architects and interior decorators using the principle of a paid online competition. All these examples are designed to ensure peace-of-mind and personalized service within a specific budget.

CO-DEVELOPMENTS WITH CUSTOMERS

On industrial markets, especially the Group’s niche markets, many products and solutions are co-developed with customers. For single-use plastic systems for medical applications, the design was developed and introduced collaboratively, from the client service to 3D printing prototypes, in order to deliver fully customized solutions.
The 4 steps in the customer journey:
Consider
Evaluate
Buy/Specify
Experience and bond
Comfort means better protected health.
...better protected health.

Saint-Gobain innovates and co-develops solutions for customized materials to improve patients’ quality of life and health, optimize medical equipment and accompany progress in medical research.
IMPROVING AIR QUALITY

Air quality is an absolute necessity to ensure our health wherever we are. Saint-Gobain contributes in this area by designing materials for walls and ceilings with absorbent or antibacterial properties. For example, the glass fiber paintable wall coverings produced by ADFORS Novelio®. In particular, the range includes two wall coverings called Novelio® Mold-X, which contains an antibacterial agent and neutralizes the propagation of molds and bacteria on surfaces, a source of irritation, allergies and infectious diseases; and Novelio® Clean Air, which can absorb 70 percent of volatile organic compounds in the air. These VOCs are also neutralized by the ceiling tiles developed by Gypsum Activity, which incorporate the Activ'Air® air purifying technology.

SUPPORTING THE DEVELOPMENT OF BIOPHARMACEUTICALS

Saint-Gobain co-develops customized, single-use, high-performance plastics solutions (tubes, connectors, pouches, filters, etc.). They are used, for example, for fluid management in a medical context for intravenous or ophthalmological therapy or for non-invasive surgical procedures. Because of their unique and biocompatible barrier properties, these polymers comply with the demands of new biopharmaceutical companies. This promising sector prefers single-use systems – a segment in which Saint-Gobain has positioned itself – rather than stainless steel. The solutions developed by Saint-Gobain Performance Plastics are helping make the production of new therapies, such as cell therapy, economically and technically viable for treating serious illnesses or for those without any feasible treatment today.
DID YOU KNOW?
In 10 years, more than one million vaccines to treat 30 different strains of influenza were made available thanks to Saint-Gobain solutions.
FACILITATING DIAGNOSES AND PROTECTING PEOPLE

In the area of medical imaging, Saint-Gobain designs crystals and scintillators that improve the detection of certain diseases. Through its subsidiary Sovis, the Group also manufactures a glass screen that protects against ionizing x-ray radiation, called SUPERCONTRYX®, used in radiology rooms.

DID YOU KNOW?

−30%

Patient stay time can be shortened by 30 percent by reducing sound levels in hospitals (by improving wall, ceiling and glazing acoustics).
Comfort means access to affordable housing adapted to all occupants, worldwide.
...access to affordable housing, adapted to all occupants, worldwide.

Active worldwide with its materials and solutions, Saint-Gobain innovates in response to the major demographic issues facing us in the coming decades.
In emerging countries, demographic change is seeing massive rural exodus.

In Africa and Asia, the rising standard of living of the middle classes is creating a new demand for comfort, property ownership and household equipment, while at the same time urbanization is making sanitary, social and environmental issues more complex. Taken together, these underlying trends are putting strain on the construction and housing segments. They require solutions and a vast quantity of materials that are accessible to all. To protect natural resources and slow climate change, it is essential that sustainability be the watchword guiding all this change. Committed to sustainability, Saint-Gobain leverages its many strengths: materials expertise, culture of innovation, commitment to the environment, and intimate knowledge of customers’ needs, wherever they are, thanks to its worldwide presence.

THE CHALLENGE OF POPULATION GROWTH AND URBANIZATION

In Africa and Asia, the rising standard of living of the middle classes is creating a new demand for comfort, property ownership and household equipment, while at the same time urbanization is making sanitary, social and environmental issues more complex. Taken together, these underlying trends are putting strain on the construction and housing segments. They require solutions and a vast quantity of materials that are accessible to all. To protect natural resources and slow climate change, it is essential that sustainability be the watchword guiding all this change. Committed to sustainability, Saint-Gobain leverages its many strengths: materials expertise, culture of innovation, commitment to the environment, and intimate knowledge of customers’ needs, wherever they are, thanks to its worldwide presence.

9.7 billion
people in the world by 2050

“Saint-Gobain is leveraging constraints associated with urbanization, population growth and scarcer resources as growth opportunities, while acting as an exemplary leader.”

Pierre-André de Chalendar,
Chairman and Chief Executive Officer of Saint-Gobain
Saint-Gobain’s actions to promote sustainable construction, benefiting the greatest number of people possible, are also reflected in its CSR policy. In partnership with the NGO YouthBuild, the Group has contributed to the creation of a green building techniques training center in South Africa, and presented the first 50 students with a drywall installer national certificate. The Saint-Gobain Initiatives Foundation contributes to social integration through housing. Worldwide, the Foundation provides Group employees with the opportunity to sponsor projects led by non-profits in two areas: integration of young adults through employment, and the construction or renovation of social housing, thereby helping to reduce energy consumption and to protect the environment. In Turkey, the Turkish Foundation for Children in Need of Protection is, for example, building a village to house and support about 100 homeless children in Izmir with the Saint-Gobain Foundation’s support.

60%
of the world’s population will live in cities by 2030

“The Saint-Gobain Initiatives Foundation made it possible for us to participate in a solidarity project and in so doing allowed us to fulfill our desire to devote some of our time to improving the daily lives of society’s most underprivileged.”

Céline Massot and Christophe Bercher, sponsors of a social integration housing renovation project in Versailles (France)
DID YOU KNOW?

More than 140 projects have been supported by the Saint-Gobain Initiatives Foundation since 2008.
IN A CONTEXT OF AN AGING POPULATION IN DEVELOPED COUNTRIES, HOUSING COMFORT NEEDS TO ADAPT TO ALL LIFE’S AGES.

SOLUTIONS ADAPTED TO EVERYONE’S NEEDS

Saint-Gobain is developing specific solutions to ensure the elderly continue to live in optimum conditions of comfort and safety. With its “Multi-Confort Sérénité” offer, the Group has invented a habitat concept tailored to occupants’ aging and potential pathologies. Equipment is installed to anticipate and adapt to occupants’ future needs. Everything is designed to optimize sight and hearing, simplify moving around, etc. Saint-Gobain has developed the Vita Confort brand to facilitate access for all without compromising on comfort or design. It distributes innovative accessories – such as the Concept’Care modular bathroom cabinet – so that people can remain living at home completely autonomously. Access to comfort at home for the entire family, seniors, the disabled and their carers is a priority for the Group.

2.1 billion people aged over 60 worldwide by 2050, compared with 901 million in 2015

(Source: United Nations)
Comfort means knowing you are safe...
KNOWING YOU ARE SAFE.

IMPROVING THE COMFORT OF OUR EVERYDAY LIVES ALSO INVOLVES MAKING OUR LIVING PLACES AND TRANSPORTATION SAFER. BECAUSE SAFETY SHOULD NOT BE A LUXURY, SAINT-GOBAIN DEVELOPS SOLUTIONS ACCESSIBLE TO THE GREATEST NUMBER. THE AIM IS TO MAKE MATERIALS MORE RESISTANT TO EXTERNAL AGGRESSION AND THE RISK OF FIRE.
SAFETY AT WORK, AT HOME OR IN TRANSPORTATION IS A STRONG DEMAND. FOR TERTIARY BUILDINGS, SAINT-GOBAIN PROVIDES A WIDE RANGE OF HIGH-PERFORMANCE GLAZING THAT GUARANTEES THE PROTECTION AND SAFETY OF PROPERTY AND PEOPLE IN THE EVENT OF FIRE OR BREAKING AND ENTRY.

MATERIALS FOR SAFER LIVING SPACES

Vetrotech has developed the world’s largest sheet of glass for this purpose: CONTRAFLAM® Mega. This tempered glass is designed to withstand very high temperatures and violent impacts, while remaining attractive. It is, for example, used in the futuristic building of the Le Rosey boarding school in Switzerland. Nearly 400 sq. m. of this protection material has been used for the partitions, doors, meeting rooms and stair well. The vast Forbury Place Estate, near London (United Kingdom), also includes this high-performance technology. For homes and cars, Saint-Gobain provides safety films with the Armorcoat® range of its Solar Gard brand. Colorless and undetectable on windows, they make homes safer. Able to retain shattered glass, they also act as a UV filter and protect against heat. For transportation, tempered and laminated glass provide vehicle occupants with complete safety. Saint-Gobain has also developed specific glass for household appliances, such as its EKO VISION II dual-coated glass for oven doors to reduce the risk of burns.

DID YOU KNOW?

Many of the world’s airports’ security gates and baggage scanners are equipped with Saint-Gobain scintillators.
The time CONTRAFLAM® glass resists fire.
CERTIFIED TOP EMPLOYER GLOBAL IN 2017 FOR THE SECOND YEAR IN A ROW, SAINT-GOBAIN ALSO BASES ITS OPERATIONAL EXCELLENCE ON STRONG VALUES. THE GROUP’S “OPEN” PROGRAM AND “ATTITUDES” CONTRIBUTE TO THE TEAMS’ FULFILLMENT AND UNDERSCORE ITS STRATEGY.

1 KEY FIGURES
In 2016, 15% of managers changed position or country (geographic or functional mobility).
Saint-Gobain is one of the 10 organizations certified Top Employer Global 2017 in the world.

100+ nationalities represented
25+ annual training hours per employee
27,635 new hires in 2016

2 PRINCIPLES OF CONDUCT AND ACTION
Saint-Gobain bases its growth on five Principles of Conduct and four Principles of Action. Formalized in 2003, translated into 33 languages and circulated among all employees, the Principles of Conduct and Action are a reference for each person. Their application is a condition of belonging to the Group.

“The Principles inform the policies implemented by the Group’s entities and form the basis of our Corporate Social Responsibility.”
Claire Pedini,
Senior Vice President in charge of Human Resources

5 Principles of Conduct
- Professional commitment
- Respect for others
- Integrity
- Loyalty
- Solidarity
are the fundamental values uniting management and employees.

4 Principles of Action
- Respect for the law
- Caring for the environment
- Worker health and safety
- Employee rights
guide the actions of all management and employees in the performance of their duties.
Backed by its history and employer-employee dialog, Saint-Gobain’s human resources policy focuses on providing each person a working environment that allows professional and personal fulfillment and that reconciles work performance and team wellbeing. The Group introduced its OPEN (Our People in an Empowering Network) program to boost employee commitment and satisfaction. Saint-Gobain employees form a community of united entrepreneurs based on the Principles of Conduct and Action, the protection of everyone’s health and safety, exemplary management and employer-employee dialog.

**THE ATTITUDES**

Because we have to adapt the way we work to the changing world, Saint-Gobain has defined five Attitudes that reflect a new style of management and state of mind uniting all Group employees.
THE COMMITMENTS
OF AN EXEMPLARY LEADER

TAKING THE ENVIRONMENT AND CLIMATE INTO ACCOUNT IN OUR CHOICES AND USES.

Saint-Gobain innovates to provide eco-designed solutions for the construction, transportation and health industries. They minimize impacts and maximize benefits for customers and the environment. For its own businesses, the Group undertakes to improve how it uses natural resources, to reduce waste and the resource intensity of its solutions. It also makes a concerted commitment to a circular economy approach.

THE CHALLENGE OF PROTECTING RESOURCES AND THE ENVIRONMENT

Demographic pressure, urbanization, increasingly scarce resources, etc.: these major challenges are also opportunities for change. Saint-Gobain undertakes to minimize the environmental footprint of its businesses and products while improving benefits for its customers.

Habitat is in the forefront of the fight against climate change and the conservation of resources. Moreover, it is a significant source of waste and CO₂ emissions from the production and transportation of materials, construction and use in homes. Additionally, improvement of living standards and urbanization mechanically boost housing needs. Saint-Gobain takes steps to reduce the effects of its own materials by implementing circular economy mechanisms and tools to reduce the resource intensity of its solutions. In particular, the Group has set itself an internal carbon price to accelerate its transition to low-carbon technologies. It aims to reduce its CO₂ emissions by 20 percent between 2010 and 2025 on an unchanged scope.

The construction industry accounts for:

- **31%** of energy consumption*
- **29%** of greenhouse gas emissions*
- **12%** of drinking water consumption**
- **40%** of solid waste**

* (Source: Global Status Report, Global Alliance for Building and Construction)
** (Source: Saint-Gobain website)
ECO-INNOVATION AND LIFE-CYCLE ANALYSIS

Inventing the necessarily sustainable solutions for tomorrow’s society requires that each product’s environmental performance be taken into account in the earliest stages of its design: from extraction of raw materials to end-of-life and including production and use.

Measuring a product’s environmental impact only makes sense if all stages in its life cycle are taken into account. From cradle to grave: that is from the quarry from where the material is extracted through to the waste center where it is then recovered as a secondary raw material. Saint-Gobain is committed to a progress approach. The Group uses life-cycle analysis (LCA) to assess all of a product’s environmental impact and to quantify its eco-benefits. Saint-Gobain uses an eco-innovation approach to implement its strategy, and develop and distribute solutions that have a lesser environmental and social impact: lighter ductile iron pipes, lead-free mirrors, heat-reflective windshields, and phthalate and bisphenol A-free bio-sourced flexible tubes are just a few examples of recent product developments that foreshadow market trends and include environmental protection criteria. Supporting this approach, employees – especially R&D and marketing teams – are trained in the processes for new product creation.

RECYCLING AND RESOURCE MANAGEMENT

Natural resources are limited and waste provides a mine of secondary materials. Saint-Gobain is therefore stepping up initiatives throughout the value chain to limit the volume of raw materials it consumes and to reduce and recover its waste.

Because waste management is a major issue for Saint-Gobain’s businesses, the Group strives to reduce its production waste and maximize recycled content in its products while also improving their performance. In particular, Saint-Gobain acts on the source by eco-designing products that have a lesser ecological impact, such as the WOOL range of refractories manufactured by Saint-Gobain SEFPRO for glass wool furnaces. It includes a recycling process that can treat and recover 100 percent of chrome waste.

Ultimately, its focus is on optimizing extraction and production processes.

In Thailand, the Group has been recognized for its exemplary circular economy approach. Gypsum Activity gives its production waste a second life by recovering it as floor tiles used locally. Saint-Gobain also supports the users of its products to help them manage their waste better. For example, in the United Kingdom, British Gypsum has created a 3D virtual tool that quantifies a construction project’s plasterboard waste. Water, a vital resource, also receives Saint-Gobain’s full attention. At its Pont-à-Mousson (France) plant, the Pipe Activity has developed an industrial water treatment system enabling process water’s reuse. As a result, 8,000 metric tons of pipe cement lining slurry is recovered each year, and the volume of water discharged has been reduced by two-thirds, that is the equivalent annual water consumption of a city of 150,000 people.

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Targets:

- **-50% reduction in non-recoverable waste between 2010 and 2025**
- **zero waste non-recovered in the longer term**

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EXECUTIVE COMMITTEE:

01 Pierre-André de CHALENDAR,
Chairman and Chief Executive Officer

02 Claude IMAUVEN,
Chief Operating Officer

03 Claire PEDINI,
Senior Vice President, in charge of Human Resources

04 Guillaume TEXIER,
Chief Financial Officer

05 Antoine VIGNIAL,
Corporate Secretary in charge of Corporate Social Responsibility

06 Armand AJDARI,
Vice President, Research & Development and Innovation

07 Benoit BAZIN,
Senior Vice President, in charge of the Construction Products Sector

08 Julie BONAMY,
Vice President, Corporate Planning and Strategy

09 Fabrice DIDIER,
Vice President, Marketing

10 Patrick DUPIN,
Senior Vice President, in charge of the Flat Glass Sector (Innovative Materials*)
Laurent GILLLOT,
Senior Vice President, in charge of the High-Performance Materials Sector (Innovative Materials*)
Benoit D’IRIBARNE,
General Delegate for Germany, Austria and Benelux
Thomas KINISKY,
Senior Vice President, General Delegate for North America
Kåre MALO,
Senior Vice President, in charge of the Building Distribution Sector
Jean-François PHELINSON,
Senior Vice President, in charge of Internal Audit and Internal Control

* Pierre-André de Chalendar supervises the Innovative Materials Sector.
GOVERNANCE

BOARD OF DIRECTORS (at January 1, 2017)

- Pierre-André de CHALENDAR, Chairman and Chief Executive Officer of Compagnie de Saint-Gobain
- Alain DESTRAIN, Safety Auditor, Saint-Gobain Interservices, Employee Director
- Jean-Martin FOLZ, Director of companies
- Bernard GAUTIER, Member of the Management Board of Wendel
- Iêda GOMES YELL, Founding Chairman of Energix Strategic Ltd
- Anne-Marie IDRAC, Chairman of the Toulouse-Blagnac Airport Supervisory Board
- Pamela KNAPP, Director of companies
- Pascal LAÏ, Environment, Health and Safety promoter, Saint-Gobain Sekurit France, Employee Director
- Agnès LEMARCHAND, Director of companies
- Frédéric LEMOINE, Chairman of the Management Board of Wendel
- Jacques PESTRE, Senior Vice President of Saint-Gobain Distribution Bâtiment France, in charge of POINT.P Matériaux de Construction, and Director representing employee shareholders
- Olivia QIU, Chief Innovation Officer of Philips Lighting, Executive Vice President of Philips
- Denis RANQUE, Chairman of the Board of Directors of Airbus Group
- Gilles SCHNEPP, Chairman and Chief Executive Officer of Legrand
- Jean-Dominique SENARD, Chief Executive Officer of Michelin
- Philippe VARIN, Chairman of the Board of Directors of Areva

BOARD SECRETARY:
- Antoine VIGNIAL, Corporate Secretary of Compagnie de Saint-Gobain

GENERAL DELEGATES

- David ANDERSON, General Delegate for Sub-Saharan Africa
- Dominique AZAM, General Delegate for Mexico, Central America, Venezuela, Colombia, Ecuador and Peru
- Mike CHALDECOTT, General Delegate for the United Kingdom and Ireland
- Erwan DUPUY, General Delegate for Russia, Ukraine and the Commonwealth of Independent States
- Javier GIMENO, General Delegate for the Asia-Pacific Region
- Thierry FOURNIER, General Delegate for Brazil, Argentina and Chile
- Benoît d’IRIBARNE, General Delegate for Germany, Austria and Benelux
- Thomas KINISKY, General Delegate for North America
- Thierry LAMBERT, General Delegate for the Nordic Countries and Baltic States
- Anand MAHAJAN, General Delegate for India, Sri Lanka and Bangladesh
- François-Xavier MOSER, General Delegate for Poland, Bulgaria, Romania and Turkey
- Hady NASSIF, General Delegate for the Middle East
- Tomáš ROSAK, General Delegate for the Czech Republic, Slovakia, Hungary and the Eastern Adriatic countries
- Gianni SCOTTI, General Delegate for the Mediterranean (Spain, Italy, Portugal, Greece, Morocco, Algeria, Tunisia and Libya)