

# SAINT-GOBAIN

#### SUSTAINABLE DEVELOPMENT REPORT 2010



BUILDING OUR ENVIRONMENT TOGETHER





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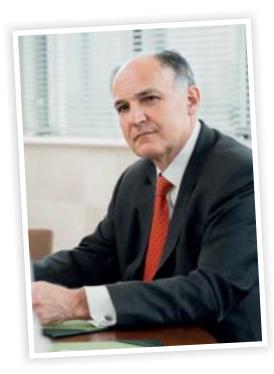
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#### **KEY INDICATORS**

2010 indicators that have been verified by the Statutory Auditors are followed by a  $\checkmark$  in the text and tables (see page 86).

This English-language version of the sustainable development report is a free translation of the original French text. It is not a binding document. In the event of a conflict of interpretation, reference should be made to the French version which is the authentic text. The auditor's report applies to the French version of the sustainable development report.



In 2010, Saint-Gobain demonstrated the validity of its strategic positioning, with a focus on habitat and construction markets.

Saint-Gobain aims to become the benchmark in the sustainable habitat market. For us, sustainable development represents both a fantastic opportunity for growth and a daily responsibility.

Our challenge is to save energy and protect the environment by helping to build healthy buildings that are comfortable to live in. This is a considerable opportunity that comes with an obligation to be above reproach in the way we conduct our business.

To fulfill this obligation, we can count on a solid set of values forged over more than three centuries of operation.

Our 190,000 employees worldwide are working hard to achieve our goals, fully aware of their mission and responsibilities and committed to keeping the lines of communication open with all stakeholders in all our host regions.

This year, we are publishing our first sustainable development report prepared in accordance with Global Reporting Initiative<sup>™</sup> guidelines and indicators. The report highlights sustainable development's importance for Saint-Gobain as an integral part of our strategy, brand identity and values.

In this report, we review the progress made so far and look ahead at the work that remains to be done, underscoring our commitment towards the future.

This emphasis on transparency is crucial for both our external and internal stakeholders, to guarantee that our teams remain vigilant and involved.

Allali

Pierre-André de Chalendar Chairman and Chief Executive Officer



#### Statement GRI Application Level Check

GRI hereby states that Saint-Gobain has presented its report "Sustainable Development Report 2010" to GRI's Report Services which have concluded that the report fulfills the requirements of Application Level B+.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

29 April 2011, Amsterdam

Nelmara Arbex Deputy Chief Executive Global Reporting Initiative



The "+" has been added to this Application Level because Saint-Gobain has submitted (part of) this report for external assurance. GRI accepts the reporter's own judgment for choosing its assurance Provider and for deciding the scope of the assurance.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 15 April 2011. GRI explicitly excludes the statement being applied to any later changes to such material.



# INNOVATIVE MATERIALS



#### **FLAT GLASS**

- No. 1 IN EUROPE
- No. 2 WORLDWIDE
- Operations in **40** countries
- Over **33,500** employees

The Flat Glass Division manufactures, processes and sells glass products for three main markets: the building, transportation and solar industries.

#### HIGH-PERFORMANCE MATERIALS

- No. 1 WORLDWIDE
- Operations in **41** countries
- Over **27,600** employees

The High-Performance Materials Division deploys an innovative technology portfolio comprising three main types of materials: mineral ceramics, polymers and glass fabrics.



# CONSTRUCTION PRODUCTS



#### • No. 1 WORLDWIDE ductile cast iron pipe

- No. 1 WORLDWIDE
   in plasterboard and plaster
- No. 1 WORLDWIDE in insulation
- No. 1 IN EUROPE for wall facings
- No. 1 WORLDWIDE for tile adhesives
- No. 1 IN THE UNITED STATES
   for sidings
- Manufacturing operations
   in 55 countries
- Nearly 46,000 employees

The Construction Products Sector offers interior and exterior solutions for all types of buildings, including acoustic and thermal insulation, wall facings, roofing and piping.



AINT-GOBAIN

# BUILDING



- No. 1 IN EUROPE
  - in building materials distribution
- No. 1 IN EUROPE in plumbing, heating and sanitaryware products
- No. 1 WORLDWIDE in tile distribution
- Operations in 26 countries
- 66,000 employees

The Building Distribution Sector serves the newbuild, renovation and sustainable building markets.



# PACKAGINC VERALLIA



• No. 2 WORLDWIDE bottles and jars

- Operations in **13** countries
- Nearly 15,000 employees

Verallia manufactures glass containers for the food industry.



#### **CONSOLIDATED** FINANCIAL HIGHLIGHTS

In a global economy still recovering from unprecedented recession, Saint-Gobain returned to growth in 2010, reporting an increase in unit sales and sharply higher earnings for the year.



(in € millions)	2010	2009
NET SALES	40,119	37,786
Operating income	3,117	2,216
Net income	1,213	241
Recurring net income (1)	1,335	617
Recurring earnings per share (in $\in$ ) <sup>(1) (2)</sup>	2.51	1.20
Net income attributable to equity holders of the parent	1,129	202
Earnings per share (in €) (2)	2.13	0.39
Total investments (3)	1,580	1,453
Equity (including minority interests)	18,232	16,214
Net debt	7,168	8,554
Non-current assets	28,933	28,149
Working capital	3,188	2,952
		-

(1) Excluding disposal gains and losses, asset impairment charges and material non-recurring provision charges.
 (2) Earnings per share are calculated based on the number of shares outstanding at December 31.
 (3) Capital expenditure and financial investments, excluding share buybacks.

#### **BY SECTOR** 2010 NET SALES 23% 43% 9% 2010 OPERATING INCOME 33% 19% 14% Innovative Materials Construction Packaging Building Products Distribution Verallia BY GEOGRAPHIC AREA 2010 NET SALES 41% 27% 13% 19% 2010 OPERATING INCOME 19% 23% 32% 26% France Other Western North America Emerging markets European countries and Asia

#### **OPERATIONS IN**



#### Net sales of €40,119 million

Proceeds from disposals €278 million

Cost of goods and services



Nearly 190,000 EMPLOYEES



FOR THE FULL FINANCIAL RESULTS, GO TO www.saint-gobain.com

ALGERIA ARGENTINA AUSTRALIA AUSTRIA BELGIUM BHUTAN BRAZIL BULGARIA CANADA CHILE CHINA COLOMBIA CZECH REPUBLIC DENMARK EGYPT ESTONIA FINLAND

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FRANCE
GERMANY
GREECE
HUNGARY
INDIA
INDONESIA
IRELAND
ITALY
JAPAN
JORDAN
KUWAIT
LATVIA
LEBANON
LITHUANIA
LUXEMBOURG
MALAYSIA
MEXICO
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MOROCCO NETHERLANDS NEW ZEALAND NORWAY PERU POLAND PORTUGAL OATAR ROMANIA RUSSIA SAUDI ARABIA SERBIA SINGAPORE **SLOVAKIA** SLOVENIA SOUTH AFRICA SOUTH KOREA

SPAIN SWEDEN SWITZERLAND SYRIA THAILAND TURKEY UKRAINE UNITED ARAB EMIRATES UNITED KINGDOM UNITED STATES VENEZUELA VIETNAM ZIMBABWE



#### BREAKDOWN OF 2010 VALUE ADDED

Value added totaled  $\in$ 13,144 million in 2010. Of this,  $\in$ 7,825 million was redistributed to employees and  $\in$ 3,091 million was retained to finance future growth.

	in € millions	in %
Value added	13,144	100
Wages and other compensation	7,825	59.5
Pension contributions	479	3.6
Income and other taxes	586	4.4
Dividend	573	4.4
Interest repayments	586	4.5
Investments in local communities	4	0.1
Retained for future growth	3,091	23.5

# GOVERNANCE

#### BOARD OF DIRECTORS (as of March 1, 2011)

#### Pierre-André de CHALENDAR

Chairman and Chief Executive Officer of Compagnie de Saint-Gobain

Jean-Louis BEFFA Honorary Chairman of Compagnie de Saint-Gobain

**Isabelle BOUILLOT** *Chairman of China Equity Links* 

**Robert CHEVRIER** *Chairman of Société de Gestion Roche Inc.* 

**Gerhard CROMME** Chairman of the Supervisory Board of ThyssenKrupp AG

#### Bernard CUSENIER

Chairman of the Association of Saint-Gobain employee shareholders and former-employee shareholders and Chairman of the Supervisory Board of the Saint-Gobain PEG France corporate mutual fund

Jean-Martin FOLZ

**Bernard GAUTIER** Member of the Managing Board of Wendel Sylvia JAY Vice Chairman of L'Oréal UK

**Frédéric LEMOINE** Chairman of the Managing Board of Wendel

**Gérard MESTRALLET** Chairman and Chief Executive Officer of GDF Suez

Michel PÉBEREAU Chairman of the Board of Directors of BNP Paribas

**Denis RANQUE** Chairman of the Board of Directors of Technicolor

**Gilles SCHNEPP** *Chairman and Chief Executive Officer of Legrand* 

Jean-Cyril SPINETTA Chairman of the Board of Directors of Air France and Air France-KLM and Chairman of the Supervisory Board of Areva

Board Secretary: **Bernard FIELD,** Corporate Secretary of Compagnie de Saint-Gobain

Since June 2010, the functions of Chairman and Chief Executive Officer have been held by a single person, Pierre-André de Chalendar, in keeping with the Group's traditional organization. Compagnie de Saint-Gobain complies with the principles outlined in the corporate governance code issued by Association Française des Entreprises Privées (AFEP) and Mouvement des Entreprises de France (MEDEF).



FOR FULL DETAILS, SEE THE 2010 REGISTRATION DOCUMENT AT WWW.Saint-gobain.com

TOOLS

#### Sustainable development: a cross-functional organization

The Chairman and Chief Executive Officer sets strategic objectives. The Corporate Secretary coordinates sustainable development policy with support from the following departments:

- Environment, Health and Safety
- Human Resources
- Responsible Development

Sustainable development policy is deployed cross-functionally, notably with the "sustainable habitat" mission created in 2010. This mission is supervised by a dedicated committee.

# SUSTAINABLE DEVELOPMENT GUIDELINES

With a rich history stretching back almost 350 years, Saint-Gobain has based its development on a set of values that inform its daily actions. These values have been spelled out in our shared **Principles of Conduct and Action**, which all employees are expected to follow as members of our corporate community.

#### principles of conduct:

- professional commitment;
- respect for others;
- integrity;
- loyalty;
- solidarity.

They represent a unifying force and shape the conduct of each and every member of Saint-Gobain, from senior management down to junior employees.

#### principles of action:

- respect for the law;
- caring for the environment;
- worker health and safety;
- employee rights that guide the actions of all corporate leaders and employees in the performance of their duties.

The Principles explicitly refer to International Labor Organization (ILO) Conventions, OECD Guiding Principles and the OECD Anti-bribery Convention.



#### OUR INTERNATIONAL COMMITMENTS

By joining the **United Nations Global Compact** in 2003, we confirmed our commitment to sustainable development in line with our Principles of Conduct and Action. In January 2009, the Group took its commitment to the UN Global Compact one step further by endorsing the **Caring for Climate** statement and the **CEO Water Mandate** for Water Resource Protection as part of the UN's Millennium Development Goals. This commitment was deepened on December 10, 2008 – the 60th anniversary of the Universal Declaration of Human Rights – with the signature by our Chief Executive Officer of the declaration of management support for human rights, an initiative organized by the United Nations.

# DEVELOPMENT -AINABLE OUR SU Strate

Founded over three centuries ago, Saint-Gobain has developed its business over the years with the deepest respect for people and their environment. These core values are the foundation of our corporate culture.



We have built our human resources policy over time with a focus on respect for employees, social dialog and internal promotion.



Saint-Gobain solutions improve energy efficiency and enhance occupant comfort.

Today, we are guided by our ambition to become the benchmark in sustainable habitat solutions. This means developing products and services that make buildings more energy efficient and environmentally friendly, while providing even greater comfort and quality of life. It also means walking the talk in the business, environmental, social and societal aspects of sustainable development.

In practice, this ambition breaks down into clear objectives:

**INCREASE** the portion of our sales generated by energy-saving, environmentally sound solutions to 38% in 2015 from 32% at present (excluding Verallia);

**INVEST** heavily in solar projects, with the goal of generating  $\in 2$  billion in net sales from solar applications in 2015;

#### **CONTINUE** to reduce

the environmental footprint of our sites and to deploy cross-functional policies on water use, forests, biodiversity, eco-design and waste management, etc; **FURTHER** enhance safety and the integration of health and industrial hygiene across the value chain;

**PROMOTE** openness and diversity, social dialog and professional development, in the area of human resources;

**ADOPT** a responsible approach while doing business and develop local territories;

**IMPLEMENT** societal programs that are aligned with our strategic positioning.

Meeting these objectives requires raising broad awareness of sustainable development issues among employees and, more generally, among stakeholders.

#### **STAKEHOLDERS**

Our approach is directly shaped by the sustainable development issues that face our businesses, on both a global and local level.

Taking stakeholders' expectations into account encourages greater innovation, commitment, solidarity and value creation for the organization and our stakeholders.

#### Environmental challenges

Addressing climate change, reducing industrial carbon emissions, protecting natural resources and conserving ecosystems are all issues that Saint-Gobain, as a responsible corporate citizen, has integrated into its manufacturing and distribution processes. The need to reduce the worldwide environmental impact of construction is a core part of our strategy, given our mission of providing sustainable habitat solutions.

#### Social challenges

In the current socio-economic environment, the job market, employee skills development, a safe and healthy workplace environment and the existence of open employee dialogue are key concerns. For this reason, one of our chief aims is to unite and motivate employees, recognize and reward their achievements and nurture diversity as an equal opportunity employer.

#### Societal challenges

Local development, the availability of decent housing, and access to water and energy are major societal needs that Saint-Gobain addresses through its involvement in local communities.

We have identified a number of stakeholders for each of these challenges. At the corporate level, they are mainly our natural partners (employees for social challenges, shareholders, investors, regional officials, etc.). But they can also be organizations or groups that emerge after one of our businesses or subsidiaries takes some type of action, such as launching a product. Examples include consumer organizations for environmental challenges, trade associations and non-governmental organizations. We organize relations with each stakeholder, based on the situation, by identifying appropriate information channels and, when necessary, selecting a suitable framework and venue.

	Stakeholders	Information channels	Opportunities for dialog
<b>SOLUTIONS</b> PROVIDER	Users	<ul> <li>Websites showcasing solutions, such as the lsover responsible insulation site.</li> <li>Recommendations charter designed to promote insulation in existing buildings.</li> <li>Participation in associations, industry groups, tradeshows, etc.</li> <li>Presentations to schoolchildren.</li> </ul>	• Town hall meetings, partnerships with community representatives through associations or groups like Effinergie, Isolons la Terre, Casa que Ahorra and Spaar het klimaat.
	Customers, businesses	<ul> <li>Websites, magazines, forums, tradeshows, training courses.</li> <li>The publication of numerous guides on energy efficiency and the environment.</li> </ul>	Conventions, training sessions, networks.
	Institutions		Dialogue on environmental     and social impact of habitat solutions.
	Employees	Internal communication media, meetings with Group executives.	• Events, meetings, surveys, etc.
RESPONSIBLE BUSINESS ACTOR	Employee representatives		• Labor union agenda, European social dialogue, works council.
	Employee shareholders	<ul> <li>Intranet.</li> <li>PEG corporate mutual fund brochure.</li> <li>Dedicated website.</li> </ul>	<ul> <li>Saint-Gobain employees' club, representative on the Board of Directors.</li> </ul>
	Individual shareholders	<ul> <li>Shareholders' Club on the corporate website, Letter to Shareholders and Shareholders' Hand- book, corporate website, regional meetings, etc.</li> </ul>	<ul> <li>Regional meetings, investors' fair, site visits, stock market primers, etc.</li> </ul>
	Institutional shareholders		Road shows, meetings with analysts.
	Customers	Websites, material safety data sheets.	Distribution networks.
	Suppliers	<ul> <li>Self-assessments.</li> <li>Suppliers' charter, responsible procurement clauses.</li> </ul>	• Supplier/customer agreements (Saint-Gobain Distribution).

Gay-Lussac days, participation in university training courses, school forums, etc.
Sponsorships.

SOCIO-ECONOMIC STAKEHOLDER Research centers,

universities, etc.

Community	<ul> <li>Communication media, annual report, brochures and other public documents, websites, press.</li> </ul>	
Non-financial rating agencies	<ul> <li>Communication media, annual report, brochures and other public documents, websites, press, public declarations, position statements, etc.</li> </ul>	<ul> <li>Meetings, evaluation processes.</li> </ul>
Press and other media	<ul> <li>Communication media, annual report, brochures and other public documents, websites, press, public declarations, position statements, etc.</li> </ul>	<ul> <li>Meetings, press trips.</li> </ul>
Professional associations	<ul> <li>Participation in working groups, development of technical standards.</li> </ul>	Various commissions and committees.
Regional bodies	<ul> <li>Regular meetings with elected officials and civil servants.</li> </ul>	<ul> <li>Participation in economic development programs, chambers of commerce, etc.</li> </ul>
NGOs and other associations	<ul> <li>Annual report, Group communication, meetings.</li> </ul>	<ul> <li>Participation in surveys, cooperation on development and training projects, partnerships, sponsorships in areas related to the environment or access to energy efficiency solutions, support for job opportunities.</li> </ul>

• Academic chairs, partnerships, scholarships,

thesis placements, internships, etc. • Student contests.



# our GUIDELINES

ECONOMIC GROWTH

#### **A SOLUTIONS** PROVIDER THAT...

...contributes to customers' performance,

#### **A RESPONSIBLE** BUSINESS ACTOR THAT...

...invests locally,

#### **A SOCIO-ECONOMIC** STAKEHOLDER THAT...

...contributes to global economic growth,





### ENVIRONMENTAL CHALLENGES

#### SOCIAL COMMITMENT

...helps to improve the environment,

...enhances users' comfort and well-being.

...designs, manufactures and distributes in respect of the environment, ...takes care of its employees.

...is committed to the major environmental challenges,

...takes on social challenges.



# SAINT-0



Saint-Gobain makes glass for windows that fill homes with natural light and sun while providing effective insulation.



In all of our markets, we offer solutions that contribute to our customers' business development while protecting the environment and enhancing user well-being.

We address sustainable development by acting in our area of expertise: the habitat and construction market. This means developing construction and renovation solutions for professional customers to ensure that buildings are energy efficient, comfortable, healthy and esthetically superior, while at the same time protecting natural resources.

To meet these challenges, we have made a deliberate choice to focus on research-driven innovation.

**Training center** for the construction industry in South Africa.

#### Our response to the challenges of sustainable development

Our main market - the habitat and construction industry - is an area with critical sustainable development challenges. Providing homes that are energy efficient, healthy and comfortable fulfils an essential need.

#### Meeting unprecedented challenges

To keep up with rapid urbanization in emerging markets and aging constructions in mature markets, we have to build more, build better and, most important, renovate the buildings we live in today. Nothing meaningful will ever be achieved in improving energy efficiency, reducing greenhouse gas emissions and eradicating poverty without massive action in the habitat and construction industry. Buildings account for more than 40% of energy consumption and around 35% of greenhouse gas emissions in Europe . As energy prices continue their inexorable rise and regulations on energy performance become increasingly stringent. innovative solutions will become an absolute necessity.

While this offers us significant growth opportunities worldwide, it also involves unprecedented economic, environmental and social challenges. We offer sustainable habitat solutions for new construction and renovation in both emerging and mature markets, with a local presence that allows us to tailor our responses to suit local requirements.

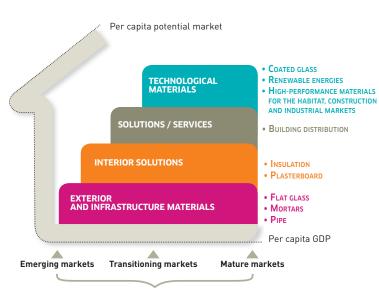
Sustainable habitat solutions are our way of contributing to sustainable development in our area of expertise. Our goal is to help building and renovation professionals worldwide deliver comfortable, healthy, energy efficient buildings that are built to last so as to preserve natural resources and reduce environmental impact.



#### All of our businesses are actively involved in achieving this goal.

• The Innovative Materials Sector comprising the Flat Glass and High-Performance Materials divisions, is spearheading our advance in cutting-edge technologies. With its unique portfolio of materials and processes for the habitat, construction and industrial markets, the Sector embodies our innovationoriented culture and accounts for almost two-thirds of our total research and development commitment. • The Construction Products Sector offers acoustic and thermal insulation products, wall facings, roofing products, piping and other interior and exterior building solutions. Its diversified business base provides an unmatched referral network, a global footprint and a portfolio of highprofile brands like Isover, PAM, Weber, Rigips<sup>®</sup>, Gyproc<sup>®</sup> and CertainTeed.

<sup>1</sup> Source : Eurostat ; EIA Energy International Agency.



A manufacturing presence in 64 countries, representing 64 springboards for growth.

#### SOLUTIONS FOR EVERY STAGE OF THE DEVELOPMENT CYCLE



Our goal is to help building and renovation professionals worldwide deliver comfortable, healthy, energy efficient buildings.

• Sharply focused on services for building industry professionals, **the Building Distribution Sector** plays a key role in helping contractors embrace new renovation techniques.

• Lastly, **Verallia**, our glass packaging business, contributes to the Group's sustainable development strategy in its own area of expertise.

In 2010, we created a sustainable habitat mission and 28 country habitat committees to develop our strategic thinking and provide local solutions.

#### **TESTIMONIAL**

#### "SUSTAINABLE HABITAT" MISSION



**PASCAL ÉVEILLARD,** Head of the "sustainable habitat mission"

#### What are the mission's objectives?

Our first objective is to deploy a waste management and recycling policy in each business for worksites and for demolition and dismantling projects. Our second is to define an eco-design policy that takes into account the environmental and health impacts of our products throughout their life cycle so as to reduce these impacts. Our third is to draw up recommendations for building standards and environmental labels so that our customers can be fully informed and make fact-based decisions.

#### How do you plan to achieve these objectives?

To start, we will need to raise awareness among all employees in all businesses around the world. Information and training are key here. The "sustainable habitat mission" will leverage a network of correspondents to cascade our strategic goals and establish an inventory of measures already taken. Afterwards, we will be able to share success stories and best practices and present action plans before the end of 2011.

#### **Focusing** on innovation



cross-functional R&D centers

Global, cross-business innovation resources for a nimble, proactive organization.

#### A growth driver for both our businesses and our customers

We have chosen to focus on innovation to meet the sustainable habitat challenge. The progress we have made in improving our products and solutions over the past few years was made possible by a significant increase in our research budget, which was maintained during the recession. Research outlays increased to €402 million in 2010 from €312 million in 2004. At the same time, our patent filings jumped to nearly 400 in 2010 from 260 a year in 2004-2006.

#### Eight research paths and strategic programs

To make sustainable development a more integral part of our businesses, we need to focus on the environmental, health and societal impacts of our processes and solutions. Eight strategic research and development programs are being carried out to achieve these objectives in the following areas:

- energy efficiency and the environmental impact of our processes;
- solar;
- lighting;
- intelligent glass;
- high-performance insulation systems;
- external wall insulation systems;
- fuel cells;
- applying green chemistry to our materials.

#### An open innovation model

Cross-business, outward-looking research that anticipates market expectations has also been a key factor in our progress.

Mixed technical/marketing teams identify and explore growth opportunities arising from new markets, new technologies and new applications of existing technology.

At the same time, the NOVA External Venturing unit focuses on nurturing partnerships between Saint-Gobain and start-ups with innovative technologies

#### TESTIMONIAL

Within NOVA, Saint-Gobain Quartz R&D teams are working with AIR SÛR, a company that offers mobile indoor air treatment solutions for use in professional environments and homes. This partnership has led to the development of Airficiency®, an innovative indoor air purification technology that reduces microbial and chemical contaminants.



**Thomas Kerting** Chairman of AIR SÛR

"Our partnership offers real benefits and will help pave the way for the development of a French indoor air treatment industry," says Thomas Kerting, Chairman of AIR SÛR. "We bring our market skills and customer knowledge to the table, while Saint-Gobain contributes its powerful R&D capabilities."



Researcher at the European research and study center (CREE) in Cavaillon, France.



**Research technician** in a cleanroom at Saint-Gobain Recherche in Aubervilliers, France.



FOCUS



#### **BIOMASS**

Verallia has launched an ambitious research program to produce a syngas from vineyard biomass\* with the specific characteristics required for the container glass melting process. A pilot project in France's champagne-making region has been set up to supply 5%-10% of the energy needed by the furnace that makes champagne bottles by end-2011. The goal is to raise this rate to 50% or more while helping grape growers reduce their environmental impact by turning vineyard pruning waste and stumps into energy instead of simply burning them.

\* Biomass: decomposing organic matter that can serve as an energy source.

#### **Contributing** to our customers' performance

We devise our products and services for habitat and construction industry professionals, who process or integrate them to serve their own customers.



In France, Point.P Matériaux de Construction has launched its "Eco Réflexes" program to help building professionals meet the challenges of energy efficiency, with a comprehensive product line-up, as well as training and information resources for Point.P employees and customers. The program is supported by a technical guide and a roadshow visiting more than 50 French towns. In the United Kingdom, Jewson has launched "The Sustainable Building Guide", a practical and informative publication for professionals in the new construction and renovation markets. For its part, Greenworks has organized awareness-raising training tours to help industry professions build sustainably.



We continuously adjust our line-up to meet the changing needs and expectations of our direct and indirect customers, thereby contributing to the overall performance of the entire value chain.

This process is reflected in the introduction of new solutions and in training programs for the people who use our products.

#### **Developing solutions**

In insulation, Saint-Gobain Isover has developed a patented process to compress glass wool. Thanks to their elasticity, glass wool products can be compressed up to ten times when packaged into rolls and palletized. This offers a number of benefits, including:

- energy savings during shipping;
- fewer transport-related
- greenhouse gas emissions;fewer trips between production
- sites and distributor warehouses; • easier handling
- on worksites during installation;
- less packaging waste.

In the area of glass packaging, we offer eco-designed products that provide value for customers and enhanced well-being for consumers. Not only are ECOVA (for ECOlogie & VAlorisation) glass bottles lighter and more attractive, but they also offer equivalent perceived quality. Food and beverage industry brands can use this packaging to market attractive products while reducing the environmental impacts over the entire lifecycle. In Argentina, Verallia has won an award for its ECOVA products. which have played a crucial role in the rise and international success of Argentine wine. As of end-2010, Verallia offered customers more than 140 ECOVA products.







We invest in training a new generation of contractors and professionals who are aware of the challenges of energy efficiency and sustainable construction.



#### **Training professionals**

Our relationships with building industry professionals and our knowledge of their profession helps us improve sustainable construction techniques. For us, it is clear that very close cooperation with all public and private industry participants will be required to meet the sustainable habitat challenge. This partnership is reflected in our extensive range of training programs for both seasoned professionals and newcomers.

Investing in training a new generation of contractors and professionals who are aware of the challenges of energy efficiency and sustainable construction will help provide a solid future for the industry's skill sets. In 2010, we conducted an in-depth study to understand our customers' training needs, determine training's role in the Group's strategy and highlight best practices.

#### TRAINING

#### New training centers

In 2010, Saint-Gobain opened new training centers for construction industry professionals in a number of countries, including:

**Brazil:** 10 new centers providing training on Brasilit, Isover, Weber, Placo<sup>®</sup> and PAM products;

**Greece:** new training center for Rigips and Weber products;

Italy: multi-functional training center;

Ireland: Saint-Gobain Technical Academy Ireland, offering training in Isover, Weber, PAM and Ecophon solutions;

**China:** a new branch of Université Cana, the dedicated Pipes Division university;

**Denmark:** opening by Brødrene Dahl of the Klima Center, with a showroom, two training centers and a skills center devoted to renewable energies and ventilation, to offer the most effective environmentally friendly and energy efficient solutions.

**Poland and Spain:** two new Saint-Gobain Abrasives centers of excellence, with a product showroom, training center and dedicated habitat solutions display area.

#### **TESTIMONIAL**

Eduardo Osaki Construction firm owner trained at Saint-Gobain's Placo Center in Jabaquara, Brazil in October 2010.

"I use Saint-Gobain materials every day, so I wanted to learn how to make the most of them and share that knowledge with my employees. The course really helped me understand these materials and learn how to calculate the amounts needed for each job. I could see just how quick they are to install and measure their acoustic and thermal insulation properties This training will have a direct impact on my daily work."

#### Improving the environment

Our broad line-up of solutions contributes significantly to improved energy efficiency in buildings and greater use of renewable energies.



Saint-Gobain solutions comply with today's ever-stricter energy efficiency regulations.

Housing accounts for 40% of all energy used in Europe, compared with 32% for transport and 28% for industry<sup>2</sup>. In mature markets, the looming shortage of fossil fuels and the pressing need to cut  $CO_2$  emissions has prompted countries to pass new regulations in favor of more energy-efficient buildings. This is encouraging the development of innovative construction techniques for new buildings and the introduction of tighter insulation standards for renovation projects. At the same time, emerging economies are experiencing rapid urban development combined with exponential growth in demand for housing, offices and other buildings. They too are looking for energy-efficient solutions.

In 2010, 32% of our net sales (excluding Verallia) derived from solutions to save energy, produce energy and protect the environment. The growth capacity of these products and solutions is higher than the Group average; our objective is to increase their share of net sales to 38% by 2015.

#### Saving energy

Our broad line-up of insulation solutions makes a significant contribution to reducing the energy used for heating and air conditioning. This, in turn, helps reduce greenhouse gas emissions. A properly insulated building consumes four or five times less energy for heating (or air-conditioning) than a non-insulated home<sup>3</sup>.





INSULATION SOLUTIONS

With mineral wool and other **insulation materials** from the Insulation Division, plasterboard from the Gypsum Division, exterior thermal insulation from the Industrial Mortar Division and Saint-Gobain Technical Fabrics, and the thermal insulation product lines distributed through our outlets, we have the right solutions to meet all types of insulation needs in new and existing buildings.





Windows also pay a critical role in a building's energy performance. A 2009 study suggests that replacing every window in the European Union with advanced, low-emissivity double glazing would cut CO<sub>2</sub> emissions by up to 90 million metric tons annually–equivalent to one third of the European Union's target for reducing greenhouse gas emissions from buildings.

As the world leader in coated glass, Saint-Gobain Glass has tangible solutions in this area. Over the past twenty years, we have achieved a six-fold increase in the energy efficiency of our flat glass products, thanks to a significant investment in research and development. We have also regularly brought new, more effective products to the market. In 2010, we launched our new sGG PLA-NITHERM® LUX Low-E coated glass for triple glazed units, targeting the residential market in cold weather regions. Thanks to its exceptional energy balance, as measured by the ratio between heat loss and solar heat gain, sGG PLANITHERM® LUX makes it possible to create large window areas to bring in natural light while saving energy.

<sup>&</sup>lt;sup>2</sup> Source : Eurostat ; EIA Energy International Agency.

<sup>&</sup>lt;sup>3</sup> Source : Eurima.

<sup>&</sup>lt;sup>4</sup> Study conducted by TNO, a Dutch scientific research organization, for the Glass for Europe association.





Many of our solutions contribute to the production of non-fossil energy sources and, especially, to the growing use of renewable energies. Our goal is to lift our solar-related sales to  $\in 2$  billion by 2015.

With a presence across the value chain and the technology base, including photovoltaic panels, solar heating systems and concentrating solar power plants, we are innovating simultaneously in components, modules and systems. In particular, we are working on new generations of products that are lighter and more efficient, as well as on systems that are easier to install. In 2009, we created a dedicated unit called Saint-Gobain Solar to combine all our solar energy solutions. Saint-Gobain Solar has created a unit called Saint-Gobain Solar Systems to design and market photovoltaic solutions

installed on rooftops, facades and windows. These solutions include complete photovoltaic systems, installation by a network of qualified partners and related turnkey services.

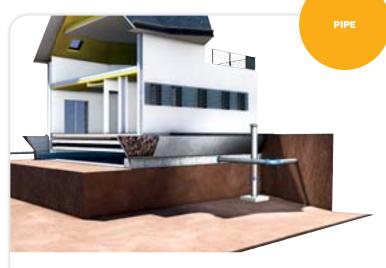
#### All-in-one solution offering

Similarly, in Germany, Saint-Gobain Building Distribution Deutschland has introduced Solarkauf, an all-in-one solution offering a comprehensive range of products and accessories for the photovoltaics market. With Solarkauf, professional customers and consumers can find everything they need in one place and get help and advice from a specially trained sales force.

Saint-Gobain is a major supplier of products and solutions for the photovoltaic industry. These include quartz crucibles for smelting silicon slabs, engineered abrasive grains for cutting them and fluoropolymer films for encapsulating photovoltaic panels.

Our Avancis subsidiary, which produces thin-film photovoltaic modules using a highly competitive Copper-Indium-Gallium-Selenium (CIGS) technology, is continuing to expand its manufacturing base. The venture's first plant in Torgau, Germany, has an annual capacity of 20MW. Plans to build two new plants (in Germany and South Korea), with an annual capacity of 100MW each, were announced in 2010 (see page 33).

# Supplying water





Because water is a vital resource, it needs to be very carefully managed. Through our Pipes Division, we are a major player in the water cycle, notably as concerns grow regarding drinking water supply. Our full range of ductile cast iron piping systems, with their exceptional watertightness, safety and durability, delivers the impeccable quality required of water networks. The Pipes Division works on large irrigation and sewage projects at the regional level, as well as on smaller municipal or neighborhood worksites. It has renewed its line-up with the BLUTOP<sup>®</sup> range of small diameter ductile cast iron pipes. Half as heavy as the previous generation, BLUTOP<sup>®</sup> is easier to install, uses less energy and fewer raw materials and produces fewer carbon emissions.

#### Limiting the environmental footprint of our products and solutions

To assess the environmental impact of our habitat solutions over the product lifecycle, from raw material extraction to end-of-life disposal, and communicate the results in a common format, we have developed a shared methodology for all construction products that complies with international standards. In each major product family, a life cycle assessment (LCA) has been conducted for a representative product in at least one manufacturing country. All of our products for the habitat and construction markets, including those for solar applications, should have undergone an LCA by 2013.

To widen our competitive edge and stand apart from our rivals, we need to invent new solutions for eco-design, with a specific focus on recycling. Life cycle assessments are a fundamental resource in these two areas:

- the goal of eco-design is to reduce the environmental and health impacts of our processes and solutions, from the drawing board to the end of their life cycle;
- improved management of production waste, as well as of construction and demolition site waste, should help us optimize our processes and provide effective services for customers.

#### **Z00M**



In France, Placoplatre has set up a dedicated system to collect and recycle plaster waste. In 2010, 25,600 metric tons of waste was recovered, representing an 85% increase from 2009.

In Austria, Rigips' "Ri-cycling" program gives customers an active role in recycling. Worksite waste is collected in special bags distributed to customers and then re-used in the production cycle.

#### Enhancing users' comfort and well-being

Saint-Gobain develops solutions to enhance users' comfort and well-being. These solutions help improve acoustic, insulation and air quality in homes, offices, classrooms, hospitals and other living spaces, for a more comfortable interior environment.

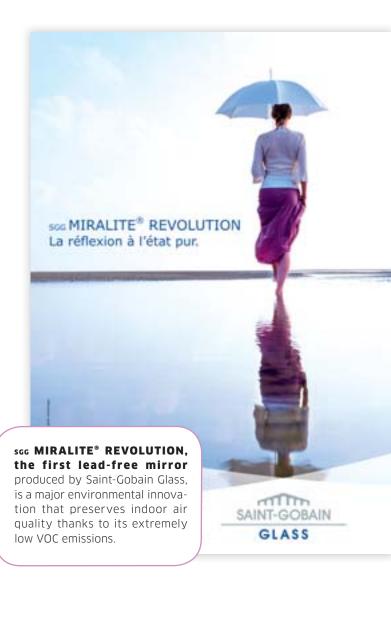
Our different businesses contribute to the overall goal of building attractive, healthy and comfortable living spaces. In Germany and Belgium, for example, several Saint-Gobain companies have joined forces on dedicated solutions to enhance acoustic comfort in schools for both students and teachers. Saint-Gobain Ecophon also specializes in acoustic insulation and provides effective ceiling solutions for schools, offices, healthcare facilities and industrial buildings.

We devise solutions for mature and emerging economies and are conducting pilot projects in both on the energyproducing home of tomorrow.

#### ZOOM



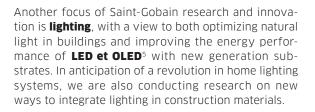
We offer products that make life easier for contractors and other construction industry professionals. The Clipper<sup>®</sup> range of tile cutting machines and blades, for example, has been expanded with Clipper<sup>®</sup> Phenomen, the first dry-cutting and dust-free tile saw ever. Clipper<sup>®</sup> Phenomen comes on the heels of numerous other Saint-Gobain Abrasives solutions, such as the Norton Silencio<sup>™</sup> diamond blade, which makes up to 30 times less noise than a conventional blade.





**Placoplatre** is also developing **solutions to enhance air quality.** Its "Activ'Air<sup>®</sup>" innovation, incorporated in plaster, captures and transforms airborne aldehydes into inert compounds without emitting any other substances. "Activ'Air<sup>®</sup>" plasterboard is recyclable.











**NOVELIO® Mold-X** Saint-Gobain Technical Fabrics' **latest paintable glass fabric,** prevents the development of surface mold and bacteria. This innovative product helps keep walls clean and healthy, particularly in highly demanding environments such as hospitals.

In the area of **intelligent glass**, we took a significant step forward in 2010 by signing an agreement with U.S.-based SAGE Electrochromics to industrialize electrochromic technology. The use of **electrochromic** glass in buildings makes it possible to modulate light transmission and solar heat gain while maintaining visibility. In this way, electrochromic glass considerably reduces the amount of energy used for lighting, heating and air conditioning. As part of the agreement, a plant will be built in the United States with an annual production capacity of more than 370,000 square meters of large format electrochromic glass. This world premiere is backed by more than ten years of research and a portfolio of more than 100 patents.



#### FOCUS

Saint-Gobain also develops solutions to facilitate access to healthy, comfortable housing for low-income families. In South Africa, Saint-Gobain Construction Products has teamed up with a local architect to create an environmentally friendly prefabricated home built using light construction materials from Saint-Gobain. The project is targeted to low-income families unable to obtain a traditional bank loan, yet not poor enough to be eligible for government support. The two-bedroom home, with a living room, kitchen and bathroom, is energy efficient, low cost and quick to build. Because it is fully insulated, the home needs no heating in the winter or air conditioning in the summer. It is equipped with a solar hot water heater and a system for collecting rainwater that can be used to irrigate a vegetable garden.

Potential buyers choose the design and finishing. The house is then built, delivered in several components and assembled on site in just a few weeks.

A similar approach has been launched in Brazil and other emerging markets.



# SAINT-GOBAIN, A RESPONSIBLE BUSINESS ACTOR





Saint-Gobain is a multiregional organization serving local markets that invests in both mature and emerging economies. As a responsible business actor, we take an active approach to environmental protection, with a focus on carefully managing our consumption of natural resources, producing less waste and using less energy.

We also pay close attention to our employees' professional growth, well-being and safety. Our human resources policy is based on a longstanding tradition of respect for employees, social dialog with our partners and a culture of bringing people up through the ranks.

**Skills enhancement** for career advancement is a Saint-Gobain priority.

# A multiregional organization

Saint-Gobain is a multiregional organization serving local markets. Today, products and services created and distributed locally account for more than 90% of our sales.

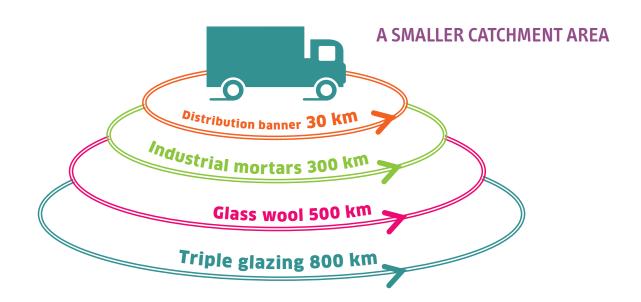
This multiregional focus is both a strategic choice and a responsibility. We have made this choice consciously because we believe in the growth of sustainable habitat markets in mature markets and emerging economies alike.

#### Optimizing shipping

In our business, we need centrally located manufacturing operations to serve our catchment areas. Shipping costs tip the balance when distances exceed 500 km for glass wool and 900 km for plasterboard. Producing where we sell also reduces our environmental impact.

#### Forging partnerships

In a world where cultural and trade flows are increasingly unfettered, we frequently develop our business with partners. These partnerships concern the design and construction of our facilities, as well as links with businesses and associations in our host communities. They allow us to make the most of regional skills, serve our customers more effectively and help customers develop locally.



#### Investing locally

Saint-Gobain invests in both mature and emerging economies. These investments contribute to local economic development and create stable jobs in our host regions.



#### SOUTH AFRICA • BRAZIL • BULGARIA

The Industrial Mortars Division expanded considerably in 2010 with the inauguration of three new plants in emerging economies. A new Weber mortar plant was inaugurated in South Africa in March, production began at two Weber Quartzolit plants in Brazil, and a second Saint-Gobain Weber plant came on line in Bulgaria during the year.

#### **GERMANY • SOUTH KOREA**

In photovoltaics, construction began on a second Avancis PV panel plant in Germany in 2010 and the decision was made to build a third high-efficiency PV panel plant in South Korea in partnership with Hyundai Heavy Industries (HHI). Together, the partners will form a 50/50 joint venture called Hyundai Avancis. Some 400 jobs are expected to be created over the long term.



Our new €130 million float glass plant in Ain el Sokhna, near Suez, will focus on serving domestic demand. With a production capacity of 900 metric tons per day and equipped with leading-edge technology, the plant is the largest in the region. More than 2,000 people worked on the massive project, which took two years to complete. Saint-Gobain Glass Egypt has 300 employees, 80% of whom were recruited locally.



(FRANCE

The new Glassolutions plant inaugurated in February 2010 in Crissey, France, represents an investment of  $\in$ 13 million. It is one of the largest advanced insulation glazing plants in France for the construction market and one of the most modern in Europe.

The Saint-Gobain Isover plant in Chemillé, France, inaugurated in 2010, produces new-generation G3 mineral wool using innovations from more than 20 patents and a unique manufacturing process that reduces environmental impact starting at the production phase, while delivering superior thermal performance. Built in compliance with High Environmental Quality (HQE) requirements and certified to CARE: 4<sup>®</sup> standards (see page 50), this €100 million investment has led to the creation of 150 highly skilled direct jobs and at least as many indirect jobs.

<sup>6</sup> HQE is an approach primilarly used in France to improve the environmental quality of new and existing buildings.

FRANCE

#### Our environmental, health and safety policy

Saint-Gobain takes an active approach to environmental protection. We also deploy measures to prevent workplace health and safety risks as effectively as possible for employees, temporary staff and subcontractors present at Group sites.

#### Our commitments

Our Environmental, Health and Safety (EHS) policy flows from our Principles of Conduct and Action (see page 9). The main components are summarized and listed in a charter displayed at all of our facilities and currently translated into 38 languages.



#### INNOVATION

#### **Close cooperation** with research and development centers

The research and development teams collaborate with the EHS department to integrate EHS concerns into product and process innovation and to address new EHS issues that arise.

• To ensure that R&D specifications take health and environmental concerns into account, the R&D tracking process includes an EHS validation procedure. At each major project milestone, an EHS checklist is used to verify specifications on raw materials, manufacturing processes, product's use or end-of life treatment. In 2010, the procedure was updated and project managers received training to give them a methodology for the procedure and a basic understanding of toxicology. • EHS and R&D also work together on nano-materials. A code of conduct has been drawn up to identify handling procedures and to ensure that ultra-fine particles are used solely at authorized sites equipped with specific installations to protect employees.



International Environment Health and Safety Day

Saint-Gobain celebrated the fourth International Environment, Health and Safety Day on October 7, 2010, with employees at all sites taking part in EHS-related activities and training. A special emphasis was placed on biodiversity in honor of the United Nations' decision to declare 2010 International Year of Biodiversity



Denmark: tree planting for the EHS Day.





Korea: information board on safety.

**Brazil:** the teams assemble to listen to the message from Group General management at the Saint-Gobain Canlização plant in Barra Mansa.



**Thailand:** raising awareness of life-saving gestures at the Gypsum Products plant in Laem Chabang.

# **EHS objectives**

In implementing EHS policy, senior management establishes **objectives** for the Group as a whole in the areas of health (deployment of standards), safety (reduction in workplace accident frequency rates) and the environment (optimized use of materials combined with reduced emissions). Applied in each skill-set and region, these objectives are used by the units as a reference in drawing up their annual EHS policy. The objectives are set for three year periods (2008-2010 and 2011-2013).

# Rigorous EHS standards and recommendations

Saint-Gobain has drawn up various standards and recommendations to support the implementation of EHS principles. These standards and recommendations were developed in response to specific EHS concerns (see page 58). The standards require employees to implement a uniform risk assessment method to control risks, ensuring that the same preventive measures are used across the Group, regardless of the country or local legislation concerned.

# Objectives for 2008 • 2010\*

## Safety

Achieve an overall lost time incident rate (LTIR) of less than 3.5, with sub-targets of 6.5 for the Building Distribution Sector and 2 for the industrial Sectors, and a total recordable incident rate (TRIR) of under 7 for the industrial Sectors.

## Occupational health and industrial hygiene

Continue to deploy standards and recommendations on noise (NOS), toxic agents (TAS, aligned with the European REACH Directive) and ergonomics (PLM).

## Environment

Step up ISO 14001 certification efforts and reduce water consumption, the amount of landfilled waste and  $\rm CO_2$  emissions.

\* The results are presented on the following pages.



# Total environmental expenditure: €128.1 M

Percentage of training hours 24%

# Objectives for 2011 • 2013

## Safety

Achieve a lost time incident rate (LTIR) of 5 for the Building Distribution Sector and a total recordable incident rate of under 6 for the industrial Sectors, for an overall LTIR of less than 2.8. >>> New: these indicators now include temporary employees.

## Occupational health and industrial hygiene

Deploy the new SAFHEAR risk analysis software introduced in early 2011.

>>> This approach is designed to ensure compliance with international regulations such as REACH and manage health risks for employees and customers.

## Environment

Pursue efforts to reduce the sites' environmental footprint and define and deploy new cross functional policies for water, wood, biodiversity and life cycle assessment.

## TOOLS

# Deploying EHS POLICY

EHS management and supervisory resources are provided to help sites develop their own EHS practices, in line with Group policy.

## A coordinated network of expertise

The EHS structure is **matrix-based**, mirroring the organization of Saint-Gobain itself. Its activities are coordinated by a central department.

## An efficient management method

The World Class Manufacturing (WCM) approach is a structured industrial excellence method that has proven effective in the areas of safety, quality and productivity. Over 90% of our manufacturing sites will have adopted the WCM method by 2015.

## Accurate EHS reporting

Since 2004, the Group has used a centralized EHS reporting system known as Gaïa (see reporting methodology, page 82).

## A comprehensive audit system

Our audit system is based on the EHS and self-diagnostic audits initiated by the EHS department and a selfassessment questionnaire introduced by the Internal Audit and Internal Control Department.

# Managing natural resources and preserving biodiversity

Managing natural resources and preserving biodiversity are global issues. In July 2010, the UN General Assembly declared that access to safe and clean drinking water and sanitation is a human right, and in October, the Nagoya biodiversity summit defined a new framework for protecting endangered species.

# Objectives for 2011 • 2013

Reduce water withdrawals by 6% between 2011 and 2013 at "concerned sites", based on 2010 production output.



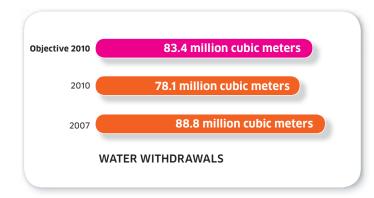
At Saint-Gobain, we understand that biodiversity is important to humankind and needs to be preserved. That's why we take measures to limit our impact on ecosystems and to optimize our use of natural resources. We have also been working to preserve water resources for several years.

# Water

In our processes, we use water primarily to cool installations that operate at high temperatures. Water is increasingly being recycled internally, which considerably reduces the demand for natural water resources. Sustained efforts over the past three years in all the Sectors have allowed us to exceed our target of reducing water withdrawals by 6% between 2007 and end-2010. In 2010, based on 2007 output, the Group's concerned sites<sup>7</sup> withdrew 78.1 million cubic meters of water, down 12% from 88.8 million cubic meters in 2007. Based on actual output<sup>8</sup>, the concerned sites withdrew 71.0 million cubic meters of water in 2010, for 20% reduction in absolute value. In all, the Group's sites used 84.2 million cubic meters of water in 2010 √.

We have also begun an in-depth study to draft and deploy a framework policy on sustainable water management. This cross-functional study is being conducted in cooperation with the corporate EHS, Responsible Development





and Purchasing departments, as well as the Sector, business and Delegation EHS network. The next step, in 2011, will be to evaluate the impact of operations in areas facing water stress and to identify potentially replicable best practices implemented by sites to reduce their footprint.

Ultimately, this framework policy on sustainable water management will leverage Group standards and, if necessary, each Sector's particular adaptation. A specific standard is currently being established within the Innovative Materials Sector to limit withdrawals, improve monitoring of wastewater and prevent accidental pollution. Supported by a catalog of best practices, the standard will be deployed in stages in 2011 starting at priority sites, which include those that have the largest withdrawals, use hazardous substances or are located in sensitive areas, etc.

## INNOVATIVE MATERIALS

## Sector's water awareness video

A video to raise awareness about the industrial challenges of water use was shown at all of the Innovative Materials Sector's sites as part of the fourth International Environment, Health and Safety Day on October 7, 2010. In the run-up to the introduction of the water standard, this video highlighted examples of best practices in the Sector concerning:

- measurement of withdrawals, using meters, flow indicators and other devices, to identify leaks and hook-up errors (Pontet, France);
- reduction of withdrawals, using closed circuits, re-use systems and low-consumption equipment (Worcester, Massachusetts) and rainwater collection systems (Chennai, India);
- monitoring of wastewater, with water analysis and treatment systems (Pontet, France);
- prevention of accidental pollution based on real-world examples.

<sup>&</sup>lt;sup>7</sup> "Concerned" sites were identified based on 2007 reporting data, and their performance was tracked in relation to 2010 environmental targets. The perimeter covers 400 sites (see page 83).

<sup>&</sup>lt;sup>8</sup> Actual output in 2010.

<sup>&</sup>lt;sup>9</sup> Areas where the demand for water exceeds the available amount from natural resources.

# Managing natural resources

and preserving biodiversity



**Cormeilles quarry** (France). The rehabilitation project created wetlands and a large green belt.

# Quarries

The Group operates 142 underground and open-cast quarries worldwide. The vast majority (75%) belong to the Gypsum Division.

The quarries are operated in an environmentally friendly manner in compliance with local and national regulations. During extraction and restoration, the effects on local communities and the environment are reduced as much as possible. These include the visual impact of the operations, dust, noise and vibration, added road traffic and any repercussions on the natural surroundings.

As part of its ongoing efforts to address the environmental impact of its extraction sites, the Gypsum Division deployed a biodiversity policy for quarries in 2010. We will leverage the results of this project to establish a meaningful biodiversity policy for all Group activities by 2013.

## PLACOPLATRE

## Quarry management

All gypsum quarries in France have a five-year rehabilitation plan. In 2010, land representing more than 25% of the guarries in areas of extraction had been rehabilitated. When extraction is complete, each site is restored appropriately. With open-cast quarries, the Group's aim is to return the land as nearly as possible to its original contours. When this is not possible, the land is sculpted harmoniously to create the right kind of habitats for final use and to blend in with the surrounding environment. Special care is taken to respect local species and create habitats that will promote the development of biodiversity. Since the early 1990s, the Gypsum Division in France has redeveloped 300 hectares (741 acres) of open-cast quarries and planted over 250,000 trees.

In 2010, 53 hectares (131 acres) were rehabilitated at the historic Cormeilles quarry, which has been in operation since the 19th century. The rehabilitation project created wetlands and a large greenbelt. The site, which has already seen the reappearance of rare orchid species, will be gradually turned over to neighboring communities and opened to the public.

# Rehabilitation

**AUSTRIA** 

## at Saint-Gobain Rigips sites

Forest lands in Bad Aussee and pasture lands in Puchberg are being restored to their natural state to allow for the reintroduction of biodiversity. Quarry rehabilitation is a long-term project. Unused areas of the quarries are backfilled and prepared for vegetation cover, a process that takes one to two years. Local bush and tree species are then introduced, with around 1,500 plants per hectare (2.47 acres).

The Puchberg rehabilitation project takes into account the presence of red-listed flowers identified by the International Union for the Conservation of Nature and Natural Resources (IUCN) and the proximity of Natura 2000 sites.

# Respecting the environment at our sites

Our environmental policy cascades down into action plans developed at the local level.

## TESTIMONIAL

Jewson, the leading distributor in the UK of sustainably managed timber and of building materials, has received ISO 14001 certification for all its branches, following a rigorous evaluation program for three years.



**Steve Millward** Jewson's Sustainability and Quality Director

"Certification has given us a perfect environment to implement an effective environmental management system, reduce waste and reduce our consumption of electricity and gas," said Steve Millward, Sustainability and Quality Director of Jewson. "The thoroughness of the audits conducted the store managers to be vigilant in the implementation of the environmental goals. We also send every month, to each of them, the results of all branches in this area, which keeps the attention on the subject."

# Objectives for 2011 • 2013

Extend ISO 14001 certification to more than 90% of concerned sites by end-2013.

# An assertive certification policy

In 2010, Saint-Gobain pursued its policy of obtaining environmental certification for its businesses. Certification is an effective way to include environmental issues in overall unit management. It is also a way to build in a commitment to continuous improvement and to preventing pollution.

As of December 31, 2010, 67.5% of concerned sites were ISO 14001certified *versus* 42% in 2007. In 2011, 42 units (or 10.5% of concerned sites) should obtain certification. The Group had set a target of 80% of concerned sites for 2010, which should be reached in 2011 with a rate of approximately 78%. The difficult economic situation since 2009 explains this lag.

## Atmospheric emissions NO<sub>2</sub> and SO<sub>2</sub>

Some of our facilities-mainly glassworks and Pipe Division plantsemit sulfur dioxide  $(SO_2)$  and nitrogen oxides  $(NO_x)$ , which contribute to acid rain.

Our different Sectors have been working to cut their sulfur dioxide emissions for several years now by using higher-quality fuel oil or coal slack, reducing their energy consumption and introducing desulfurization processes. Investments in pollution control equipment are part of this effort. In 2010, glass furnaces at concerned sites discharged 2.33 kg of  $SO_2 \checkmark$  per metric ton of finished glass produced, while concerned sites in the Pipe Division discharged 3.38 kg of SO<sub>2</sub> for each metric ton of cast iron produced, representing a total of 38,236 metric tons of  $SO_2 \checkmark$ .

Saint-Gobain companies seek to reduce their nitrogen oxide emissions by emphasizing primary measures to



prevent or limit NO<sub>x</sub> production at source. In 2010, glass furnaces at concerned sites discharged 2.34 kg of NO<sub>x</sub> per metric ton of finished glass produced  $\checkmark$ , while Pipe Division concerned sites discharged 1.77 kg of NO<sub>x</sub> for each metric ton of cast iron produced  $\checkmark$ , representing a total of 35,263 metric tons of NO<sub>x</sub>  $\checkmark$ .

#### Dust

Saint-Gobain takes an active approach to managing dust emissions. We have invested extensively in electrostatic precipitators and bag filters, depending on the type of furnace. In addition, filtration dust is increasingly recycled at the plants themselves or utilized through special processes.

All of the Verallia's European plants have now been equipped with electrostatic precipitators, leading to a very significant decrease in the amount of dust emitted by glass furnaces. In all, dust emissions declined by more than 60% at the European plants between 2008 and 2010. Electrostatic precipitators have been or are being installed at facilities in other host regions, notably in the United States.

The Innovative Materials - Flat Glass Sector is also taking measures to manage atmospheric emissions from its furnaces and is pursuing its investments in electrostatic precipitators. In 2010, glass furnaces and glass production lines at concerned sites discharged an average of 0.25 kg of particulates per metric ton of glass produced.

The Pipe Division distinguishes between ducted dust and diffuse dust. For many years, Saint-Gobain plants have been capturing and treating the large volume of ducted dust they generate, drawing on advances in available technology to make ongoing improvements to their filtration systems. In 2010, the Pipe Division's concerned sites generated 2.2 kg of ducted dust per metric ton of finished cast iron produced following treatment. Diffuse dust emissions are less substantial but difficult to capture and treat. Diffuse dust is found only in metal melting areas and consists primarily of mineral substances.

#### **Other regulated substances**

Heavy metals resulting from impurities in raw materials, cullet<sup>10</sup> and other furnace input are closely monitored. Pollution control equipment, such as the electrostatic precipitators described above, has proven effective in reducing emissions of heavy metals.

# Respecting the environment at our sites

## Reducing production waste and consumption of raw materials

In 2010, concerned sites generated 3.5 million metric tons of production waste, compared with 3.7 million in 2007 based on comparable output and scope of consolidation, a reduction of 4.8%. On an actual production basis over the same period, the reduction came to 13.6% in absolute value (3.2 million metric tons in 2010).

Saint-Gobain had set a target of reducing landfill waste at concerned sites by 6% by end-2010, based on 2007 production output. Because this indicator was not sufficiently reliable over the three-year period, we decided to present results for produced waste rather than for landfill waste. In the objective for 2011-2013, the indicator will cover landfill waste.

The more we use recycled materials, the less we consume primary raw materials. In addition to recovering our own waste products, we use recycled materials from outside sources, such as cullet and recovered scrap metal, to optimize our raw material consumption.

## Objectives for 2011 • 2013

Reduce landfill waste by 6% by end-2013 on the basis of 2010 production at concerned sites.

# Glass

The primary method for reducing resource consumption in glass furnaces is to include cullet (crushed recycled glass) among the raw materials. The proportion of non-recycled glass used within the Group fell between 2009 and 2010 based on a comparable scope of consolidation. In 2010, glass furnaces at concerned sites used 11.4 million metric tons of primary raw materials, compared with 10.8 million metric tons in 2009; 4.5 million metric tons of externally-sourced cullet, *versus* 4.2 million in 2009; and 3.3 million metric tons of internallygenerated cullet, compared with 2.8 million in 2009.



## FOCUS



In the United Kingdom, Saint-Gobain Building Distribution has set a target of reducing landfill waste by 50% between 2008 and end-2012. In 2010, 11,509 metric tons of wastes were landfilled, or 34% less than the target of 17,500 metric tons set for the year. The waste is collected by an external service provider for all sites. Different containers have been installed to separate out recyclable waste such as lumber, concrete and cardboard, helping to significantly reduce the amount of waste remaining to be landfilled.



# Cast iron

The Pipe Division uses two melting processes to produce cast iron: primary melting, which produces cast iron from iron ore in blast furnaces, and secondary melting, in which cast iron is manufactured from scrap metal and recovered cast iron. In 2010 the use of primary melting increased, representing 78.3% of production at concerned sites (compared with 75.8% in 2009 based on a comparable scope), while 30.3% of finished cast iron was produced from recycled materials at concerned sites (*versus* 37% in 2009 based on a comparable scope).



# Gypsum

The conversion of gypsum into plaster is an age-old process. Plaster is a natural, recyclable and abundantly available material that requires very little energy to be produced. As with cullet, the only limitation on recycling plaster is the problem of waste sorting. In 2010, at the concerned sites within the Gypsum Division, 30% of finished gypsum was produced from recycled materials compared with 24.3% in 2009. Waste recycling facilities have been established in several countries. This type of system can vary in scope, depending on the country and local demand (see page 27).

# Climate change and energy consumption

Through our products and actions, we are rising to the challenges posed by climate change and energy consumption (see pages 24 to 27). We are committed to walking the walk in our manufacturing and distribution operations, as well as in our buildings.



## PARTNERSHIP

## Saint-Gobain named ENERGY STAR partner of the Year



In the United States, the Environmental Protection Agency (EPA) recognized Saint-Gobain as an Energy Star Partner of the Year for the second year in a row, citing its remarkable energy management and reduction of greenhouse gas emissions.

## A commitment to stakeholders

In cooperation with government officials and other industry players, we are working on defining a framework that helps reduce greenhouse gas emissions while fostering the development of a profitable industrial base. In 2010, we participated actively in the preparation of the post-2012 phase of the European Union Emission Trading Scheme (EU ETS). We are also paying close attention to emerging regulations to limit greenhouse gas emissions around the world, notably in California and South Korea.

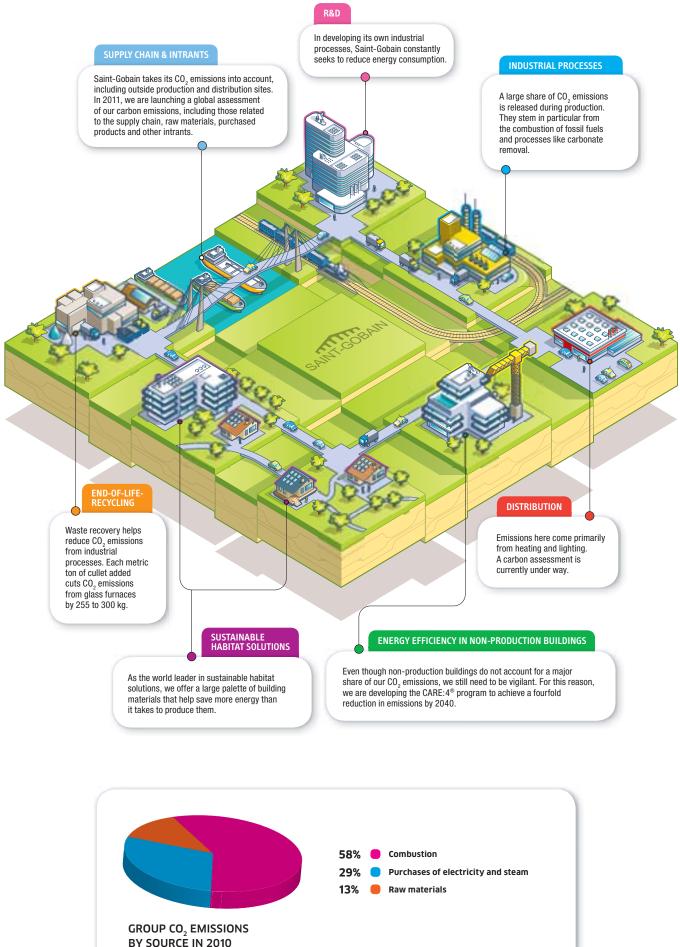
Since 2003, we have participated in the Carbon Disclosure Project (CDP), an international initiative designed to encourage the development of a shared methodology for measuring greenhouse gas emissions. In 2010, Saint-Gobain was included in CDP's Global 500 Carbon Disclosure Leadership Index (CDLI), which recognizes the top-scoring companies for disclosure of greenhouse gas emissions.

## **CO2 emissions** Gaining a better understanding of our impact on climate change

Producing and distributing quality products and services generates greenhouse gasses all along the value chain. To gain a better understanding of our emissions, we conducted carbon assessments at a number of our largest companies in 2009 and 2010. These studies show that, at most of the companies, three to four sources are responsible for more than 90% of total carbon emissions. They are: energy consumption, process emissions, purchasing of products and raw materials (intrants) and shipping.

In 2011, we are pursuing this approach with the Saint-Gobain Carbon Assessment program, which is designed to help us account for our carbon emissions more effectively across the value chain and over time. Special emphasis will be placed on emissions from shipping and intrants.

# Gaining a better understanding of our impact on climate change



# Climate change and energy consumption

## Carbon emissions from our industrial processes<sup>11</sup>

We track the greenhouse gas emissions from our production facilities very closely. These emissions primarily comprise  $CO_2$  from energy consumption and from chemical reactions during production, such as carbonate removal in the glass production process.

In 2010, Groupwide  $CO_2$  emissions totaled 18.7 million metric tons  $\checkmark$ , broken down as follows:

• indirect emissions accounted for 4.9 million metric tons  $\sqrt{}$ .

In 2007, we set a target of reducing direct  $CO_2$  emissions by 6% between 2008 and 2010 based on comparable output and scope of consolidation. Because of the recession, production facilities did not operate under optimal conditions for environmental performance. Plant throughput rates declined, furnaces were idle and production line stoppages became more frequent.

In 2010, concerned sites emitted 12.6 million metric tons of CO<sub>2</sub>, compared with 13.1 million in 2007 based on comparable output, a reduction of 3.6%. On an actual production basis, concerned sites emitted 12 million me-

tric tons of  $CO_2$  in 2010  $\checkmark$ , for a reduction of 8.9% in absolute value.

# Objectives for 2011 • 2013

Reduce direct CO<sub>2</sub> emissions by 6% by end-2013 based on 2010 performance for concerned sites.



CARBON EMISSIONS FROM OUR INDUSTRIAL PROCESSES

Saint-Gobain Glass plant in Renedo, Spain.



**Cullet,** or crushed glass, is used to make new products.

## Energy consumption in our processes Energy consumption in our processes at the Group level

Managing energy consumption is a key factor in our sites' environmental and financial performance. In 2010, energy use for the Group as a whole stood at 227,520 TJ ✓ of which 174,960 TJ of primary fossil energy ✓.

#### Glass

We are working actively on reducing the energy used by our processes. Glass production is powered primarily by fuel oil and natural gas. Energy consumption is being steadily reduced by replacing outdated equipment at the end of its life with newer, more energy-efficient equipment, and by enhancing combustion methods and refractory performance. The use of cullet also helps to save energy. For each 10% of cullet added to a glass batch, 2.5% to 3% of melting energy is saved. Around half of the furnaces used by the Insulation Division are fully electric and we also frequently use electricity in addition to fossil fuels to aid in the melting process, accelerate convection currents in the glass bath and ensure uniform treatment in the furnace.

#### **Cast iron**

The Pipe Division uses coke and coal to fire the blast furnaces and cupola furnaces, as well as electricity and

natural gas. The Division is focusing on improving yields and energy efficiency at its plants, developing techniques for injecting oxygen and carbon-bearing matter into the melting process and relying more heavily on secondary melting when the raw materials are available.

At our site in Barra Mansa, Brazil–a pilot site for biomass–iron ore is smelted primarily using eucalyptus charcoal (2,099 TJ).

#### **RENEWABLE ENERGIES**

## Isover

## switches to biogas

The Isover plant in Forssa, Finland, is the first glass wool production facility in the world to switch from a fossil fuel (butane) to a renewable energy source (biogas) for its heating. The methane-based biogas also fuels the site's oven. Waste from the food and beverage industry and organic waste from the local community provide the feedstock. With this solution, the plant has reduced its CO<sub>2</sub> emissions by around 20% and shown its leadership in the use of renewable energies.



<sup>11</sup> These emissions include:

- direct emissions stemming from the burning of fossil fuels or from chemical reactions such as carbonate removal and reduction;
- indirect emissions stemming from the use of electricity and heat.
- They do not include indirect emissions from road transportation, commuting, business travel, etc.

# Climate change and energy consumption







Saint-Gobain buldings that obtain CARE:4<sup>®</sup> certification in 2010.

## TESTIMONIAL

## **Energy-efficient offices**

On September 29, 2010, Saint-Gobain made a commitment alongside 15 other CAC 40 companies to reduce the energy consumption of its offices in a manifesto supported by France's Entreprises pour l'Environnement (EpE) association. Together, the companies will define and deploy a program of tangible, measurable actions to reduce energy use in buildings.

Saint-Gobain already introduced its own program for office buildings back in 2008 when it launched its CARE:4<sup>®</sup> (Company Actions for the Reduction of Energy by 4) standard, which calls for a fourfold reduction in overall energy consumption and greenhouse gas emissions at its office buildings by 2040 at the latest. CARE:4<sup>®</sup> sets energy performance standards for all new buildings and renovations, including office space connected to production facilities. In a Group first, two buildings earned the CARE:4<sup>®</sup> label in 2009–one at the R&D center in Northboro, Massachusetts (USA) and the second at the Saint-Gobain Isover facility in Chemillé, France. The Plateforme du Bâtiment building in Aubervilliers, France and the Saint-Gobain Technical Academy in Kingscourt, Ireland, which provides training for the Gyproc, Isover, Weber, PAM and Ecophon brands, joined the CARE:4<sup>®</sup> club in 2010. A dozen projects designed to meet the standard are on the drawing board or under construction.



**Bernard Sesolis** Head of Tribu Energie, an energy and sustainable development design firm

"We've been working with Saint-Gobain Weber on the construction of two new office buildings in Adana, Turkey and Fortaleza, Brazil since 2010. Our mission is to offer solutions that deliver an acceptable level of comfort while consuming the least amount of energy possible. We're following the same type of low consumption approach that exists in France, taking local weather conditions and needs into account".



# Sustainable IT charter

A sustainable information technology (IT) charter was rolled out in 2010 following an internal study on our IT systems' environmental footprint. The charter is designed to raise employee awareness about IT-related environmental issues and to publicize the Group's related commitments and priorities.



## **CO**<sub>2</sub> emissions from transportation

Our businesses give rise to transportation-related  $CO_2$  emissions at the various stages of the product manufacturing and distribution process. Transferring raw materials to the factory, transporting certain products to a second site for additional processing and delivering finished products to the distribution outlet all generate emissions.

Alternatives to road haulage are used by Building Distribution banners, as well as by other Group Sectors. For example, some 40% of Saint-Gobain PAM products are shipped to their destination entirely via sea, river and/or rail links.

# Human resources policy



A welcoming, solid, open-minded company that offers long-term career opportunities.



# 189,193, employees in 64 countries

Our human resources policy is based on a longstanding tradition of respect for employees, social dialog with our partners and internal promotion. These policies leverage our shared values, described in the Principles of Conduct and Action that all team members are expected to embrace. They also reflect a series of guidelines on hiring, training, skills development, career management and working conditions. These guidelines are set by General Management and apply to everyone in our corporate community.

In the interest of enhancing its reputation and attractiveness to both current and potential employees, the Group aims to raise the visibility of the Saint-Gobain name to establish its image as a good employer, so that our values, history and professions are better understood by future hires. Internally, a good employer brand will build loyalty and motivation among employees who may in turn become the organization's best ambassadors. This approach is an integral part of our sustainable habitat and construction strategy, and will further enhance its value. Our innovative solutions are the work of our employees, who are given every opportunity to find professional fulfillment and acquire new skill sets and tools. Our human resources policy seeks to guide employees on their career paths within the Group by contributing to their professional development and by being open to all types of diversity. Human resources management is broadly decentralized, with representatives acting at the local level to promote a decisively multicultural, international approach.

## "Managerial attitudes"

In addition to the fundamental values expressed in the Principles of Conduct and Action, which apply to all employees, General Management outlined Saint-Gobain's main managerial attitudes in 2010 to help team leaders in carrying out their mission. Pierre-André de Chalendar, Chairman and CEO, presented the managerial attitudes, which were then cascaded down through the ranks. The managerial attitudes have also been included in numerous internal training programs.

## Always be consistent with our values

All members of the corporate community are expected to comply fully with the Principles of Conduct and Action. Each individual is an active member of a mutually-supportive community of entrepreneurs, and as such helps to promote a spirit of initiative and always puts the Group's interests first. The Group's values are shaped by a long-term strategy, decentralized management and a preference for internal promotion.

## **2** No leadership without close focus on people

This responsibility cannot be delegated. Managers must be able to 1) recognize and evaluate each person's contribution, 2) involve themselves in organizing and monitoring career paths, developing and training team members, and overseeing key recruitments and separations, and 3) take the time to listen, explain and inspire. When restructuring cannot be avoided, managers are required to dialog with employees and involve themselves personally in the site's environment.



## **3** Walk the talk

All managers are expected to set an example for their teams. They must act fairly and be perceived as doing so. To this end, managers need to set formal ground rules and communicate them clearly, honestly and faithfully. This means distributing and explaining the Principles of Conduct and Action, setting clear expectations and objectives, explaining what can and cannot be done, rigorously evaluating positive and negative performance, and sharing information in a transparent manner.

## **4** No complacency allowed

Managers need to explain that, in all situations, the means for achieving an end are as important as the end itself. Employees should understand what this signifies in their daily work and that it is a critical factor in their career growth. This attitude also means that certain types of behavior–such as lack of team spirit, unreliability, lack of sensitivity to people's problems, and self-importance–are unacceptable. All team members are asked to learn from their successes, as well as from their failures, and to be more aware of the world around them.

## **Managerial competencies**

A managerial competencies guide has been drawn up to describe the attitudes and personal qualities all managers should develop.



## Human resources facts and figures

## BREAKDOWN BY TYPE OF SECTOR

122,868

66,325

## BREAKDOWN BY CATEGORY

•24,988 managers 🗸

 •77,941 administrative employees, technicians and supervisors ✓

●86,264 operators ✓

75% of employees are located outside France ✓

Nearly 100 nationalities are represented in the workforce

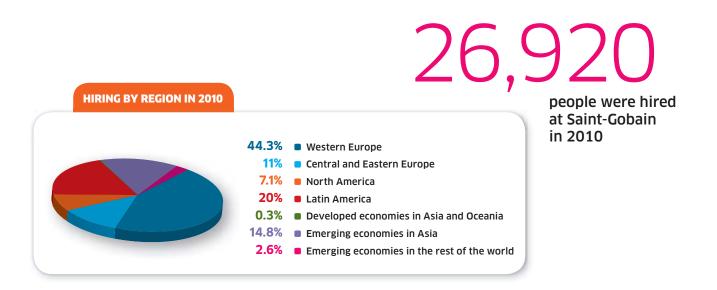
20% of our employees are women 🗸

## LTIR\* of 3,3 en 2010 🗸

\* Lost-time incident rate (LTIR) (more than 24 hours' lost time) – Group. For details on changes in the workforce and statistics by business, country and category, see pages 90 to 91.

# A welcoming, open-minded company

At all stages of an employee's career, human resources management is guided by respect for diversity and zero tolerance for any type of discrimination.



## An equal-opportunity employer that seeks out diverse profiles

In 2010, we gradually began hiring again, with targeted recruiting to support our growth worldwide. The global recession in 2009 had placed heavy restrictions on our hiring policy in all countries.

## Encouraging diversified career paths

Except in rare cases, hiring is handled locally by the Delegations<sup>12</sup> and companies, who define the most appropriate strategy for their situation. Depending on their needs, they build relationships with national and regional schools and universities, offer internships, sponsor classes and coordinate site tours to introduce Saint-Gobain to students.

We encourage our teams-and future senior executives in particular-to acquire international experience and diversified skills. To help them, we offer opportunities for international and multiple skill-set experience whenever possible.

## **Promoting fair hiring practices**

At the Group level, every step in the hiring process, from advertising open positions to selecting résumés and conducting interviews, is based on the most objective, professional criteria possible. Although specific practices may vary from one company or country to another, all forms of discrimination are universally prohibited.

## Attracting young applicants

In 2010, applicants under 26 accounted for 35.6% of new hires.

Each year, the General Delegations take part in university recruitment forums in many countries, nurturing ties with leading business and engineering schools through programs to sponsor a class year or to provide mentoring for selected students. We have dedicated training programs for young people in numerous countries and regions, including Germany, the United Kingdom, Brazil and Eastern Europe. In France, 1,398 young people participated in workstudy programs under skills-acquisition or apprenticeship contracts in 2010, for a youth contract rate of 2.9%.

Internships during a student's final year of study are a particularly effective way of introducing our businesses and corporate culture to potential applicants, who can then be inducted more easily upon completing their studies. Each year in France, more than 1,000 interns receive training in programs lasting six months or more. The internships are government-regulated and paid according to a uniform recommended pay scale.

In close cooperation with the French Agency for International Business Development (UBIFRANCE), Saint-Gobain also offers assignments worldwide to



French students as part of the country's Volunteer for International Experience (VIE) program. In all, 38 contracts were signed in 2010, with the United States, Germany, Belgium and Switzerland ranking as the top destinations. At the end of their assignments, 33% of the VIE participants were subsequently hired, principally in the fields of industrial processes, finance and research and development. Since 2001, the Group has welcomed 268 VIE participants.

#### **Supporting innovation**

Because innovation is an integral part of Saint-Gobain's strategy, particular care is given to recruiting researchers. In 2010, 143 research managers were hired in our R&D centers around the world to support major strategic projects and contribute to internal growth. We have also initiated long-term collaborative research projects with top-ranked university laboratories, with the ultimate goal of hiring researchers in strategic countries to help drive our local growth. Higher learning institutions meeting the Group's specifications are being identified and financing has been put in place for thesis work and postdoctoral internships.

# COMPETENCIES

# Identifying talent

The Saint-Gobain Talents program, launched in 2003, is designed to identify managers throughout the Group who have significant growth potential or key competencies and demonstrate a high level of professional commitment. As a likely source of future senior managers and executives, this talent pool needs to be prepared for a career shaped by mobility.

Operational supervisors are responsible for managing the program, which is carefully tracked by General Management. Tailored paths for Saint-Gobain Talents will soon be introduced to offer appropriate training for each profile.

## COOPERATION

## Partnerships with universities

In 2010, Saint-Gobain joined forces with Institut National des Sciences Appliquées (INSA) in Lyon, France to finance the Saint-Gobain corporate chair on Diversity and Success and to support the Engineering and Diversity chair. In December 2010, we also inaugurated the Innovative Solutions for Sustainable and Responsible Habitat chair at France's Ecole Nationale des Ponts et Chaussées (ENPC) and signed on to the creation of a master's program in energy at Ecole Polytechnique. In Japan, we have signed an agreement with the National Institute for Materials Science (NIMS) to create a center of excellence for advanced materials.

## GRADUATES

## Global Player Program

For several years now, the Central and Northern Europe Delegation has participated in the Global Player Program to recruit high potential graduates and prepare them for an international career at Saint-Gobain. The 18-month program includes three successive missions, one of which must be performed outside the participant's home country and Sector. The participants are evaluated at the end of each mission and receive comprehensive training throughout the program. The Global Player Program will soon be extended to the Nordic countries, as well as to the Asia-Pacific Delegation.

## A RESPONSIBLE BUSINESS ACTOR

# A welcoming open-minded company

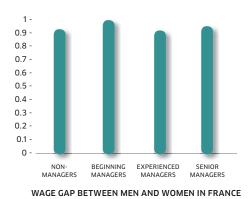


PERCENTAGE OF WOMEN EMPLOYEES BY REGION



# 19.7% Western Europe 27% Central and Eastern Europe 20.2% North America 18.8% Latin America 17.7% Developed economies in Asia and Oceania 17.8% Emerging economies in Asia 14.2% Emerging economies in the rest of the world

Women account for 20% of the Group workforce  $\checkmark$ 



Embracing difference

## Fostering gender diversity

The Group is committed to achieving a better gender balance, particularly at the managerial level, with regard to both hiring and access to positions of responsibility.

In 2010, 23.4% of our new hires were women: women accounted for 20% of the total workforce.  $\checkmark$ 

Of the 37,800 women working at Saint-Gobain as of end-2010, the breakdown by category was as follows:

• 4,302 managers 🗸

• 24,970 administrative employees, technicians and supervisors

• 8,528 operators

In all, 77.5% of the women at Saint-Gobain were employed in white collar positions in 2010, versus 76.7% in 2009  $\checkmark$ 

The percentage of women managers increased to 17.2% ✓ overall from 16.4% in 2009, with Central and Eastern Europe and France reporting the highest scores at 22.9% and 20.4%, respectively.

Among managers working outside their home countries, 21.5% were women.

Group management is committed to eliminating the wage gap as quickly as possible.

#### Expanding diversity and equal opportunity

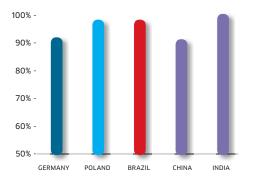
Respect for diversity and opposition to every form of discrimination are embodied in the Group Principles of Conduct and Action, and specifically in the principles of respect for others and respect for the rights of employees. These principles shape our Human Resources practices at every step in an employee's career.

In addition to its general commitments to fostering diversity and providing opportunities for the disabled, the Group actively develops initiatives in each host country that are aligned with local practices and culture and that meet the specific needs of each business.

## Promoting multi-cultural management teams

To develop our businesses, particularly in our newer host countries, we need to develop fully integrated local teams who embrace our values.

Local team members represent 99.7% of the management team in India, for example and 97.7% in Brazil.



PERCENTAGE OF LOCAL EMPLOYEES IN THE MANAGEMENT TEAM IN FIVE HOST COUNTRIES

## Supporting integration of the disabled

A wide range of measures have been deployed at Saint-Gobain to support integration of the disabled.

In France, where disabled persons represented 4.1% of the workforce<sup>13</sup> at end-2010, we pursued our efforts in a variety of areas, including recruiting and retaining the disabled (117 workstations were adapted during the year), outsourcing to the social economy, and raising awareness among the internal teams. A disability task force comprising Human Resources managers from the various businesses continued to meet regularly to allow members to share their practices and enhance action plans.

Several Group companies are members of the Tremplin (Springboard) Association, which assists and coaches disabled students and graduates entering the job market and provides access to a network of employers in the greater Paris area. A number of participants have already joined the Group as interns or new employees. Group companies are also encouraged to use sheltered workshops, and several Sectors have set up outsourcing agreements with sheltered employment programs and companies with special-needs employees.

## Hiring and retaining older employees

Applicants age 50 and over represented 4.7% of new hires in 2010.

In France, we pursued efforts to increase the percentage of older employees in the workforce during the year. The action plans covered:

- hiring of older employees;
- forward-looking career planning;
   improved working conditions and prevention of physically challenging situations;
- development of skills and qualifications and access to training:
- end-of-career scheduling and transition to retirement;
- transmission of skills and competencies and development of mentoring.

## HANDICAP

## Overcoming prejudice to demonstrate abilities

For more than three years now, Point.P has been involved in a program to provide employment opportunities for the disabled. In 2010, it focused primarily on developing outsourcing to sheltered workshops and maintaining disabled persons in their jobs. The program revolves around the deployment of action plans at the regional level, most often in close cooperation with local associations. At Point.P Normandy, for example, nearly 20% of the year's interns were disabled. Point.P also participates in numerous disability expos and events and conducts awareness campaigns in house.

## DIVERSITY

## Promoting job opportunities

In Mexico, the Saint-Gobain Gypsum plant in San Luis Potosi has introduced a corporate social responsibility program to promote job opportunities for disabled persons, single mothers and older job seekers. Ten people have been hired. The workstations manned by disabled persons have been adapted for greater accessibility and safety. In addition, the plant has rolled out a campaign to raise employee awareness.

<sup>13</sup> Workforce in units of 20 employees or more, who must report their statistics in accordance with the French law of February 11, 2005.

# A strong focus on working conditions

At Saint-Gobain, employee health and safety are a constant priority. Our objective is very clear: zero accidents and zero occupational illnesses.



# Objectives for 2011 • 2013

A lost-time incident frequency rate (LTIR) of 5 for the Building Distribution Sector and a total reportable incident rate (TRIR) of less than 6 for the industrial Sectors, for an overall LTIR of less than 2.8. These indicators include both Saint-Gobain employees and temporary staff.

## Safety: building on our achievements

We have expanded the scope of our safety efforts. Our EHS policy applies not only to Saint-Gobain employees but also to temporary staff working at Group sites.

## A sharp decrease in work accidents

Our safety performance improved again in 2010, with results exceeding our targets. All of the Sectors reported steady improvement.

## **Preventing serious accidents**

The only acceptable target for fatal accidents is zero. The number of fatal work-related accidents came to 11 in 2010, versus 14 in 2008 and 5 in 2009. We regret to report that there were two work-related deaths among Saint-Gobain employees (compared with three in 2009), six among employees of outside contractors (two in 2009), one among temporary workers and two among other third parties. There were no fatalities among temporary workers or other third parties in 2009. The Group recorded ten non-work-related deaths among employees in 2010 (versus nine in 2009) and five fatal accidents during commutes (nine in 2009).

## Safety standards

The causes of the most frequently reported accidents have been identified to define standards for priority deployment. New safety standards were introduced in 2010 concerning lift trucks and machine safety. Seven others were already in force concerning work at height, management of outside contractors working on site, work permits, commissioning/decommissioning procedures, risk assessment, accident analysis and front-line

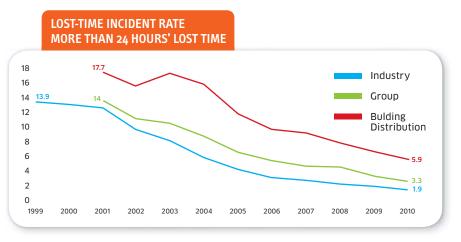
## 2010 RESULTS

The Group's LTIR improved to  $3.3 \checkmark$  in 2010. LTIR in the Building Distribution Sector stood at  $5.9 \checkmark$  while TRIR in the industrial Sectors came to  $6.9 \checkmark$ . This performance exceeded the targets set for 2010 of an overall lost-time incident frequency rate (LTIR) of less than 3.5, with a goal of 6.5 for the Building Distribution Sector, and a total reportable incident rate (TRIR) of less than 7 for the industrial Sectors.

safety practices as measured using the Safety MAnagement Tool (SMAT).

## Work environment

As part of our operations, we process and use mineral and chemical substances that may potentially expose some of our employees to risks. The industrial hygiene initiatives and innovative remedial solutions we have developed seek to keep this risk under control.



The lost-time incident rate (LTIR), defined as more than 24 hours' lost time, stood at 3.3 in 2010, representing a 0.5 improvement from 2009 and a 37% decrease from 2007. This compares with a target for 2010 of less than 3.5. The severity rate (SR), defined as the number of lost-time days per thousand hours worked, stood at 0.21, stable compared to 2009 and down 12.5% from 2007.



The Group also monitors the frequency

of reportable incidents, corresponding to incidents that lead to medically

diagnosed injuries regardless of whether they

the total reportable incident rate (TRIR) stood

at 6.9 √ in 2010 compared with 8.2 in 2009, for a 13% improvement from 2007.

result in lost time. In the industrial Sectors,

 and support tools
 We have introduced our own NOise Standard (NOS) to detect, measure and control potential sources of noise exposure in the workplace. The standard is designed to protect all employees

and subcontractors.

- A specific Posture/Lifting/Movement (PLM) method for identifying the risks inherent in handling operations and work postures has been developed and distributed to EHS managers in the Sectors and Delegations for use in industrial and distribution facilities. An EHS recommendation has been issued concerning the use of this method.
- The Toxic Agent Standard (TAS), set up by the Group, provides a framework for identifying, assessing and eliminating or controlling potential sources of exposure to toxic agents in the workplace.

#### New developments

Saint-Gobain has implemented REACH<sup>14</sup>, the European regulation on chemicals. We have successfully served as the Lead Registrant in consortia for the following high tonnage substances: calcium sulfate, mineral wool and zirconium dioxide. We are also working in partnership with other reporting companies in Europe who want to register the same substances. As a downstream user, we inform our suppliers about how we use substances so that they can cover these uses in their registration documents. At the same time, we carefully monitor updates to the list of authorized or restricted substances so we can fulfill our obligation to inform customers about specific hazards or substitutes. We have also included a clause in all purchasing contracts to verify supplier compliance with REACH. A new web-based resource comprising a dedicated software and training kit is being deployed across the Group in 2011 to assess toxic, mechanical, electrical and other risks. Known as SAFHEAR, it leverages both internal and external best practices to help industrial facilities manage risk. SAFHEAR includes the new online inventory of products and substances, with a link to the internal S'B@se database on substance hazards. Our overall policy and related resources are designed to ensure uniform prevention of health risks for all employees and product users.

<sup>14</sup> EC regulation 1907/2006 concerning the registration, evaluation, authorization and restriction of chemicals, and establishing a European Chemicals Agency.

## AWARDS

## Encouraging **Progress**

The Health & Safety Diamonds awards ceremony has been held each year since 1990. During the ceremony, the 25 sites with the best health and safety results are recognized and their best practices are shared with the rest of the Group. A number of Delegations, including Brazil, the United Kingdom, the United States and Italy have set up similar ceremonies of their own to give their teams added encouragement.



The Millionaires Club includes the sites that deliver the best safety performance. As of December 31, 2010, the Club had 156 member sites compared with 142 the year before. Of these, 38 were Millionaire sites with no lost-time incidents over the past 10 years and 8 were Millionaire sites with no lost-time incidents over the past 15 years. This compares with 25 and 5, respectively, as of December 31, 2009.

## Saint-Gobain PAM UK wins National Health & Safety Award

Saint-Gobain PAM UK (Construction Products Sector) has won a Health & Safety Award from the Society of British Water and Wastewater Industries (SBWWI). The judges were particularly impressed by Saint-Gobain PAM UK's commitment to health and safety and by the tangible and sustainable results achieved.



# A company that supports, motivates and empowers its employees

Managing, developing and transmitting employee skills are daily challenges for Saint-Gobain.

## **Skills management**

## Training

Skills enhancement for career advancement is a Saint-Gobain priority. We offer training programs for all types of skill sets and levels of experience. In 2010, we pursued our longstanding training efforts to provide all employees with the resources they need to meet their objectives. More and more, we do this through distance learning, as well as by organizing training sessions in our various host regions and countries.

In 2010, training expenditures amounted to 2% of total payroll.

Our training programs were both broadened and deepened. In all, 71.6% of the workforce received training during the year, up from 69% in 2009, with an average 23.9 hours per person *versus* 22 hours the year before. Technical courses accounted for 48% of total training, down slightly from 51% in 2009. Environmental, health and safety training remained steady at 24%. By category, 15.5% of participants were managers and 84.5% were nonmanagerial staff. Women account for 19% of the employees receiving training in 2010.

We continued to develop distance training during the year, with the number of participants doubling from the previous year to 30,545.

Our training policy focuses on four strategic axes:

- deploying our sustainable habitat strategy and getting employees involved in making this strategy a reality;
- supporting cultural change within the Group to place greater emphasis on innovation and on meeting customer needs and expectations;
- enhancing the Group's strengths and consolidating its know-how in preparation for a new stage of growth;
- supporting Saint-Gobain's growth in emerging markets.

## MENTORING



Saint-Gobain North America has launched the MyMentoring program under which mentees interested in achieving a specific objective or acquiring a particular skill can get confidential, one-on-one help from a mentor. This approach to human resources development offers objective assistance, without any hierarchical relationship. Programs like MyMentoring increase productivity and employee involvement, strengthen networks, enhance communication and foster the sharing of skills and strategic capabilities within the company. The mentoring is offered for periods of 3, 6, 9 or 12 months.



Saint-Gobain Glass Egypt has 300 employees.

## Egypt Training and skills transfer

## TESTIMONIAL

# Advanced management seminar,

to help seasoned managers embrace the Group's strategy



During the five-day seminar, participants review their career paths and role as team managers, analyze the various aspects of deploying the sustainable habitat strategy and discuss the Group's fundamental values in discussions with senior executives and in a half-day meeting with the CEO.

"We organized this seminar for two main reasons," explains Davide Dardanello, Corporate Training Deputy Director. "First, many seasoned managers who had been through the main School of Management courses wanted to continue their training. Second, we needed to explain recent changes in our strategy to the people who were going to be in charge of deploying it". The Saint-Gobain Glass float glass plant inaugurated in 2010 in Ain El Sokhna, Egypt, was built with local and international partners. A significant training and skills transfer program was deployed for the project, which took 28 months to complete. The majority of the plant's employees – including engineers and technicians but also operators – received training before the facility opened in our plants in France, Romania, India, the United Kingdom and Brazil.

## **Employee mobility**

Geographical and job mobility is a powerful tool for driving growth and consolidating our corporate culture, as people change positions among our different businesses and country organizations. Inter-Sector and interbusiness mobility has virtually doubled over the past ten years.

In each host country, our human resources departments have mobility managers who guide and support employees interested in mobility assignments.

Combined into an integrated information system, a wide variety of systems and resources help to facilitate the exchange of information on employee aspirations and mobility opportunities. They include:

 the annual performance review, where HR managers can identify an employee's interest in changing jobs in the near to medium term. In 2010, 82% of managers and 49% of nonmanagers had a performance review. The review is conducted using a standardized form deployed throughout the Group since 2010;

• employee reviews and succession planning, which are performed every year using a standardized form. These reviews are designed to anticipate possible changes in positions and people in the various Sectors and Delegations.

A number of sources of information are available in-house, including a list of job openings by country, profession and type of contract posted on the Group intranet. An International Mobility Guide and dedicated intranet site have also been developed to facilitate the process of relocating to a new country.

At the end of 2010, 1,362 executives were working outside their home countries. Of these, 403 were expatriates. This figure has been declining for the last several years, as the Group has focused on promoting local managers, notably in emerging markets, in its commitment to creating more international teams.

# A company

that supports, motivates and empowers its employees



## FOCUS

In France, Saint-Gobain signed the CINDEX convention concerning the spouses/partners of expatriate professionals at the end of 2010. Twenty-four other companies, most of them multinationals, have already signed the agreement, under which an employee of a signatory company whose spouse or partner is posted as an expatriate by another signatory company can benefit from unpaid leave so they can relocate together. The employee must have been with his or her company for at least three years to benefit from the agreement.

By joining the group of signatories, Saint-Gobain has enhanced the support system available to expatriate spouses or partners. Geographical and job mobility is not restricted to managers. Technicians are also offered opportunities to apply their experience abroad or as part of project teams in multicultural environments.

## Motivating and empowering employees Compensation

Compensation policies are designed to be fair, motivating and transparent, in compliance with the provisions of the Universal Declaration of Human Rights concerning the right to just and favorable remuneration ensuring an existence worthy of human dignity. The Delegations set base salary scales

for their region by country and business, in line with market practices. Each company sets employee salaries based on its business and its financial and employee relations situation. Wages of blue collar workers and nonmanagers are at least in line with the levels defined in the collective-bargaining agreements.

In addition, to foster team spirit and ensure that all employees have a stake in their company's success, the Group encourages member companies to sign discretionary profit-sharing agreements whenever possible. In France, virtually all employees are now covered by such an agreement, with the French subsidiaries paying a total  $\in$ 72.3 million in profit-shares for the year, or 4.78% of total payroll.

Managerial compensation generally includes a bonus, governed by rules set at the Group level and tailored to each region based on local conditions. The bonus also takes individual performance into account, as assessed during the annual performance review.

In most host countries, subsidiaries provide employees with supplemental healthcare and other benefits, as well as stipends for meals and occasionally for transportation. These additional benefits vary considerably from one country to another. They generally go well beyond employers' obligations under labor law and depend on local living standards.

#### **Health coverage**

In many countries, Saint-Gobain helps employees obtain coverage for their healthcare costs. In 2010, the health coverage policy in France was harmonized to offer benefits under a common system for all the subsidiaries. By leveraging the Group's size, we are able to obtain competitive rates and reduce withholding of social taxes.

#### **Employee share ownership**

Employee share ownership is a major part of Saint-Gobain's social contract. The program strengthens ties between



**Geographical and job mobility** is offered to managers and technicians.

the Group and its employees by enabling team members to become shareholders under preferential terms, giving them an even greater stake in their company's growth and performance.

Employees are offered shares at a discount and, in some countries, they are entitled to a matching contribution as well. Investments in the Group Savings Plan must be held for a period of five or ten years.

Introduced in France in 1988, the Group Savings Plan is offered annually. It has been steadily extended to employees outside France, notably in emerging markets. The Plan currently covers 42 countries, including most of Eastern Europe, Latin America and Southeast Asia, as well as China, India and South Africa. In 2010, these countries represented an aggregate 11% of Plan subscribers. Employee shareholders are represented on the Board of Directors of Compagnie de Saint-Gobain.

In 2009, Saint-Gobain set up a socially responsible investment fund within the Group Savings Plan with a focus on sustainable development to give employees the opportunity to invest on the basis of both financial and non-financial criteria. Five to ten percent of the diversified fund is continuously invested in socially responsible French companies to finance inclusion programs, and the rest is invested primarily in bonds and shares of socially responsible companies in other European countries.

## TESTIMONIAL



Bernard Cusenier Chairman of Association des Actionnaires Salariés et Anciens Salariés de Saint-Gobain and Chairman of the Supervisory Board of FCPE Saint-Gobain Avenir corporate mutual fund.

"The Employee Shareholders" Fund is Saint-Gobain's second-largest shareholder, with 7.8% of the capital and 10.7% of the voting rights. The Fund comprises more than 80.000 individual accounts and represents a core of loyal, long-term investors who support the Group's growth strategy and intend to participate *in sharing the value created* by Saint-Gobain. Through a plan renewed annually for more than 20 years, the Group has allowed employees to build up long-term savings with an attractive return. Employee participation in this common project is an additional source of social cohesion."

# A company

## that supports, motivates and empowers its employees



The Group is seeking opportunities for dynamic and interactive exchange with its staff.

## Transparent, meaningful social dialog

Throughout its long history, Saint-Gobain has seen social dialog as a critical lever in the company's long-term development. In 2010, Saint-Gobain was recognized in the Social Dialog category by the Trophée du Capital Humain awards in France for its proactive efforts to anticipate impacts on jobs. As part of an initiative included in the European Social Dialog Convention\* in 2009, an outside expert chosen by employee representatives reviews all of the Group's industrial facilities in Europe and works with Sector management to anticipate potential restructuring risks. A summary of the expert's finding, updated annually, is distributed to the Convention's 70 members.

In each business, most of the social dialog process takes place at the company or facility level, where it can deliver an appropriate response to local concerns and issues. Employee representatives negotiate and sign agreements with individual companies, in accordance with local legislation and practices. These practices vary from country to country. In 2010, 65.2% of employees had an employee representative body in their unit.

Of the 1,343 agreements signed with employee representatives during the year, 36% addressed compensation issues, 21% work organization and 16% jobs.

In all, 67.2% of employees (99.8% in France) are covered by a collective-bargaining agreement.

Saint-Gobain is particularly attentive to compliance in all units worldwide with employees' right to organize, to belong to labor unions and to take part in collective bargaining. In keeping with this spirit, a new indicator was created in 2010 that calls for the Delegations to assess the risk of non compliance and describe corrective measures.

#### Restructuring

Layoffs, restructuring programs or site closures are carried out only when they are unavoidable to preserve the financial health of the subsidiary or Sector in question. In such cases, the Group's size and diverse business base offer a wide variety of opportunities for in-placement transfers. In France, restructuring may include plans to preserve employment and voluntary separation plans. In all cases, Saint-Gobain Développement leads an active support process designed to place as many of the affected employees as possible in new positions. In particular, local job centers deliver ongoing, personalized support, even after the work site has closed. Procedures are also in place to

\* This Saint-Gobain body, which comprises union representatives from 27 European countries, provides an opportunity for General Management and employee representatives to exchange view on the Group's strategy and transnational issues.



address the professional, material, psychological and personal consequences of losing one's employment. Depending on their needs, employees may benefit from additional training, relocation assistance, spousal job placement or support for pursuing a personal project.

#### Gauging the social climate

The Group is constantly seeking opportunities for dynamic and interactive exchange with its staff, in the form of meetings, surveys and interviews so that it can ensure social cohesion among internal constituents and understand the expectations and aspirations of its employees. Many of the Delegations and companies also regularly conduct surveys to gauge employee opinion at every level and define local action plans. The Brazil Delegation encourages its subsidiaries to survey their entire workforce every one or two years to assess employee views and expectations on Group strategy, the image of the company and the Group, working conditions and the extent to which their personal aspirations are being fulfilled. A number of regular events enable managers to talk directly with General Management.

## FRAMEWORK-AGREEMENT



# Managing and preventing workplace stress

In November 2010, Pierre-André de CHALENDAR, Chairman and CEO of Saint-Gobain. and five French labor unions signed a framework agreement on preventing workplace stress in France. The agreement, which covers all Saint-Gobain subsidiaries in France. is based on the definition of workplace stress provided in the national inter-industry agreement of July 2, 2008. The occupational health, safety and working conditions committee (CHSCT) is recognized under the agreement as an essential player in its implementation. The agreement focuses on identifying workplace stress and on organizing an appropriate action plan to be deployed in each subsidiary. In particular, it provides for a methodology based on a scientific approach to ensure that stress is measured as objectively as possible. Lastly, the agreement calls for the deployment of a major training program for CHSCT members, supervisors and human resources managers.

# SAINT-GOBAIN, A socio-economic stakeholder





## Being a leader brings with it a number of responsibilities. The first is to be exemplary in our practices and conduct, both in-house and outside the company.

The second is to make stakeholders aware of the challenges involved in sustainable development and sustainable habitat solutions. The third is to play an active role in local economic development in our host communities. And the fourth is to support our host communities' development by sponsoring local actions.

The Saint-Gobain Initiatives international corporate foundation expresses our objective commitment to our host communities.

# **Exemplary** in our practices and conduct

As a leading actor in our business areas, we have a responsibility to set an example. In addition to complying fully with regulations, our teams must be above reproach in their conduct and practices, both in-house and outside the company.

## **Group Compliance Program**

In 2009, the Board of Directors approved the launch of a Group Compliance Program to ensure that the Principles of Conduct and Action (see page 9) are applied properly in all Divisions worldwide.

The Group Compliance Program consists of four main components:

- the Responsible Development;
- the Competition Law Plan;
- the Internal Audit and Internal Control;
- the Compliance alerts system.

#### **Responsible Development**

The Responsible Development Department ensures that the Principles of Conduct and Action are distributed to all employees, that everyone understands them and that the operational departments have deployed good practices.

It is also responsible for training the Group's managers. To do this, the Responsible Development Department systematically participates in School of Management seminars and more specific training sessions for auditors, purchasing managers and others on a case-by-case basis. The training course begins with an overview of the Principles of Conduct and Action, followed by a group discussion. The goals here are to discuss and explain how to apply them more effectively in everyday work and make sure that all participants understand the critical importance of responsible development. More than 500 managers underwent awareness training in 2010.

## **Competition Law Plan**

The first Principle of Action, respect for the law, states that "all Group companies (...) prohibit actions that could potentially infringe on competition law."

A Competition Law Compliance Guide has been translated into 17 languages and distributed to all managers worldwide. The Guide reviews competition rules, describes procedures to be followed and explains the consequences of non-compliance.

The Competition Plan, launched in 2007, is designed to ensure compliance by:

- making sure that managers understand the basic rules of competition law through the "Comply" online training course, which has been translated into 17 languages. Managers are required to participate in a refresher course every two years. A new campaign was launched in October 2010;
- **organizing seminars** led by lawyers and Group legal specialists for the most directly concerned managers. Since the Competition Law Plan was launched, 2,351 managers have attended 105 seminars in 18 countries;

• sending specialized lawyers to perform unannounced audits. So far, 91 sites have been audited in 23 countries, covering a total of 388 people.

Everyone in the Saint-Gobain corporate community is expected to comply at all times with good competition practices. General Management regularly reminds team members of the Group's zero tolerance policy.

## Internal Audit and Internal Control

The Internal Control system is responsible for controlling the units' main business risks. It is designed to ensure that units comply with laws and regulations and apply the strategy and guide-lines set by General Management. Internal control also verifies that processes operate properly, that financial information is reliable, that property, plant and equipment and intangible assets are safeguarded and that fraud is detected and eradicated.

As part of the Group Compliance Program, the Internal Audit and Internal Control Department has designed and deployed a compliance statement that all general managers are asked to sign each year.

A detailed description of the Group's internal audit and internal control system is provided in the Annual Report (pages 88 to 95).

## **TRAINING**









# The "Adhere" online training program

In 2010, the "Adhere" online training program for the Principles of Conduct and Action was deployed among all managers worldwide. The program presents 27 real-world situations and asks participants to identify the appropriate Principle and related behavior. The same situation is repeated until a satisfactory answer is provided. Launched in March in France, the program has been translated into 17 languages and gradually extended to all host countries. As of December 31, 2010, more than 18,000 managers (or around three out of four) had successfully completed the program.

#### **Compliance alerts system**

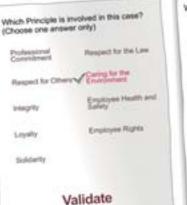
In 2010, we continued to deploy the system of compliance alerts in our host countries, in accordance with local administrative constraints and legislation. An e-mailbox has been opened for each country on the intranet so employees can contact the regional compliance correspondent. The compliance correspondent is responsible for collecting and processing the messages and for ensuring that the identities of the authors and the persons discussed remain confidential. This non-obligatory system provides a way to report serious violations of applicable laws, internal rules and procedures, or the Principles of Conduct and Action. All reports must be submitted in good faith. Anonymous reports are not accepted.

As of December 31, 2010, 61 countries had opened an e-mailbox.

## "ADHERE"



#### A case study of the online training ADHERE



## Who is right, Emilio or Maria?

- who you still have the re-too tale, when you're a
- mett 2 is t cal level before taking action and ado top best practices. You need to be an poactive, water is a precisus reexu
- 1

# **Exemplary** in our practices and conduct



**Communications campaign in India** to promote the Principles of Conduct and Action.



#### **Fighting corruption**

Our Principles of Conduct and Action call for compliance with the law. As we have seen, this means complying with the rules of fair competition. It also means rejecting all forms of corruption. A number of resources have been developed to help employees take precaution against the risk of corruption. In particular, the internal control system describes risk factors related to practices that could be construed as corruption. The internal control reference base includes specific controls covering relations with third parties and their remuneration. The level of control is assessed through annual compliance statements (see page 90 of the Annual Report) covering all of the Group's businesses and, in some cases, by specific audits.

Appropriate procedures have been implemented to strictly manage relations with third parties in the businesses with the highest export sales. No cases of corruption were reported through the Compliance alerts system in 2010. In 2011, we intend to harmonize the various anti-corruption rules and procedures in the businesses and Delegations to provide the Group with a general frame of reference.

#### **Human rights**

Saint-Gobain is committed to preventing any infractions to respect of human rights.

For this reason, three new indicators were created in 2010 concerning nondiscrimination, child labor and forced or compulsory labor. All Group units have been asked to identify operations that could be at risk for forced labor, child labor or compulsory labor and to report the number of incidents of discrimination recorded during the year related to race, skin color, gender, religion, political opinion or national or social origin, as defined by the International Labor Organization, or any other form of discrimination involving internal or external stakeholders. An incident corresponds to legal action or a complaint lodged against a Group company, as well as evidence of non-compliance identified through established procedures, notably as part of the internal audit and internal control process.

These indicators are a measurement tool and a way to signal the Group's determination to apply and enforce its fundamental values in the front lines. To date, no infractions have been recorded.

#### FOCUS

## Building Distribution Wood purchases

An environmental policy on wood was introduced in September 2007 in the Building Distribution Sector. This policy defines ethical and responsible practices to be followed by the banners for purchasing and selling wood and sets common operating guidelines. In 2010, a specific brochure was produced and sent to all the purchasers and salespeople in the network.

The goal for the year was to be able to ensure the origin and traceability of all products and to source 80 percent of wood and wood-related products from certified forests. This goal was achieved.

#### **Responsible purchasing**

The responsible purchasing process reflects the application of the Principles of Conduct and Action to Group purchasing. The process is based on:

- a Purchasing Charter, which provides guidelines for routine purchasing practices;
- a Suppliers' Charter, which spells out the Group's environmental and social criteria for suppliers and service providers. This Charter is distributed to all our suppliers;
- a self-assessment questionnaire for suppliers (modified in 2010), which is now systematically included in all calls for tenders generated by the central SRM Prosource software package.

All general purchasing training seminars include a section on responsible purchasing. A specific program is also currently being rolled out. All framework agreements signed by the Group systematically contain responsible purchasing clauses to remind suppliers about the Group's sustainable development requirements. Between 2008 and 2010, priority measures were taken to reduce energy and raw material consumption, optimize the supply chain and raise awareness about the automobile fleet's carbon emissions.

A network of purchasing officers is currently being set up in the country organizations and businesses to strengthen the responsible purchasing process by giving each purchaser access to a contact person who can provide examples and advice. This network will foster best practices sharing and support local discussions on corporate social responsibility issues as they apply to purchasing.

## Purchases from the social economy

A project launched in 2009 to develop purchases from the social economy produced tangible results in 2010. In France, Saint-Gobain was involved in organizing Pas@Pas, an association that brings together several companies and encourages the development of business with organizations who work with disabled persons and underprivileged workers. An Internet portal was opened in June 2010 with a free-access address book and a restrictedaccess section for purchasers that includes supplier information sheets and a template for issuing offers to selected organizations. The platform's launch was supported by an awareness campaign for Group purchasing officers.

#### TESTIMONIAL



Antoine Doussaint Vice President Purchasing at La Poste and member of the Pas@Pas Board of Directors.

"I was impressed by Saint-Gobain's drive in setting up this platform. We and the other founding members shared this determination to succeed, supported by our synergistic strengths. We all encountered the same difficulties with regard to raising awareness among our purchasing officers, finding service providers, expanding the areas available to the social economy and sharing experience. Together, we have made a great deal of progress. I have great hopes for Pas@Pas, which is a crucial resource in developing our purchases from this sector."

# Supporting local economic development

We take measures to promote economic development in the employment catchment areas around our sites.



Group companies nurture a close relationship with professional organizations and local authorities, while the Delegations maintain contacts with national government agencies, chambers of commerce and industry federations.

Relations with local communities are the most highly structured in France, where the Group's presence is the most concentrated. This is primarily due to Saint-Gobain Développement, which supports local development and the revitalization of employment catchment areas.

Saint-Gobain Développement contributes to local economies in a variety of ways, from forging direct partnerships with small- and mediumsized enterprises (SMEs) and helping employees create their own businesses to participating in regional events and providing support to local development networks and organizations.

To support growing SMEs, Saint-Gobain Développement offers a comprehensive range of solutions, including low-interest loans, expertise sharing and skills transfers, as part of a long-term "manufacturer-entrepreneur" partnership.

In 2010, Saint-Gobain Développement signed 66 agreements involving nearly  $\in 1$  million in loans, thereby helping to finance the creation of 226 jobs in our host communities. Most of the loans were first granted to companies involved in the environment.

Lastly, Saint-Gobain Développement helps employees who want to start their own businesses by conducting feasibility and other in-depth studies and, if appropriate, by providing technical and/or financial support for up to five years. Energy efficiency projects are a special focus, as are projects with the potential to create jobs in regions with high unemployment.

In all, 21 projects were tracked and financed in 2010, but the impact in people terms was probably much larger, since successful projects often result in the creation of several jobs.



Saint-Gobain Développement support in France.



#### TESTIMONIAL



In February 2010, Maxime Reffay acquired a former Saint-Gobain mortar and concrete site located in Saint-Quentin-Fallavier, France, and created a small business called t-mix.

"Saint-Gobain Développement provided valuable assistance in getting my project off the ground. They put me in contact with a financial analyst who advised me on how to put my development plan together and supported my search for financial backing. They're still helping me keep the project on track. We started t-mix with six employees and now have fifteen".

#### OCCUPATIONAL INTEGRATION

# The "100 opportunities - 100 jobs" program

in the "100 opportunities - 100 jobs" program to help develop employment in our host communities. The initiative is designed to provide an on-ramp for disadvantaged young people with few skills by organizing mock interviews, site visits, vocational training programs, work/study contracts, and other types of support. Carried out in cooperation with the local iob placement and unemployment offices, local communities and other businesses in the area, the program purpose in that it gives companies an opportunity to recruit people who are located near their sites but who, for a variety of reasons, are too often disconnected from the workplace. In 2010, Saint-Gobain was involved in the program in Chalon-sur-Saône, Grenoble, Chambéry, Lyon, Nice and Aubervilliers.

# **Raising** awareness among stakeholders

In addition to our manufacturing and sales operations, we carry out a number of programs to raise awareness among younger generations and building professionals about sustainable development and habitat issues.

# Solar Decathlon Europe

In 2010, Saint-Gobain was one of the main partners of the Solar Decathlon Europe competition, in which 17 universities worked on projects to build self-sufficient solar homes.

Saint-Gobain in the United Kingdom partnered with the University of Nottingham on a zero-carbon passive house, known as Nottingham HOUSE (for Home Optimising the Use of Solar Energy) built almost entirely using products made or approved by the Group.





# Izocam

Izocam, the insulation industry leader in Turkey, organizes events in schools to teach children about global warming and its impact on the environment. The events, which feature a presentation, short film and mascot, are scheduled to reach 30,000 school children in 2010 and 2011.

## Awareness campaigns for young people

The young people of today will drive change in the future, which is why Saint-Gobain is committed to raising their awareness of the environmental challenges we face. Our various units have launched numerous initiatives in this area, including awareness campaigns in schools and sustainable habitat contests in post-secondary institutions.

#### Programs for building professionals

We are involved in forward-looking thinking on the sustainable buildings of tomorrow, both at the local level, taking regional or national characteristics into account, and internationally, with the deployment of shared solutions.

This work has translated into a number of tangible initiatives carried out in cooperation with other manufacturers and public partners.

## An international commitment to sustainable building

As part of our commitment to sustainable building, we have joined the United Nations Environment Program's Sustainable Buildings & Climate Initiative (UNEP-SBCI) and Sustainable Building Alliance.

UNEP-SBCI is a partnership among businesses, governments, non-governmental organizations and research organizations to promote sustainable building practices worldwide.

The Sustainable Building Alliance's goal is to develop common metrics that can be used to monitor the environmental quality of buildings. These metrics are to be based on a shared methodology but adapted to local labor, economic, cultural or weather conditions.

#### TESTIMONIAL



"Saint-Gobain's membership of the UK Green Building Council demonstrates their commitment to sustainability, putting them on the cutting edge of the debate around policy and best practice. Saint-Gobain is a critical part of the supply chain, but membership of UK-GBC gives them the ability to break down silos, to work collaboratively with clients, specifiers and end-users".

Paul King CEO of the UK Green Building Council.

We also keep a close eye on the development of international standards to assess the environmental, social and economic impact of buildings such as ISO 21931 and CEN TC 350 (Sustainability of construction works).

## A local commitment to sustainable building

## • Recognizing each country's specific characteristics

As a sign of our commitment to environmental protection, we belong to Green Building Councils-trade associations that promote sustainable housing-in a number of countries, including the United States, Colombia, South Africa, the United Kingdom, Italy, the Netherlands, Spain and Germany. In 2010, we joined the Green Building Council in France.

These partnerships give Saint-Gobain the opportunity to share its expertise in environmental quality and encourage best practices in the building industry, while recognizing each country's specific characteristics.

## • Promoting energy efficiency in buildings

In response to the challenge of global warming, Saint-Gobain has adopted a proactive communications policy to raise public awareness about the impact of buildings on the environment (through their greenhouse gas emissions) and on fossil fuel consumption, and to convince the public to take action to significantly reduce this impact.

We have helped create a number of local associations over the years to generate support for energy efficient buildings, including *Isolons Ia Terre contre le CO*<sub>2</sub> in France, *Isoterra* in Belgium and *Spaar het klimaat* in the Netherlands.

#### SUSTAINABLE CONSTRUCTION



In Spain, Saint-Gobain is involved in *La Casa que Ahorra*, a foundation devoted to energyefficient homes created in 2010. With the support and assistance of the Spanish federation of towns and provinces, the foundation will carry out energy efficiency studies in several Spanish cities and organize awareness campaigns.

#### Guides on sustainable development

The Group and several of its companies around the world have published practical guides on sustainable development and habitat solutions, including:

- Comment faire rimer habitable et durable ? by Didier Roux, Director of Research & Innovation at Saint-Gobain;
- *Isover Évolutions*, by Isover, France;
- The Case for Energy Efficiency in Buildings, by Saint-Gobain North America;
- The Sustainable Building Guide, Jewson, UK.

#### **Awareness actions**

The Internet is another valuable resource for raising awareness. In Italy, 12 Saint-Gobain online information and training conferences on sustainable construction were organized during the year. More than 3,000 professionals attended the first ten sessions.

# Supporting community development

At both the corporate level and in our sites around the world, we initiate sponsorship programs to support local community development.

In 2010, a total of €4.4 million was devoted to these programs.

#### The Saint-Gobain Initiatives International Corporate Foundation

The Saint-Gobain Initiatives International Corporate Foundation expresses our commitment to our host communities. The foundation supports projects put forward by current and retired Saint-Gobain employees in three focus areas:

youth integration through housing sector;



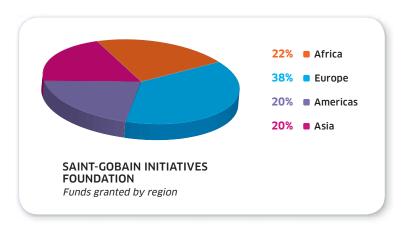
- construction, refurbishment or renovation of social-housing for general interest purposes;
- energy efficiency and environmental protection in the social housing.

This support can take the form of financing or technical expertise.

The foundation also has a very positive impact on our employees, as it gives them a tangible way to express their commitment and generosity. Sponsored projects must be implemented through a non-profit association and should preferably be located near a Saint-Gobain site.

Since its end-2008 launch, the Saint-Gobain Initiatives International Corporate Foundation has provided €2.3 million to support 26 projects, including:

- the construction of homes as part of large-scale low-income housing programs in Mexico, India, Brazil and other countries;
- the construction of energy efficient shelters and houses for disadvantaged persons in France, the United States and other countries;
- the renovation of an orphanage in Austria;
- youth integration job sites in the construction sector;
- the rehabilitation of a riverboat shelter for homeless people in France;
- the construction of a drinking water purification system for a village in Vietnam.





#### SOUTH AFRICA

## Sustainable homes in South African townships

The foundation is participating in the construction of more than 90 energy efficient homes in townships located in Johannesburg, Cape Town and Durban, for a total investment of  $\in$ 470,000 over three years. This is the largest amount granted by the foundation to date. The project is organized by Habitat for Humanity (South Africa) and supported by the South African government. The Saint-Gobain Construction Products Academy provides additional assistance in training the worksite volunteers.





#### TESTIMONIAL



Senamile Mazibuko Business Development Manager Saint-Gobain Construction Products South Africa, sponsor of a social housing construction project.

"Although the government is committed to fighting poverty and developing a range of social housing options, it is confronted with many challenges. The support of Saint-Gobain, the only private donator involved in this project, enables us to build 90 houses so to provide people in need with decent housing. Habitat for Humanity chooses the land and oversees the work. The houses are designed to comply with energy efficiency criteria. We take care of the ceiling and wall insulation, and the orientation of the windows. Many employees of the Group volunteered to take part in the construction work. For me, this is an extraordinary experience, one I'd willing do over again."

# Supporting community development



#### FRANCE

In Marseille, France, the foundation financed the purchase of a worksite vehicle and teaching materials for a school that trains young people in building industry skills, in liaison with Fondation d'Auteuil.





#### **UNITED STATES**

In Worcester, Massachusetts (USA), we helped renovate a house with the Matthew25 association, which rehabilitates homes for the disadvantaged.

VIETNAM

In Long An, Vietnam, the foundation supported a project to install a drinking water purification system alongside Les Enfants du Vietnam association.



#### **Local initiatives**

Our sites around the world interact with their immediate environment and participate in local community development through initiatives. Examples include:

- **in North America:** the Saint-Gobain Corporation Foundation, which coordinates charitable donations to non-profit organizations in the United States and Canada;
- **in India:** the Saint-Gobain India Foundation, which is active in educational projects;
- **in France:** Fondation PAM and Fondation Placoplatre, which have programs to provide job opportunities for young people in their respective businesses.

Although these initiatives focus on the Group's reference markets, others cover more general areas such as education, research, culture and health.

#### ARGENTINA

## Un Techo para mi País

In Argentina, Saint-Gobain Isover signed an agreement with non-profit association Un Techo par mi País (UTPMP) as part of its corporate social responsibility program. UTPMP is located in 18 Latin American countries.

The agreement is designed to improve the quality of life of families living in extreme poverty by building 1,000 low-income homes with efficient insulation.

The Franco-Argentine Chamber of Commerce recognized Isover for its efforts with the CCIFA-RSE 2010 award for mid-sized companies during the sixth corporate social responsibility awards.



## Together

In 2002, SGBD UK & Ireland launched Together, a fund drive that has attracted enormous in-house participation. Since then, more than £1.6 million have been collected for distribution to charities. The program's new partnership with Help the Hospices brings together all SGBD UK & Ireland employees.

#### **UNITED STATES**

## Youthbuild

In the United States, Saint-Gobain supports the YouthBuild program for young people aged 16 to 24 who need a helping hand. The program offers both classroom training and hands-on experience in building sustainable, affordable homes for low-income families. In addition to financial support, Saint-Gobain provides products, labor and energy efficiency expertise.

# METHODOLOGY AND INDICATORS





### METHODOLOGY AND INDICATORS

# **Reporting methodology**

# The data published in this sustainable development report comes from two separate reporting systems:

- the NRE system set up in 2002 to comply with the disclosure requirements of France's NRE Act. Data on employee numbers from a reporting system established several years ago has been included since 2008;
- the Gaia environment, health and safety (EHS) reporting system set up in 2003, which was upgraded in 2008.

#### **Basic reporting principles**

#### Baseline

The baseline for Saint-Gobain social reporting and the Gaia EHS system was developed in line with the requirements of the UN Global Compact and France's NRE Act of 2001.

#### **Social reporting**

Stability was a primary consideration in determining social indicators, to provide the most reliable basis for comparison. Consequently, there have been no major modifications to these indicators since they were introduced in 2002. The only changes concern the introduction of new indicators on gender (by socio-professional category) and age to refine the analyses and the inclusion of four indicators on human rights in 2010.

#### **EHS Reporting**

To keep pace with developments in international standards such as the Global Reporting Initiative and leverage feedback from sites, working groups meet on a regular basis to propose improvements to the EHS indicators. These proposals are discussed and approved at steering committee meetings held twice a year.

#### Scope

#### **Social Reporting**

In 2010, there were 1,344 social reporting units for 617 fully consolidated companies at year-end.

As in 2009, the two separate reporting systems used in prior years were merged to improve the reliability of data collection, with a 99% coverage rate for all indicators.

New companies joining the Group are included from the date on which they are consolidated, while divested companies are excluded from the figures for the year of divestment.

- Employee numbers are reported on a monthly basis.
- NRE data-corresponding to the indicators specified in France's NRE Act of 2001-are reported annually.

#### **EHS Reporting**

There were nearly 1,600 EHS reporting units in 2010, corresponding to all of the Group's facilities. The increase from 2009 reflects the more targeted data collection process. The scope of reporting covers the facilities operated by all companies that were at least 50%-owned by Saint-Gobain at the balance sheet date, including, where possible, facilities that came onstream or were acquired during the year and excluding facilities that were closed or sold. Maxit, acquired in 2008, was included in the 2009 safety reporting, but only the main Maxit facilities were included in the 2010 Environmental reporting. As for other Group operations, only units and skillsets with a material environmental footprint have been included.

The majority of data are entered directly in the Gaia system by the EHS units, and the remaining information is extracted from reporting systems used for other purposes (such as "Teams" for the Insulation Division).  The Safety, Industrial Health & Hygiene, General and Safety-On-Line (SOL) questionnaires are designed to cover all facilities and all Group employees. The Safety and Safety-On-Line questionnaires include questions about temporary staff, and the Safety-On-Line questionnaire also includes questions about subcontractors.

Safety data are reported on a monthly basis and comprise information about all accidents that occurred during the month and their severity. The system covers approximately 98% of employees across the Group. Lost-time accidents (including fatal accidents) are reported systematically via the Safety-On-Line system, with a description of the circumstances of the accident.

The Industrial Health & Hygiene questionnaire and the General questionnaire are completed annually.

#### • The Environment questionnaire

is completed annually by 1,004 facilities, including environmentally sensitive "concerned" sites, sites that need an operating permit, mines and quarries (except for sites connected to plants) and other sites selected by the Sectors.

Concerned sites have been identified based on 2007 reporting data (2009 reporting data for the Gypsum Division), and their performance will be tracked in relation to 2010 environmental targets. Results for concerned sites will therefore be reported on a comparable scope basis in each year through 2010. Any divested facilities will be removed (from current year indicators and the 2007 baseline) but no acquisitions will be taken into account until January 1, 2011, when the scope will be adjusted. In addition, environmental indicators will be calculated each year by reference to the 2007 baseline. In line with this principle, 2010 emissions and consumption have been adjusted based on 2007 production output.

This choice was made in order to focus efforts on the facilities with the greatest environmental impact, as well as to make the data and progress in meeting objectives easier to understand. The Divisions have validated certain criteria, such as energy consumption, water consumption, and quantity of non-recycled waste, enabling clear identification and monitoring.

Among the 400 concerned sites, only the 196 with the highest emissions are tracked in relation to the  $CO_2$  targets. They include glass production units within the Flat Glass Division, High-Performance Materials, Insulation and Verallia, as well as Gypsum and Pipe plants. Together, these sites represent 87 percent of the Group's  $CO_2$  emissions (excluding Building Distribution). Data for concerned sites are presented using environmental subgroups. Because of the Group's wide-ranging business operations, the environmental indicators managed in Gaia do not all apply to all businesses. The indicators are therefore combined into "batches" and allocated to groups of units with similar environmental impacts and ratios (i.e., indicators expressed by unit of production, generally per metric ton of finished product). The main unit groups – referred to as environmental sub-scopes – are as follows:

- the "Glass" sub-scope, comprising units in the Innovative Materials Sector - Flat Glass, Verallia, Technical Fabrics Division (Innovative Materials Sector - High-Performance Materials) and the Insulation Division excluding rock wool (Construction Products Sector), that use glass furnaces (108 concerned sites out of a total of 125 units);
- the "Pipe" sub-scope (21 concerned sites corresponding to the 21 units);
- the "Innovative Materials High-Performance Materials - Silicon Carbide" sub-scope (8 concerned sites out of 10 units);

- the "Innovative Materials Sector -High-Performance Materials excluding Silicon Carbide and Glass operations" sub-scope (98 concerned sites out of 208 units);
- the "Others" sub-scope, covering all other units (Industrial Mortars, Lapeyre plants, glass products, Gypsum, etc.) (165 concerned sites out of 640 units). This sub-scope also includes the 142 quarries.

One of the principles applied by the Group for the calculation of ratios is to use tons of finished product complying with quality standards ("tons of finished products"), rather than tons floated (for glass) or cast (for cast iron)<sup>15</sup>.

EHS financial data (expenses and capital expenditure) have been tracked in Gaia since 2007. Annual data are adjusted during the following year to take into account information obtained after the year-end.

The frequency, scope and content of the various questionnaires are described in the table below.

Questionnaire	Frequency	Scope	Content
Safety-On-Line	When needed	Global, all categories of victims	Instant alert in the event of accidents involving fatalities or lost time
Safety	Monthly	Global, all categories of victims	Accidents, number of days lost, hours worked, etc.
General	Annually	Global (all facilities except certain offices or related sites)	Certification, audit results, etc.
Complaints and financial data	Annually	"Concerned" sites + Sites requiring an operating permit + Other sites at the Sectors' discretion	Complaints and financial data in compliance with the NRE Act
Health	Annually	Global (all facilities except certain offices or related sites)	Assessment campaign, health standards tracking, etc.
Environment & Mines and quarries	Annually	"Concerned" sites + Sites requiring an operating permit + Mines and quarries (excluding sites connected to plants) Other sites at the Sectors' discretion	Output, raw materials, energy consumption, atmospheric emissions, water, waste, rehabilitation plan, etc.

<sup>15</sup> Tons floated or cast: all products that come off the production line, including finished and substandard products.

# Methodology



#### **Indicator definitions**

The indicators are defined in the EHS reporting protocol and the Saint-Gobain Group doctrine (for social indicators), which have been prepared in several languages to ensure that all contributors understand what is required.

#### **Social Reporting**

The Saint-Gobain Group doctrine<sup>18</sup> for social indicators is available in French and English and is distributed by the Delegations.

#### **EHS Reporting**

The EHS reporting protocol<sup>18</sup> is available in French and English.

#### **Consolidated data**

#### **Social Reporting**

Saint-Gobain's social reporting process comprises three stages:

- data input by contributors at the individual company level;
- data validation by the head of Human Resources at the company or Delegation level, depending on the country;
- data verification and consolidation by the Group Employee Relations Department.

#### **EHS Reporting**

The EHS reporting process (monthly and yearly) involves four stages:

- data input by the EHS correspondent or correspondents at the reporting unit concerned;
- data validation, usually by the unit manager or by the company or divisional coordinator;
- data verification by EHS managers in each Sector;
- data consolidation by the Group EHS Department.

#### **Difficulties and limitations** Social Reporting

The main difficulty in social reporting stems from the Group's wide geographic presence. Indicators may be interpreted differently from one country to another, due to differences in local legislation and practices. For example, certain employee categories commonly used in France, such as "cadre" (roughly translatable as "manager") and "CDI" (employee with a permanent employment contract) may not have any direct equivalent in other countries. The Doctrine Department is working on commonly understood definitions to avoid this problem.

#### **EHS Reporting**

Difficulties can be experienced with consolidating data across businesses that use different units of measurement. Problems can also arise from differences in the interpretation of technical terms across different countries and businesses. The definition of "waste" for example, can vary depending on local legislation, as can that of its components (production waste, by-product, final waste, etc.). Since Groupwide reporting systems were launched, reporting quality has steadily improved thanks to effective feedback and increased familiarity with the systems. The new version of Gaia will allow the Group to deploy modules for the daily tracking of environmental data, in alignment with monitoring practices at the operational level. This will enable more frequent reporting of EHS data according to operational needs, so that data controls can be performed at shorter intervals

Although Saint-Gobain has experienced a significant slowdown since 2009, business picked up again in 2010. This explains the increase in consumption (of water, energy and raw materials for glass furnaces) and emissions (of  $CO_2$ ,  $NO_4$ ,  $SO_2$  and dust).

<sup>&</sup>lt;sup>18</sup> The documents are available upon request.



The percentage of externally generated cullet used in glass furnaces also rose in 2010, reflecting the use of stockpiles from the previous year as glass plants operated at higher capacity.

 $\rm NO_x$  and dust emissions increased in indicators expressed in specific values, such as emissions per ton of finished product, partially because older, less efficient furnaces were brought back on stream during the year.

Data from concerned sites on production waste,  $CO_2$  emissions and water consumption based on 2007 output showed a decline thanks to the long-term impact of measures to reduce the Group's environmental impact.

We intend to pursue these efforts and reduce water consumption,  $CO_2$  emissions and production waste at concerned sites by 6 percent between 2011 and 2013. The percentage of concerned sites with environmental certification is slated to increase from 80 percent to 90 percent over the same period. New environmental policies will also be implemented concerning water, waste, eco-design and biodiversity.

# **Statutory** Auditors' review report

on a selection of environmental, health, safety and social indicators published in the 2010 sustainable development report of Saint-Gobain Group.

This is a free translation into English of the Statutory Auditors' review report issued in French and is provided solely for the convenience of English speaking readers. The review report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

Further to your request and in our capacity as Statutory Auditors of Compagnie de Saint-Gobain, we have carried out a review to enable us to provide limited assurance on certain environmental, health and safety (hereinafter referred to as EHS) and social indicators, identified by the symbol 🗸 and published on pages 88-93 of the 2010 sustainable development report of Saint-Gobain Group.

The selected EHS and social indicators are as follows:

#### • Environmental indicators:

- CO<sub>2</sub> emissions,
- NO<sub>x</sub> emissions,
- SO<sub>x</sub> emissions,
- Energy use per type of energy,
- Water input (withdrawn) per type of source;

#### • Health and safety indicators:

- LTIR: ratio of lost-time accidents involving Group employees to the number of hours worked by Group employees;
- TRIR: ratio of declared accidents with or without absence from work involving Group employees to the number of hours worked by Group employees;

#### Social indicators:

- Total number of employees per socio-professional category,
- Male/female workforce breakdown.

These indicators were prepared under the responsibility of the Environment, Health and Safety (EHS) Department and the Employee Relations Department, in accordance with the EHS reporting rules and the Group's procedures for the monthly reporting of employee data, both of which can be consulted at the Group's head office and appear in a summary on pages 82-85 of the 2010 sustainable development report. It is our responsibility to express an opinion on the selected indicators based on our review.

#### NATURE AND SCOPE OF OUR WORK

We performed our review in accordance with the International Standard on Assurance Engagements (ISAE 3000) and the professional standards applicable in France.

We carried out the procedures described below to provide limited assurance that the EHS and social indicators are free of material misstatement. A higher level of assurance would have required a more extensive review.

• We reviewed the reporting procedures prepared by the Group with regard to their relevance, reliability, objectivity, comprehensibility and completeness.

- The work described below was carried out on sites selected on the basis of quantitative and qualitative criteria applied to the indicators, enabling us to cover a representative sample of the Group's activities in the geographic areas where it operates:
- Building Distribution Sector: 6 Point. P group regions (France) and 2 Lapeyre group companies (France);
- Innovative Materials Sector: 14 sites (Brazil, India, Mexico, Poland, Republic of Korea, Czech Republic, United States), of which 6 were verified at company level for social indicators;
- Construction Products Sector: 7 sites (Brazil, China, Spain, France, United States), of which 2 were verified at company level for social indicators;
- Head office of the General Delegation, United States.
- At the level of the sites selected:
- on the basis of interviews with the people in charge of preparing the indicators, we verified the proper understanding and application of the procedures;
- on a sample basis, we performed detailed tests which consisted of verifying the calculations and of reconciling the indicators with substantiating documents.
- At Group level, we carried out analytical procedures and verified, on a sample basis, the calculations and the consolidation of data used to generate the indicators. This work mainly relied on interviews with the members of the EHS Department and the Employee Relations Department responsible for the preparation and application of the procedures, as well as the consolidation of the indicators.

The contribution of the sites included in our review to the Group's consolidated indicators represents between 12% and 37% of the selected EHS and social indicators.

We were assisted in our work by our specialized sustainable development teams.

#### CONCLUSION

Based on our work, no material misstatement has come to our attention that causes us to believe that the EHS and social indicators reviewed, identified by the symbol  $\checkmark$  and published on pages 88-93 of the 2010 sustainable development report, were not prepared, in all material respects, in accordance with the EHS reporting rules and Group procedures for the monthly reporting of employee data.

Neuilly-sur-Seine and Paris La Défense, April 14, 2011

**The Statutory Auditors** 

PricewaterhouseCoopers Audit

**KPMG Audit** Department of KPMG S.A.

Jean-Christophe Georghiou

Thierry Raes Partner of the Sustainable Business Solution Department

Jean-Paul Vellutini

Philippe Arnaud Partner of the Sustainability & Climate Change Services

# **EHS summary tables**

Objectives for 2008 - 2010	2010 results	Comments	Outlook for 2013
ENVIRONMENT			
Reduce CO <sub>2</sub> at concerned sites** by 6%*.	-Down 3.6% based on 2007 output -Down 8.9% in absolute value	Because of the recession, production facilities did not operate under optimal conditions for environmental performance. Plant throughput rates declined, furnaces were idle and production line stoppages became more frequent.	Reduce $CO_2$ at concerned sites <sup>**</sup> by 6% <sup>***</sup> .
Assess the Group's greenhouse gas emissions.	Saint-Gobain Carbon Assessment defined for launch in 2011.	The French manufacturing subsidiaries have undergone a carbon assessment since 2009.	Deploy the assessment across the Group's main companies worldwide.
Define Factor 4 targets for office buildings: Care:4 <sup>®</sup> project.	Support tools for conducting energy audits in office buildings introduced.	First buildings certified to Care:4 <sup>®</sup> standards.	Deploy Care: $4^{\ensuremath{\otimes}}$ action plans (renovation, etc.) in each Sector.
Reduce water withdrawals at concerned sites** by 6%*.	-Down 12% based on 2007 output -Down 20% in absolute value	We exceeded our target for 2010.	Reduce water withdrawals at concerned sites** by 6%***. Deploy a comprehensive Group policy.
Reduce landfill waste at concerned sites** by 6%*.	-Waste produced down 4.8% based on 2007 output -Waste produced down 13.6% in absolute value	Because the indicator for landfill waste was not sufficiently reliable for all businesses over the three-year period, we decided to present results for produced waste instead. In the objective for 2011-2013, the indicator will cover landfill waste.	Reduce landfill waste at concerned sites** by 6%***.
Obtain ISO 14001 certification for more than 80% of concerned sites**.	67.5% of sites were certified in 2010 and another 10.5% will be certified in 2011.	In all, 78% of sites should be certified in 2011. The lag is due primarily to the difficult economic situation in 2009-2010.	Obtain ISO 14001 certification for more than 90% of concerned sites**.
Apply the environmental policy on wood in the Building Distribution Sector.	Nearly 80% of wood product purchases sourced from certified forests.		Deploy the environmental policy on wood at all sites, including those in the industrial Sectors.
Conduct systematic life-cycle assessments (LCAs) for all construction product lines.	LCAs conducted for all construction product lines.	A methodology for evaluating and communicating LCAs for all construction products was deployed.	Conduct LCAs for all construction and solar product lines.
SECURITY			
Reduce the incident frequency rate as follows: - Overall LTIR of less than 3.5 (less than 2 for the industrial Sectors and less than 6.5 for the Distribution Sector) - TRIR of less than 7 for the industrial Sectors	LTIR: 3.3 $\checkmark$ - Industrial = 1.9 $\checkmark$ - Distribution = 5.9 $\checkmark$ TRIR: - Industrial = 6.9 $\checkmark$	We exceeded our target for 2010.	Reduce the incident frequency rate as follows: - LTIR of 5 for Building Distribution - TRIR of less than 6 for the industrial Sectors - Overall LTIR of less than 2.8 These indicators concern employees and temporary staff.
Deploy the SMAT standard on behavior Groupwide as from 2008 Deploy risk assessment systems at all sites.	SMAT deployed and maintained Risk assessment and accident/incident analysis standards deployed.	Six safety standards have been deployed on working at height, management of outside firms operating on company sites, work permits, commissioning/decommissioning procedures, and machine and forklift safety.	Deploy standards at all new sites within three years of joining the Group Have the Delegations implement the EHS training matrix in liaison with the Sectors.

Objectives for 2008 - 2010

2010 results

Comments

Outlook for 2013

HEALTH			
Ergonomics.			Deploy a program to reduce MSDs in coordination with the Delegations.
Noise standard (NOS).			Implement an action plan to reduce noise exposure at concerned sites**. Ensure more reliable noise reporting in Gaia.
Toxic agent standard (TAS) on the overall approach to risk assessment (via SAFHEAR).	REACH objectives concerning registrations and substance uses achieved through the deployment of a Group project and an inventory of chemical products.	We achieved our objectives despite the wide range of products and processes and the complexity of our skill sets.	Deploy SAFHEAR across the Group. Ensure exposure traceability with SAFHEAR in accordance with French regulations.
Guide on crystalline silica and respirable dust.			Ensure that the silica indicator is reliable and reduce exposure (target defined by business). Implement annual individual measuring of exposure and reduce exposure (target defined by business).
Analyze EHS hazards and impacts in R&D projects using the Stage Gate procedure.	Set up training on the procedure in the R&D centers.		Deploy a training module on the procedure among R&D project managers.

\* based on 2007 output.

\*\* see Reporting Methodology, pages 82-85.

\*\*\* based on 2010 output.

SMAT: Safety MAnagement Tool.

LCA: Life Cycle Assessment.

MSD: Musculoskeletal Disorders.

CMR: Carcinogenic, Mutagenic and Reprotoxic.

# **Social** indicators

#### **Employment data**

At December 31, 2010, Saint-Gobain had 189,193 employees, down 1.17% from 2009.

On a like-for-like basis, the decrease came to 0.8%.

#### **By Sector**

The Building Distribution Sector accounted for 35.1% of total headcount, followed by the Innovative Materials Sector (31.7%) and Construction Products (24.3%).

#### **Innovative Materials**

The number of employees was virtually stable (down 0.1%) on a reported basis and up 1.6% like-for-like. The divestment of the Advanced Ceramics business explains most of this difference. The headcount trend was relatively uniform in Flat Glass (up 1.1%) and High-Performance Materials (up 2.2%).

#### **Construction Products**

The Construction Products Sector saw its workforce decrease by a gross 1.6% (1.4% like-for-like).

On a same-structure basis, trends varied from one business to another. Headcount adjustments were the most pronounced in the Gypsum, Insulation and Pipe Divisions.

#### **Building Distribution**

Total employment in the Building Distribution Sector declined by a gross 1.9% (2.2% like-for-like). Cuts were spread across the banners.

#### Verallia

Verallia saw its workforce decrease by 2.5% on both a reported and likefor-like basis.

#### **By Delegation**

Workforce trends were more contrasted from a geographic standpoint, with continued rightsizing in countries still suffering from the recession and renewed hiring in regions that had returned to growth.

On a like-for-like basis, the workforce increased in India (up 10.6%) and Latin America (up 8.4%) and, to a lesser extent, in Eastern Europe (1.5%), the countries covered by the Asia-Pacific Delegation (up 1%) and the countries covered by the North American Delegation (up 0.8%).

On the other hand, headcount declined in Russia and Ukraine (down 12.7%), Spain, Portugal and Morocco (down 4.5%), the United Kingdom, Ireland and South Africa (down 4.3%), France (down 2.9%), Central and Northern Europe (down 2.7%), and Italy, Egypt, Greece and Turkey (down 0.5%).

#### **Employee categories**

#### Managers

The proportion of managers in the workforce rose to 13.2% in 2010  $\checkmark$  from 13.1% the year before.

The percentage is generally higher in Western countries, where our longer history is reflected in a greater number of head offices and Research and Development centers. This is especially true in Western Europe (13.9%), North America (20.7%) and the developed countries of Asia (26.9%).

The percentage of women managers increased to 17.2%, overall from 16.4% in 2009, with Central and Eastern Europe and France reporting the highest scores at 22.9% and 20.4%, respectively.

## Administrative employees, technicians and supervisors

This category, which also includes sales personnel, stood at 41.2%  $\checkmark$  of the total workforce in 2010, on a par with 2009.

In 2010, women accounted for (32,1 %)  $\checkmark$  of employees in this category

overall, and were particularly well represented in Russia, Eastern Europe and North America.

#### **Operators**

Overall, operators represented 45.6% ✓ of the total workforce in 2010. The percentage was much higher in the industrial Sectors, at 59.2%, than in distribution (20.3%).

Women accounted for 9.9% of the category, falling below the 10% threshold.

#### Separations

The separation rate narrowed to 15.2% from 17.8% in 2009.

- Attrition rose to 12.1% from 10.6% in 2009.
- The resignation rate edged up slightly to 5.3% from 4.5% the year before.
- The termination rate declined sharply to 5% from 8.6% in 2009, reflecting the end of the recession.

#### Hiring

The hiring rate jumped to 14.4% from 9.2% in 2009 in a trend that covered all businesses and host regions with the exception of countries like Spain and Russia, which were harder hit by the economic crisis.

In all, the Group hired 26,920 people in 2010, an increase of 55% from 2009. In 2010, applicants under 26 accounted for 35.6% of new hires, all socioprofessional categories combined. In France, 1,398 young people participated in work-study programs under skills-acquisition or apprenticeship contracts during the year, for a youth contract rate of 2.9%.

Applicants aged 50 and over represented 4.7% of new hires in 2010, while women accounted for 23.4%. The percentage of women in the total workforce now stands at 20%  $\checkmark$ .

#### Use of temporary workers and subcontractors

#### Temporary work

With the recession winding down and visibility improving somewhat, the Group started hiring again and used fewer temporary workers. Hours worked by temporary staff represented 5.9% of total hours worked in 2010, compared with 7.2% in 2009, with significant variations by country and business.

Fixed-term employment contracts are used for assignments spanning several months, such as to replace workers on maternity leave or extended sick leave, or to handle spikes in production resulting from large orders. The percentage of Group employees on fixed-term contracts rose slightly to 3.7% in 2010 from 3.4% in 2009.

On the other hand, the percentage of fixed-term employment contracts converted to permanent contracts declined to 28.2% from 31.2% in 2009.

#### **Subcontracting**

Group companies in every host country use subcontractors to perform certain activities that fall outside their core competencies.

Before signing an outsourcing agreement, subsidiaries are required to verify that the partner company's operations and employment contracts comply with applicable legislation. Employees of service providers and subcontractors working on a Group site are expected to familiarize themselves with site safety standards upon their arrival. During their presence on-site, they are subject to the same health and safety rules and regulations applicable to Group employees working at the same facility. They receive specific training in these areas as needed.

#### Working conditions Absenteeism

Absenteeism was relatively stable, at 3.8% versus 3.7% in 2009. The most frequent causes are illness, maternity and work accidents.

#### Shift work

Shift work primarily concerns the manufacturing operations, where it is organized in response to technical production requirements. Distribution operations are not generally organized in shifts.

In 2010, 44.7% of employees in manufacturing operations worked in shifts. Days may be organized into two, three or more shifts, in the case of round-theclock production, 365 days a year. Groupwide, round-the-clock production is performed in cycles, with alternating active and idle periods. In every country, shift workers work fewer hours a year than day workers.

In Building Distribution, customer needs at certain businesses sometimes

require that employees work in shifts. This is the case in Brazil, for example, where some stores are open 24 hours a day.

#### **Overtime**

To respond to a temporary increase in workload, some Group companies are occasionally required to ask their employees to work overtime. On average, overtime represented 4.8% of all hours worked in 2010.

#### Part-time work

Part-time work concerned 2.8% of the workforce in 2010.

# METHODOLOGY AND INDICATORS

# Key indicators

Indicator	2009	2010	GRI	Pages
ENVIRONMENT				
Number of quality-certified sites - comparable scope	740	759		-
Percentage of concerned sites that are environmentally certified	56%	67.5%		p 42
Number of Seveso-classified sites	6	6		AR p 102
Total environmental expenditure:	€120.6 M	€128.1 M	EN30	p 36
Salaries and other payroll expenses for environmental officers	€21.3 M	€22.1 M	EN30	-
ISO 14001 and EMAS environmental certification and renewal costs	€1.9 M	€2.2 M	EN30	-
Environmental taxes	€4.84 M	€5.02 M	EN30	-
Insurance and warranties	€4.86 M	€2.46 M	EN30	-
Environmental fines	€0.35 M	€1.69*M	EN28	-
Cost of environmental incidents	€0.46 M	€0.82 M	EN30	-
Cost of technical measures	€8.1 M	€8.31 M	EN30	-
Environmental R&D budget	€64.2 M	€68.4 M	EN30	-
Soil decontamination, site remediation and other clean-up costs	€14.5 M	€17.1 M	EN30	-
Capital expenditure on environmental protection measures	€47.1 M	€62.21 M	EN30	-
Provisions for environmental risks	€167 M	€174 M	EN3	-
Quantity of production waste - concerned sites (based on 2007 production output)	3.3** Mt	3.5** Mt	EN22	p 44
Consumption of primary raw materials in glass furnaces - concerned sites.	10.8 Mt	11.4 Mt	EN1	p 44
Consumption of cullet in glass furnaces - concerned sites	2.8 Mt internally sourced 4.2 Mt externally sourced	3.3 Mt internally sourced 4.5 Mt externally sourced	EN2	p 44
Percentage of cullet in each ton of finished product of glass wool produced - concerned sites	24.3% internally sourced 42.4% externally sourced	15.8% internally sourced 44.4% externally sourced	EN2	-
Percentage of cullet in each ton of finished product of container glass produced - concerned sites	16.8% internally sourced 43.9% externally sourced	22.8% internally sourced 46.3% externally sourced	EN2	-
Percentage of cullet in each ton of finished product of flat glass produced - concerned sites	31.8% internally sourced 7.4% externally sourced	30.2% internally sourced 8.8% externally sourced	EN2	-
Percentage of tons of finished products from primary melt - concerned sites	75.8%	78.3%		p 45
Percentage of recycled materials in each ton of finished product of cast-iron produced - concerned sites	37.0%	30.3%	EN2	p 45
Percentage of recycled materials in each ton of finished product of gypsum - concerned sites	24.3%	30.0%	EN2	p 45
Percentage of waste generated by the processing of recycled stack gas in Saint-Gobain Glass furnaces - concerned sites	58.2%	58.3%		-
CO <sub>2</sub> emissions, based on 2007 production output - concerned sites	13.0** Mt	12.6** Mt	EN16	p 48
Direct CO <sub>2</sub> emissions - Group, based on a comparable scope	13.0 Mt	13.8 Mt 🗸	EN16	p 48
Number of facilities concerned by the EU greenhouse gas emission allowance trading scheme	86	83		-

(√) 2010 indicators verified by the Statutory Auditors. (\*) Of which €1.5M from Verallia in the United States. (\*\*) Based on 2009 data for the Gypsum Division. (\*\*\*) The 2009 figure does not include steam, as the related indicator had not yet been deployed. <sup>19</sup> Construction Products Sector, Innovative Materials Sector, Verallia and Holding Companies.

Indicator	2009	2010	GRI	Pages
CO <sub>2</sub> emissions concerned by greenhouse gas emission allowances	5.6 Mt (excl MAXIT), i.e. less than 0.3% of allocated allowances in Europe (5.7 mt including Maxit)	5.4 mt (excl. Maxit), i.e. less than 0.3% of allocated allowances in Europe (5.6 mt including Maxit) ✓	EN16	-
Energy use – Group, based on a comparable scope	215,280 TJ	227 520 TJ 🗸	EN3	p 49
Indirect energy consumption – Group, based on a comparable scope	-	52,560 TJ	EN4	-
Electricity consumption – Group, based on a comparable scope	48,960 TJ	51,480 TJ 🗸	EN4	-
Steam and hot water consumption – Group, based on a comparable scope	n.a	864 TJ 🗸	EN4	-
Direct energy consumption – Group, based on a comparable scope		174,960 TJ 🗸	EN3	p 49
Coal consumption – Group, based on a comparable scope	-	14,400 TJ	EN3	-
Natural gas consumption – Group, based on a comparable scope	-	106,200 TJ	EN3	-
Petroleum product consumption – Group, based on a comparable scope	-	51,840 TJ	EN3	-
Indirect greenhouse gas emissions from electricity, steam and hot water purchases	4.3 mt CO <sub>2</sub> ***	4.9 mt CO₂*** ✓	EN16	p 48
SO <sub>2</sub> emissions per ton of finished product of glass produced - concerned sites	2.43 kg	2.33 kg 🗸	EN20	p 42
SO <sub>2</sub> emissions per ton of finished product of cast-iron produced - concerned sites	1.4 kg	3.38 kg 🗸	EN20	p 42
SO <sub>2</sub> emissions by the Pipes Division and the glass businesses - concerned sites	33,882 t	38,236 t 🗸	EN20	p 42
$NO_x$ emissions per ton of finished product of glass produced - concerned sites	2.32 kg	2.34 kg 🗸	EN20	p 42
$NO_x$ emissions per ton of finished product of cast iron produced - concerned sites	1.32 kg	1.77 kg 🗸	EN20	p 42
NO <sub>x</sub> emissions - concerned Pipe and glass businesses - concerned sites	32,280 t	35,263 t 🗸	EN20	p 42
Particulate emissions per ton of finished product of glass produced - concerned sites	0.27 kg	0.25 kg	EN20	p 43
Captured particulate emissions per ton of finished product of cast-iron produced - concerned sites	1.07 kg	2.20 kg	EN20	p 43
Water withdrawals, based on 2007 production output - concerned sites*	80.8** million cu.m.	78.1** million cu.m.	EN8	p 38
Water withdrawals - Group, based on a comparable scope	81.4 million cu.m.	84.2 million cu.m. 🗸	EN8	p 38
Rainwater withdrawals - Group, based on a comparable scope	-	0.7 M de m <sup>3</sup>	EN8	-
Municipal water withdrawals - Group, based on a comparable scope	-	17.8 M de m <sup>3</sup>	EN8	-
Surface water withdrawals (from rivers, lakes, etc.) - Group, based on a comparable scope	-	38.1 M de m <sup>3</sup>	EN8	-
Groundwater withdrawals - Group, based on a comparable scope	-	27.6 M de m <sup>3</sup>	EN8	-
SOCIAL INDICATORS				
Number of millionaire sites (sites that have clocked up over one million incident-free hours of work and/or more than five years' work without any lost-time incidents)	142	156		p 59
Lost-time incident rate (LTIR) (more than 24 hours' lost time) - Group*	3.8	3.3 🗸	LA7	p 58
Severity rate - Group	0.21	0.21	LA7	p 59
Lost-time incident rate (LTIR) (more than 24 hours' lost time) - Building Distribution Sector*	6.9	5.9 🗸	LA7	p 58
Total recordable incident rate (TRIR) - industrial Sectors <sup>19</sup>	8.2	6.9 🗸	LA7	p 58
Number of workplace fatalities - Saint-Gobain employees	3	2	LA7	p 58
Number of Health & Safety-certified sites - comparable scope	267	303		-
Total headcount	191,442 employees	189,193 employees 🗸	LA1	p 52, 90
Departure rate	17.8%	15.2%	LA2	p 90
Resignation rate	4.5%	5.3%	LA2	p 90
Termination rate	8.6%	5.0%	LA2	p 90
Recruitment rate	9.2%	14.4%	LA2	p 91
Percentage of temporary workers	7.2%	5.9%	LA1	p 91

## METHODOLOGY AND INDICATORS

# Key indicators

Indicator	2009	2010	GRI	Pages
Percentage of fixed-term employment contracts	3.4%	3.7%	LA1	p 91
Percentage of fixed-term employment contracts transformed into permanent contracts	31.2%	28.2%	LA1	p 91
Training expenditure as a percentage of total payroll	2.0%	2.0%	LA10	p 60
Percentage of employees who took at least one training course during the year	69%	71.6%	LA10	p 60
Number of training hours per employee	22	23.9	LA10	p 60
Percentage of training hours dedicated to technical training and EHS	Technical training: 51% EHS training: 24%	Technical training: 48% EHS training: 24%	LA10	p 60
Percentage of female employees	20.1%	20.0% 🗸	LA13	p 57
Percentage of white-collar workers among female employees	76.7%	77.5% 🗸	LA13	p 57
Female managers as a % of total managers	16.4%	17.2% 🗸	LA13	p 57
Percentage of disabled employees in France	4.0%	4.1%	LA13	p 57
Percentage of employees with employee representation	64.0%	65.2%	-	p 64
Number of agreements signed with employee representatives	1,579	1,343	-	p 64
Operations identified in which the right to exercise freedom of association and collective bargaining may be at risk	-	none	HR5	p 64
Percentage of employees covered by a collective bargaining agreement (and percentage for France)	63.7% France: 99.7%	67.2% France: 99.8%	LA4	p 64
Percentage of employees in France covered by the discretionary profit-sharing scheme	99% (€57.5M)	97,5% (€72.3M)	-	p 62
Percentage of shares held by Group employees	7.6%	7.8%	-	p 63
Number of countries covered by the Group Savings Plan	42	42	-	p 91
Absenteeism	3.7%	3.8%	-	p 91
Percentage of employees in manufacturing operations performing shift work	32.6%	44.7%	-	p 91
Overtime rate	3.9%	4.8%	-	p 91
Percentage of part-time employees	3.3%	2.8%	LA13	p 91
Percentage of executives and managers	13.1%	13.2% 🗸	LA13	p 90
Percentage of administrative employees, engineers and supervisors	41.3%	41.2% 🗸	LA13	p 90
Percentage of operators	45.5%	45.6% 🗸	LA13	p 90
Percentage of managers who had a performance review	79%	82%	LA12	p 61
Percentage of employees in France taken on under a youth employment scheme	2.5%	2.9%	-	p 54
Total number of incidents of discrimination and actions taken	-	0	HR4	p 70
Operations identified as having significant risk for incidents of child labor	-	none	HR6	p 70
Operations identified as having significant risk for incidents of forced or compulsory labor	-	none	HR7	p 70
Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.	-	0	S08	p 68-70
Indicator	2009	2010	GRI	Pages
SOCIETAL INDICATOR				
Group community development spending	€4M	€4.4M	-	p 76
Number of jobs created outside the Group in France with the support of Saint-Gobain Développement	453 jobs (through 33 SME support agreements representing €1.1M)	226 jobs (through 66 SME support agreements representing €1M)	-	p 72

# **GRI** table

Category	Subsection	GRI ref.	Description	Pages
PROFILE				
Stratogy and A	nalvojo	1.1	Statement from the most senior decision maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	p 1, 11
Strategy and A	Strategy and Analysis		Description of key impacts, risks and opportunities.	p 12, 13 AR p 35-37, 99-106
		2.1	Name of the organization.	cover
		2.2	Primary brands, products and/or services.	p 4,18-29 AR p 10-25
		2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries and joint ventures.	p 4-5 AR p 4, 84-85, 188-199
		2.4	Location of organization's headquarters.	AR p 203
		2.5	Number of countries where the organization operates and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	р7 А Вр8
		2.6	Nature of ownership and legal form.	AR p 60
Organizational	Profile	2.7	Markets served (including geographic breakdown, sectors served and types of customers/beneficiaries).	р 4-5 АR р 10-25
			<ul> <li>Scale of the reporting organization, including:</li> <li>Number of employees.</li> <li>Net sales (for private sector organizations) or net revenues (for public sector organizations).</li> <li>Total capitalization broken down in terms of debt and equity (for private sector organizations).</li> <li>Quantity of products or services provided.</li> </ul>	p 6-7 AR p 4, 9, 39-55, 108-113
		2.9	<ul> <li>Significant changes during the reporting period regarding size, structure or ownership, including:</li> <li>The location of, or changes in operations, including facility openings, closings and expansions.</li> <li>Changes in the share capital structure and other capital formation, maintenance and alteration operations (for private sector organizations).</li> </ul>	AR p 122, 123
		2.10	Awards received in the reporting period.	p 46, 64
		3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	AR p 165
	Report Profile	3.2	Date of most recent previous report (if any).	-
	neport Frome	3.3	Reporting cycle (annual, biennial, etc.).	AR p 165
		3.4	Contact point for questions regarding the report or its contents.	AR p 203-204
		3.5	<ul> <li>Process for defining report content, including:</li> <li>Determining materiality.</li> <li>Prioritizing topics within the report.</li> <li>Identifying which stakeholders the organization expects to use the report.</li> </ul>	p 12-13, 14-15, 82-85
Report		3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	p 82-85
Parameters		3.7	Any specific limitations on the scope or boundary of the report.	p 82-85
	Report Scope and Boundary	3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	p 82-85
		3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report.	p 82-85
		3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of the business, measurement methods).	p 82-85
		3.11	Significant changes from previous reporting periods in the scope, boundary or measurement methods applied in the report.	p 82-85

## METHODOLOGY AND INDICATORS

Category	Subsection	GRI ref.	Description	Pages
Report Parameters	GRI Content Index	3.12	<ul> <li>Table identifying the location of the Standard Disclosures in the report. Identification of the page numbers or web links where the following can be found:</li> <li>Strategy and Analysis 1.1-1.2.</li> <li>Organizational Profile 2.1-2.10.</li> <li>Report Parameters 3.1-3.13.</li> <li>Governance, Commitments and Engagement 4.1-4.17.</li> <li>Disclosure of Management Approach, per category.</li> <li>Core Performance Indicators.</li> <li>Any GRI Additional Indicators included.</li> <li>Any GRI Sector Supplement Indicators included in the report.</li> </ul>	p 95-99
	Assurance	3.13	Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s).	p 86-87
		4.1	Governance structure of the organization, including committees under the highest governance body (Board of Directors or other) responsible for specific tasks, such as setting strategy or organizational oversight.	p 8 AR p 66-76 84-85
		4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	p 8
		4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	AR p 68
	Governance	4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	p 12-13 AR p 87
		4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	AR p 76-83
		4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	p 68-69 AR p 72, 73
		4.7	Process for determining the qualifications and expertise required of the members of the highest governance body for making decisions on economic, environmental and social strategy.	р 8 АR р 74
Governance, Commitments and		4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	р 9 АR р 32, 66
Engagement		4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	p 68-71 AR p 74
		4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	AR p 33-34, 74
		4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	AR p 99-106
		4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	p 9
	Commitments to External Initiatives	4.13	<ul> <li>Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization:</li> <li>Has positions in governance bodies.</li> <li>Participates in projects or committees.</li> <li>Provides substantive funding beyond routine membership dues.</li> <li>Views membership as strategic.</li> </ul>	p 9, 12-13, 74-75
		4.14	List of stakeholder groups engaged by the organization.	p 12-13
		4.15	Basis for identification and selection of stakeholders with whom to engage.	p 12-13, 74-75
	Stakeholder Engagement	4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	p 12-13
		4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	p 12-15

Category	Subsection	GRI ref.	Description	Pages
MANAGE	MENT APPRO	ACH AI	ND PERFORMANCE INDICATORS	
			Economy	p 17-23, 32-33
	Economy	DMA EC	Economic performance	p 17-23
			Market presence	p 32-33
			Environment	p 34-37
			Materials	p 44-45
			Energy	p 48-49
			Water	p 38-39
	Environment	DMA EN	Biodiversity	p 40-41
			Emissions, effluents and waste	p 42-45
			Products and services	p 24-27
			Compliance	p 36, 92
			Overall	p 34-37, 92
			Labor practices and decent work	p 52-53
			Employment	p 54-55
	Labor practices		Labor/management relations	p 64-65
	and decent work	DMA LA	Occupational health and safety	p 58-59
			Training and education	p 60-61
			Diversity and equal opportunity	p 56-57
			Human rights	p 67-69
			Investment and procurement practices	p 68-69
	Human rights	DMA HR	Non-discrimination	p 70
			Child labor prohibition	p 70
			Forced and compulsory labor prohibition	p 70
			Society	p 76-79
	Society DMA S	DMA SO	Corruption	p 70
			Compliance	p 68
			Product responsibility	p 27
	Product responsibility	DMA PR	Customer health and safety	p 27

# **GRI** table

Indicator	Subsection	Indicator	Description	Pages
<b>GRI INDI</b>	CATORS			
		EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	p 6-7
Economic	Economic performance	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	p 37, 46-49, 92-93
		EC3	Coverage of the organization's defined benefit plan obligations.	AR p 102, 109, 119
	Market Presence	EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	p 56,57
		EN1	Materials used by weight or volume.	p 44-45, 92
	Materials	EN2	Percentage of materials used that are recycled input materials.	p 44-45, 92
	Energy	EN3	Direct energy consumption by primary energy source.	p 48-49, 92-93
		EN5	Energy saved due to conservation and efficiency improvements.	p 25
	Water	EN8	Total water withdrawal by source.	p 38-39, 93
	Biodiversity	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	p 40-41
Environmental		EN16	Total direct and indirect greenhouse gas emissions by weight (tons $\mathrm{CO}_{_2}$ equivalent).	p 44-45, 92-93
	Emissions, Effluents	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	p 46-51
	and Waste		$NO_{x}$ , $SO_{x}$ , and other significant air emissions by type and weight.	p 42, 93
		EN22	Total weight of waste by type and disposal method.	p 44-45, 92
	Products and Services	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	p 27
	Compliance	EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	p 92
	Overall	EN30	Total environmental protection expenditures and investments by type.	p 92

Indicator	Subsection	Indicator	Description	Pages
GRI INDIO	ATORS			
		LA1	Total workforce by employment type, employment contract, and region.	p 90, 93
	Employment	LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	p 90, 93
	Labor/Management Relations	LA4	Percentage of employees covered by collective bargaining agreements.	p 64, 94
Labor Practices and Decent Work	Occupational health and safety	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	p 58-59, 91, 93
	Training and	LA10	Average hours of training per year per employee by gender, and by employee category.	p 60, 93-94
	Education	LA12	Percentage of employees receiving regular performance and career development reviews.	p 61, 94
	Diversity and Equal Opportunity	LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	p 8, 56, 57, 94
		LA14	Ratio of basic salary and remuneration of women to men by employee category.	p 56
	Investment and Procurement Practices	HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	p 68, 69
uuman riahte	Non-discrimination	HR4	Total number of incidents of discrimination and corrective actions taken.	p 70, 94
Human rights	Child Labor	HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	p 70, 94
	Forced and Compulsory Labor	HR7	Operations identified as having significant risk for incidents of forced or compulsory labor and measures to contribute to the elimination of all forms of forced or compulsory labor.	p 70, 94
		S02	Percentage and total number of business units analyzed for risks related to corruption.	p 69
	Corruption	S03	Percentage of employees trained in organization's anti-corruption policies and procedures.	p 69
Society		S04	Actions taken in response to incidents of corruption.	p 70
	Compliance	S08	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.	p 94
Product Responsibility	Customer Health and Safety	PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	p 27

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