



## CDP 2013 CDP Water Disclosure 2013 Information Request

Saint-Gobain

### Module: Introduction

#### Page: Introduction

##### 0.1 Introduction

#### **Please give a general description and introduction to your organization.**

Saint-Gobain, worldwide leader in the habitat and construction markets, designs, manufactures and distributes building materials, providing innovative solutions to meet growing demand in emerging and developed countries, for energy efficiency and for environmental protection.

Our sustainable habitat strategy is being rolled out through three Sectors, each with its own growth drivers contributing harmoniously to our growth.

- The Innovative Materials Sector, comprising the Flat Glass and High-Performance Materials Divisions, is spearheading our advance in over-the-horizon technologies. With its unique portfolio of materials and processes for the habitat, construction and industrial markets, the Sector embodies our innovation oriented 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 interior and exterior building solutions that deliver a wide range of benefits, including energy savings. Its diversified business base provides a portfolio of high profile brands like Isover, Pont-à-Mousson, Weber, Placo®, Gyproc® and CertainTeed.
  - The Building Distribution Sector, which is sharply focused on services for building contractors, individuals and large companies, has a detailed knowledge of the construction market and how it is changing. It plays a key role in helping contractors embrace new building renovation techniques.
- The Packaging Sector is not involved in our sustainable habitat strategy. The world's no.2 manufacturer of glass containers, Verallia makes bottles for wines and spirits and jars for food products. The Sector also supplies glass containers for beer, fruit juices, soft drinks, mineral water and oil.

With operations in 64 countries, the Group is reinforcing its strategy through the 13 General Delegations (GD):

- Brazil, Argentina and Chile GD
- Central Europe GD
- Poland, Romania and Bulgaria GD
- Spain, Morocco and Portugal GD
- UK, Republic of Ireland and South Africa GD
- India, Sri Lanka and Bangladesh GD
- Italy, Egypt, Greece and Turkey GD
- Asia Pacific GD
- Mexico, Central America, Venezuela, Colombia, Ecuador and Peru GD
- Czech Republic, Slovakia, Hungary and Eastern Adriatic countries GD
- Russia, Ukraine and the Commonwealth of Independent States (CIS) GD

- Nordic countries and Baltic States GD
- North America GD

Climate change, the rapid growth in the world population, especially in cities, and the increasing environmental impact of human activities are all factors that are reinforcing tensions over water resources and sustainable water management. These challenges of today require that all the stakeholders concerned become aware and committed. Saint-Gobain has already launched efforts to reduce water consumption volumes. The Group is particularly involved in the search for sustainable water management solutions, especially through its historic pipe activity and the contribution of that activity to the water cycle.

We are a signatory to the UN Global Compact since 2003 and the CEO Water Mandate since 2009.

The Group is willing to be recognized as a responsible Group everywhere it operates, and one that is involved in a continuous improvement process, especially for water management and its related challenges.

**0.2  
Reporting Year**

**Please state the start and end date of the year for which you are reporting data.**

**Enter the period that will be disclosed.**

Sun 01 Jan 2012 - Mon 31 Dec 2012

**0.3  
Reporting Boundary**

**Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported.**

Other: All the sites that belong to consolidated companies with more than 50 % control by Saint-Gobain (every business and every country) are included. Annual consolidation only regroups the data of entities that are still present at the end of the financial year. Joint-ventures are included if Saint-Gobain has the operational control of the entity. Reporting boundary for water accounting: Environmental impacts in the Group differ from one site to another. Furthermore, many sites in the Group (sales offices, offices, warehouses, etc.) have negligible environmental impacts compared to others (floats, pipe plants, etc.). For this reason, we include in the 'Environment' reporting scope the sites with significant environmental impact only, because the environmental indicators are not relevant to the sites which have no environmental impact or practically no environmental impact. In 2012, 1026 reporting entities out of 1771 were selected to report on their environmental performance, and in particular on water related aspects. The water data reporting covers these 1026 entities. Reporting boundary for environmental performance: 'concerned' sites: In order to focus efforts on the facilities with the greatest environmental impacts, performance in relation to environmental targets is monitored on a restrained reporting boundary called the 'concerned perimeter'. Since objectives are set for a three-year period, the 'concerned perimeter' is also revised every three years: 532 sites were identified as 'concerned' in relation to the 2011-2013 environmental targets, based on 2010 data such as energy consumption, water consumption and quantity of non-recycled waste. Together, these sites represent more than 90% of the Group's water withdrawals.

**0.4  
Exclusions**

**Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?**

Yes

**0.4a**

**List of Exclusions**

Please describe any exclusion(s) in the following table.

Exclusion	Please explain why you have made the exclusion
Facilities which have practically no environmental impact	Approximately 745 facilities were not included because they have no or practically no environmental impact. These are distribution sales offices, offices, warehouses, small transformation plants, etc.
Type of water input: mine drainage water pumped	The mines of Saint-Gobain monitor the volume of drainage water pumped out of the mine in order to prevent flooding, but the Group does not report on this withdrawal indicator. In 2012, about 30 facilities monitored their mine drainage water pumping.

**Module: Water-Governance**

**Page: Water-1-ManagementGovernance**

**1.1**  
Does your company have a water policy, strategy or management plan?

Yes

**1.1a**  
Please describe your policy, strategy or plan, including the highest level of responsibility for it within your company and its geographical reach.

Country or region	Description of policy, strategy or plan	Position of responsible person
Company-wide	Tensions over water resources and sustainable water management are increasing, especially due to climate change and the growth of cities. This is why Saint-Gobain has decided to implement a water policy at the level of the Group. Saint-Gobain thus confirms its willingness to reduce as much as possible the quantitative and qualitative impact of its activities on water resources, by both its withdrawals and by its discharges. Its objective is to withdraw as few resources as possible and to strive towards 'zero discharges' of liquid industrial water, while avoiding the generation of new impacts on other environments and/or stakeholders. The water policy is based on concrete objectives and tools: - Mobilizing and making all the Group's functions, sites and stakeholders (including suppliers) more aware of water-related challenges, while taking socioeconomic challenges into consideration (dialogue with communities). - Planning the implementation of appropriate action on the Group's sites, according to their level of exposure to water-related risks. - Measuring progress attained by using common indicators that are coherent with existing guidelines and reference tools at an international level. - Anticipating changes in laws & regulations in the countries where the Group operates and incorporating water-related challenges in the Group's innovation strategy. This policy contributes to Saint-Gobain's global response to the challenges of sustainable development and is consistent with efforts already undertaken by the Group (signature of the United Nations Global Compact, reduction of water withdrawal volumes on our sites, etc.).	Individual board member

**1.1b**  
Does the water policy, strategy or plan specify water-related targets or goals?

Yes

1.1c

Please describe these water-related targets or goals and the progress your company has made against them.

Country or region	Category of target or goal type	Description of target or goal	Progress against target or goal
Company-wide	Direct operations	90% of concerned sites to achieve environmental certification ISO 14001 by 2013	In 2012, 75.2% of sites achieved environmental certification, which includes performance on water management.
Company-wide	Direct operations	Withdraw as few resources as possible and to strive towards 'zero discharges' of industrial water in liquid form, while avoiding the generation of new impacts on other environments and/or stakeholders.	An applicable environmental standard on "management of water and associated risks", which describes the minimum environmental requirements that sites must implement to meet the general objectives fixed by the policy, was released in 2011. In total during 2012, Saint-Gobain spent 60.8 million euros on investments linked to the protection of the environment and 90.2 million euros on environmental research and development projects, to help the Group achieve these goals. Multiple sites, including the Chemillé site in France, inaugurated in 2010, have already achieved the target of zero industrial process water discharged into the natural environment by recycling 100 percent of the water used. In 2012, based on 2010 production, the Group's concerned sites (see 0.3) reduced withdrawals by 3.6%. Between 2011 and 2012, water withdrawals were reduced by 9.8%. A water-related risk assessment grid was developed and applied to the Group's concerned sites (see 0.3) for the first time in 2012, in order to identify the risk exposure level of every site. In 2012, around 140 sites identified with the highest risk were chosen in the first round of sites to implement the standard on "management of water and associated risks". These sites have three years to obtain high conformity to this standard, including the development of action plans to manage water related risks.
Company-wide	Community engagement	Promote a reasoned and constructive dialogue with the local communities living close to its sites, to facilitate a better understanding of its activities and enable sustainable and shared management of local water resources.	The Delegations will organize the monitoring of impacts caused by the sites' activities and the identification of associated stakeholders locally, in order to build a dialogue with impacted communities.
Company-wide	Supply chain	The global goal of the Group's supply chain is to align purchasing practices with the Group Water Policy: <ul style="list-style-type: none"> <li>• Encompass water related risks in the suppliers' selection policy.</li> <li>• Make purchasers aware of water-related challenges, with the objective to ensure their long-term commitment.</li> </ul>	The Purchasing Department launched a new project aiming to assess the Group's potentially high-risk suppliers. This project is based on a risk category cartography made in 2012 that includes water-related criteria. Approximately 1200 suppliers belonging to potentially high-risk categories will be assessed. Around 70 suppliers will receive social on-site audits, based on environmental criteria, among others. Both projects are organized with the help of local purchasers. Certain tasks have been decentralized to empower the purchasers. The new Purchasers Charter sets environmental requirements towards purchasers, including the decrease of water pollution. Suppliers must comply with these requirements to be selected. The Suppliers Charter must be acknowledged by our suppliers, beginning by those of highest risk or the largest suppliers. A new web site is going to be used to follow up the suppliers' answers. The Charter requires the suppliers to limit their environmental footprint throughout the life cycle of the products they supply. In particular, they must strive to reduce their impact on ecosystems and biodiversity and optimize consumption of natural

Country or region	Category of target or goal type	Description of target or goal	Progress against target or goal
Company-wide	Transparency	Measure performance by using common indicators that are coherent with existing guidelines and reference tools at an international level.	resources. Purchasers are asked to attach this Charter to their contracts. A new procedure is being written to include CSR criteria into our procurement policy.  Saint-Gobain has been reporting on water using the GRI indicators for several years. GRI's Report Services have concluded that the "Sustainable Development Report 2012" fulfils the requirement of Application Level A+.

**1.2 Do you wish to report any actions outside your water policy, strategy or management plan that your company has taken to manage water resources or engage stakeholders in water-related issues?**

Country or region	Category of action	Description of action and outcome
Company-wide	Direct operations	Since 2011, Saint-Gobain has been awarding the Environment Emeralds which reward the most exemplary projects in the following categories: greenhouse gases, waste, water and biodiversity. In 2012, the Saint-Gobain Performance Plastics Akron Site (USA) was awarded a Water Emerald for the installation of a semi-closed loop water system, resulting in a 98% reduction of their water discharge.
Company-wide	Transparency	As a signatory of the CEO Water Mandate in 2009, Saint-Gobain has committed itself to sharing best practices and emerging practices related to its conduct of operations, management of the logistic chain, protection of catchment areas, transparency, taking public policies into consideration, community commitment and collective action. In June 2012, Saint-Gobain's CEO Pierre-André de Chalendar became the Chairman of "Entreprises pour l'Environnement" a coalition of companies operating in France committed to the environment and to sustainable development. As part of this coalition, Saint-Gobain participates in the Working Group focusing on "How to measure and manage water".
Company-wide	Public policy	Saint-Gobain PAM, the company that represents our Pipe Activity, is a member of the World Water Council. This international multi-stakeholder platform organizes every three years the World Water Forum in order to raise the importance of water on the political agenda, to support the deepening of discussions towards the solution of international water issues in the 21st century, to formulate concrete proposals and bring their importance to the world's attention and to generate political commitment.
Haiti	Community engagement	The Saint-Gobain Initiatives Foundation supports the founding of a Water and Sewage Management School in Haiti. This project meets a pressing need to restore utility services as more than 80% of the water supply and sewage networks are out of service. Renovating these networks is a national priority. With the help of the "Office International de l'Eau", specialized technicians will be trained in this field where there is a severe shortage of local skills.
Vietnam	Community engagement	The Saint-Gobain Initiatives Foundation has supported the installation of a drinking water distribution system in Long An, a village in southern Vietnam, whose well was unusable. Some 10,000 people have enjoyed the benefits of this project.
Company-wide	Transparency	Saint-Gobain has set an objective to evaluate the environmental impacts of its construction products in all activities, in particular water consumption and water pollution: life cycle assessments will be carried out by 2013 according to the Group methodological guidelines (based on ISO and EN standards). A common EPD (Environmental Product Declaration) format has been used to report on life cycle assessment results. The Group decided to have these EPDs verified by independent third-parties. EPDs are already available for more than 200 Saint-Gobain products, with at least one representative product in each activity. Please see question 9.2 for the water content of a representative product in the Pipe, Insulation and Glass activities.

**Attachments**

[https://www.cdproject.net/sites/2013/51/16151/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/1.WaterManagementandGovernance/SG\\_Water Policy.pdf](https://www.cdproject.net/sites/2013/51/16151/CDP%20Water%20Disclosure%202013/Shared%20Documents/Attachments/CDPWaterDisclosure2013/1.WaterManagementandGovernance/SG_Water_Policy.pdf)

**Module: Water-RisksOpps**

**Page: Water-2-indicators-op**

**2.1**  
**Are any of your operations located in water-stressed regions?**

Yes

**2.1a**  
**Please specify the method(s) you use to characterize water-stressed regions (you may choose more than one method).**

Method used to define water stress	Please add any comments here:
Internal company knowledge WBCSD Water Tool Other: Pfister et al. "Assessing the Environmental impacts of Freshwater Consumption in LCA"	Saint-Gobain developed an in-house method to characterize water-stressed regions, based on the Water Stress Index map created by Pfister et al. (Pfister, Koehler and Hellweg, Assessing the Environmental Impacts of Freshwater Consumption in LCA, Environ. Sci. Technol, 2009, 43 (11), pp 4098–4104, DOI: 10.1021/es802423e) To date, the assessment of water stress levels has been carried out on the 'concerned perimeter' only (see 0.3). The 532 'concerned' sites were located on the map using their GPS coordinates, and associated a water stress index (WSI). The WSI accounts for water availability (and its temporal variability) and withdrawals at the watershed level. Water-stressed regions are defined by a WSI above 0.5, which corresponds to the 'severe' level according to Pfister et al. In addition, we used the WBCSD Water Tool to identify the watersheds concerned.

**2.1b**  
**Please list the water-stressed regions where you have operations and the proportion of your total operations in that area.**

Country or region	River basin	Proportion of operations located in this region (%)	Further comments
Company-wide	Other: Some severely water-stressed regions where the Group has significant industrial operations are China, India, Mediterranean countries and the United States.	11 – 20	The mapping of sites and water-stressed regions described above enabled us to identify the watersheds concerned. The Group is not able to communicate on water stress at the watershed level this year, as this information is still in the process of being verified locally.

**2.2**

Are there other indicators (besides water stress) which you wish to report that help you to identify which of your operations are located in regions subject to water-related risk?

Yes

**2.2a**

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or region	River basin	Risk Indicator	Proportion of operations located in this region (%)	Further comments
Company-wide	Other: Due to the complex nature of the Group's activities, we will only report on risks at the company level this year.	Flooding	1-10	Please see question 3.1a for further details regarding the risk of flooding.
Company-wide	Other: Due to the complex nature of the Group's activities, we will only report on risks at the company level this year.	Poor water quality	1-10	During environmental reporting, concerned sites are asked to report any operations affected by the quality of water withdrawn.
Company-wide	Other: Due to the complex nature of the Group's activities, we will only report on risks at the company level this year.	Tightening of regulations	1-10	During environmental reporting, concerned sites are asked to report on any regulatory conditions that have been imposed or any planned regulatory changes on their water withdrawals.
Company-wide	Other: Due to the complex nature of the Group's activities, we will only report on risks at the company level this year.	Other: Physical Constraint/Water Availability	1-10	During environmental reporting, concerned sites are asked to report on any withdrawals that were limited due to physical constraints.

**2.3**

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and/or 2.2.

20%

**2.4**

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2.

Basis used to determine proportions	Please add any comments here
Number of facilities	The Group is made of very diverse business units, thus for consistency the number of facilities was chosen as the basis to calculate proportions. Since water stress information is still in the process of being verified locally, the proportion of operations given is an estimate and not an exact number.

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**2.5**  
Do any of your key inputs or raw materials (excluding water) come from regions subject to water-related risk?

Yes

**2.5a**  
Please state or estimate the proportion of your key inputs or raw materials that come from regions subject to water-related risk.

Country or region	River basin	Input or material	Proportion of key input or raw material that comes from region at risk (%)	Unit used for calculating percentage	Further comments
Company-wide	Other: Due to the complex nature of the Group's supply chain, we will only report on risks at the company level this year.	Raw materials and energy are considered as key inputs, as they are essential for our activities.	11 – 20	Value of material purchased	According to the Water Stress Index (WSI) Water-stressed regions are defined by a WSI above 0.5, which corresponds to the 'severe' level according to Pfister et al.

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**3.1**  
Is your company exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Yes

**3.1a**  
Please describe (i) the current and/or future risks to your operations, (ii) the ways in which these risks affect or could affect your operations before taking action, (iii) the estimated timescale of these risks, and (iv) your current or proposed strategies for managing them.

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
Company-wide	Other: Due to the complex nature of the Group's activities, we will only report on risks at the company level this year.	02. Physical: Flooding	Floods may cause important damages to the Group's installations and lead to production disruption, significant financial and market losses, plus threaten jobs and pose challenges to	Current	The purpose of Saint-Gobain's Loss Prevention policy is to limit its exposure to floods, and to reduce the severity of losses and safeguard business continuity if they occur nevertheless. 1. Prevention: - Existing sites must apply the global framework of rules, standards and procedures of the Industrial and Distribution Risks Prevention Manual. - For new construction projects, the choice of land, the construction and the protection measures envisaged all have to take into account the risks of flooding. 2. In the event of a flood, the



Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
Company-wide	Other: Due to the complex nature of the Group's activities, we will only report on risks at the company level this year.	03. Physical: Increased water stress or scarcity	human and environmental safety.	Current	group has an adapted insurance coverage for property damage and subsequent business interruption, including contingent business interruption.
			Considered as a physical risk, water scarcity may cause production disruptions.		The risk of water scarcity is analysed at the corporate level. In 2011, the sites located in water stressed areas were identified and mapped (see 2.1a). Water scarcity is one criteria in the comprehensive assessment of water-related risks. Moreover, the Group aims at reducing water withdrawals: the objective is to reduce withdrawals by 6% between 2010 and 2013. In-house water recycling is encouraged, particularly through the use of closed circuits, as this considerably limits withdrawals from natural resources.
Company-wide	Other: Due to the complex nature of the Group's activities, we will only report on risks at the company level this year.	10. Regulatory: Regulatory uncertainty	In the Group, there is a real concern to anticipate and to stay ahead of regulation to avoid penalties and prevent conflicts with local authorities and other key stakeholders.	Current	Respect for the law is one of the fundamental principles of the Group. Adherence to these principles is a requirement for belonging to the Saint-Gobain Group. The Water standard requires that all sites must have an updated regulatory watch and identify the local authorities in charge of water. In addition, some Delegations have EHS regulatory watch contracts which cover water-related regulations in particular. In France all sites are systematically covered by a master contract. In 2012, regulatory problems were monitored at the group level as part of the Environmental Campaign: all sites were asked several questions concerning compliance in the environmental campaign, as well as planned regulatory changes.
Company-wide	Other: Due to the complex nature of the Group's activities, we will only report on risks at the company level this year.	Other: Environmental liability/Reputational Damage	An environmental incident caused by one of the Group's site's activities involves the environmental liability of the Group.	Current	The Group's Water standard requires that all sites must identify the natural sources of water significantly affected by withdrawals and discharges. Where natural sources are significantly affected, a detailed environmental impact study must be available. Three Divisions (Innovative Materials, Gypsum and Verallia) use specific environmental standards to address the risks of environmental events. In 2012, the Group developed a corporate Environmental Events standard that sets up a common framework and enables the sites to identify, characterize, analyze and record environmental events in accordance with ISO 14001. It will be launched in 2013.

3.2

**What methodology and what geographical scale (e.g. country, region, watershed, business unit, facility) do you use to analyze water-related risk across your operations?**

Risk methodology	Country or geographical scale
<p>A plant-level risk exposure and sensitivity assessment grid has been developed, however, final results are not yet available. Shared by the entire Group, this tool measures three risks based on quantitative and qualitative criteria: - Water constraint risk: factors that might affect or compromise a site's water supply, and so its activity; - Pollution risk: factors linked to a site's discharge and its impact on the environment; - Flooding risk: factors defining a site's vulnerability to the frequency and intensity of climate events and more generally to natural disasters. For each risk, the assessment tool takes into account operational, regulatory and reputational factors. The risk assessment is based on both local and technical data. The Group developed and deployed a detailed water section, which contains approximately 50 indicators, in the environmental reporting survey that all relevant sites (see question 0.3) complete annually. Moreover, the Group carried out an analysis of the water consumption patterns of the main production processes.</p>	<p>Facility</p>

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**3.3 Do you require your key suppliers to report on their water use, risks and management?**

No

**3.4 Is your supply chain exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?**

Don't know

**3.4c Please explain why you do not know if your supply chain is exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure, and if you have plans to assess this risk in the future.**

The Purchasing departments do not carry out a centralized assessment of water-related risks of our supply chain yet for two main reasons.

First, the Purchasing function is following the Group structure and is decentralized. National or international purchases are managed by Business Units, Delegations or Corporate purchasing organizations. On-site purchasers are dealing with local suppliers. To date, there is no consolidation regarding the exposure of suppliers to water-related risks at Group level. Each purchasing organisation is managing water-related risks at its own level. When making listing decisions, purchasers must take into consideration the commitments made by suppliers and subcontractors to identify and bring under control environmental risks.

In addition, in 2013 the Group will assess its supply chain. Even if it is known that some suppliers are in potentially high-risk categories and in high-risk countries, it is unknown how they manage water-related risks and what the consequences will be for the Group.

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**4.1**  
**Has your business experienced any detrimental impacts related to water in the past five years?**

Yes

**4.1a**  
**Please describe these detrimental impacts including (i) their financial impacts and (ii) whether they have resulted in any changes to company practices.**

Country	Impact indicator	Description of impact	Response strategy
Company-wide	Flooding	The Group has experienced detrimental impacts related to flooding in several facilities in the past five years. Industrial and Distribution sites suffered damage in the South-East of France (Var) in June 2010 and November 2011.	The total amount of financial impacts due to flooding is under 10 million Euros over the past five years. Following the floods in the South of France, technical measures were taken in order to reduce the severity of damages in the event of future floods. Therefore, the electrical system of a site located in a high risk area was completely rewired after the 2010 flood, which proved effective since there were no production disruptions and remediation costs were halved after the 2011 flood.
Company-wide	Flooding	The Group has experienced detrimental impacts related to flooding in several facilities in the past five years. Industrial and Distribution sites suffered damage in Thailand in 2011.	The total amount of financial impacts due to flooding is under 10 million Euros over the past five years. Following the flood in Thailand, a Site Risk Incident Warning was released and communicated to all Prevention managers of the concerned business division. This document describes the incident, the main learning points from this event and the actions required in all sites concerning flood management. Application of the Group's Water Policy and lessons learned from the Thailand flood event has successfully prevented a Greenfields site, under construction in Jakarta, from being affected by recent flooding in the region.
Spain	Flooding	The Group has experienced detrimental impacts related to flooding in several facilities in the past five years. Industrial and Distribution sites suffered damage in Spain in 2011.	The total amount of financial impacts is under 10 million Euros over the past five years.

**Page: Water-5-Opportunities**

**5.1**  
**Do water-related issues present opportunities (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?**

Yes

**5.1a**

Please describe (i) the current and/or future opportunities, (ii) the ways in which these opportunities affect or could affect your operations (iii) the estimated timescale and (iv) your current or proposed strategies for exploiting them.

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
Company-wide	Sales of new products or services	<p>The need for clean water and sewage are increasing in emerging and developing countries while OECD countries are investing more in maintenance and new pipe systems. - The market drivers are mainly urbanization and water scarcity for emerging countries: due to climate change and urbanization more than 3 billion people will face water scarcity in 48 countries according OECD prospective. The United Nations Millennium Development Goals set a target to halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation. - As for developed countries, priorities are to renovate old infrastructure and to meet new regulations on water and sewage treatment. Much of the network is more than 50 years old and need to be replaced or repaired. The investment needed to renovate all aging infrastructure in OECD countries amounts to 200 USD billion (2010 estimate). The European Water Framework is a major driver for new infrastructure. Consequently, the need for new water infrastructure in many parts of the world represents a potential increase in the sales of our Pipe Division PAM which manufactures water-supply and sewer networks. The world pipe market growth is expected to be 4% every year from 2012 to 2017 (source: Global Water Intelligence). Pipe market size is estimated around 35 billion USD globally and the percentage of pipes in terms of value is 20% of the water equipment.</p>	Current	<p>Saint-Gobain PAM is the world-wide leader for pipe systems. More than 100 capitals and over 1000 large cities worldwide have been equipped with PAM solutions. PAM solutions respond to the major challenges of durability and economy of resources. PAM strategy is to offer complete pipe systems with a dedicated service. PAM provides long-term solutions, permanent innovation and expertise from our specialists. Saint-Gobain PAM is present at every stage of a water project: design, implementation and after-sales. Like communication channels, water and sewage pipe systems are infrastructures created to last for several generations. Pipe systems infrastructure must be cost effective, long lasting and require little maintenance. Too often, pipe systems prove to be defective and must be repaired or upgraded after several years. Leaks in drinking water pipe systems are a waste of resources and leaks in sewage networks potentially cause pollution of rivers and groundwater. The PAM benefits are based on longevity, high performance and a sustainable partnership. The long-lasting solutions are strengthened by new patented coatings and reinforced lining. Every year, PAM engineer-scientists file more than a hundred patents. Their expertise in the fields of metallurgy, strength of materials, coatings and processes are focused on customers need to meet the challenges of water requirements.</p>

**Page: Water-6-tradeoffs**

**6.1**  
**Has your company identified any linkages or trade-offs between water and carbon emissions in its operations or supply chain?**

Yes

**6.1a**

Please describe the linkages or trade-offs and the related management policy or action.

Linkage or trade-off	Policy or action
Trade-off	Water reuse systems reduce the volume of withdrawals and discharges but increase energy consumption. The Group's Water Policy gives the objective of 'zero-discharge of industrial water in liquid form, while avoiding the generation of new impacts on other environments and/or stakeholders'. We believe that we can achieve this target by using the best technologies available, which can be designed to have an optimal trade-off between water and energy requirements and impacts.
Linkage	Some Gypsum products have to be fluidized and then dried in the production process: if less water is used in the process, then less energy will be required for drying. Therefore, increasing water efficiency will also lead to greater energy efficiency, but the potential for the reduction of water is limited by process and equipment constraints and the need to ensure products adhere to quality specifications.
Trade-off	There are also trade-offs when recycling raw materials. The Gypsum Activity utilizes desulfurized gypsum (DSG) which yields recycling benefits, but at the same time the recycling of this by-product requires more energy because of the higher water content of the raw material. The Gypsum activity continuously strives to reduce the amount of water and energy used in the process, whilst at the same time increasing the amount of recycling. It aims at reaching an optimum balance between quality of the product, water consumption, energy consumption and recycling rate.

**Module: Water-Accounting**

**Page: Water-7-Withdrawals**

**7.1**

Are you able to provide data, whether measured or estimated, on water withdrawals within your operations?

Yes

**7.1a**

Please report the water withdrawals within your operations for the reporting year.

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
Company-wide	Other: Due to the complex nature of the Group's activities, we will report withdrawals on a Company level this year.	Surface	31.2	1-25	The quantity of water withdrawn includes cooling water. The contribution of the audited sites represents between 12 – 35% of the selected indicators.
Company-wide	Other: Due to the complex nature of the Group's activities, we will report withdrawals on a Company level this year.	Groundwater	25.2	1-25	The quantity of water withdrawn includes cooling water. The contribution of the audited sites represents between 12 – 35% of the selected indicators.
Company-wide	Other: Due to the complex nature of the Group's activities, we will report withdrawals on a Company level this year.	Rainwater	0.5	1-25	The quantity of water withdrawn includes cooling water. The contribution of the audited sites represents between 12 – 35% of the selected indicators.

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
Company-wide	Other: Due to the complex nature of the Group's activities, we will report withdrawals on a Company level this year.	Municipal water	17.8	1-25	The quantity of water withdrawn includes cooling water. The contribution of the audited sites represents between 12 – 35% of the selected indicators.

**7.2**

**Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?**

No

**7.2b**

**Please explain why you are not able to provide data for water recycling/reuse within your operations.**

In-house water recycling is encouraged, particularly through the use of closed circuits, as this considerably limits withdrawals from natural resources. Due to the complex nature of many of the Group's processes, it is difficult to calculate the rate of water recycling and reuse. In applying the water standard, the Group intends to make improvements in this area and ultimately produce a reliable metric for the entire scope of reporting by 2015.

**7.3**

**Please use this space to describe the methodologies used for questions 7.1 and 7.2 or to report withdrawals or recycling/reuse in a different format to that set out above.**

The EHS reporting makes use of the Group Environment, Health and Safety reporting tool: the Information System known as Gaïa (operational since financial year 2003).

The reporting boundary for water accounting covers the 1026 entities that report on their environmental performance, i.e. the sites with significant environmental impact (see 0.3).

Environmental data is obtained directly from the EHS units of the sites through annual reporting campaigns. The reporting process involves four stages:

- data input by the EHS correspondent 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.

The Statutory Auditors of Compagnie de Saint-Gobain carried out a review which enabled them to provide limited assurance that the "Water input per type of source" indicators are free of material misstatement.

The contribution of the sites included in the review to the Group's consolidated indicators represents between 12 – 35% of the selected indicators.

**7.4**

**Are any water sources significantly affected by your company's withdrawal of water?**

Don't know

**7.4c**

**Please explain why you do not know if any water sources are significantly affected by your company's withdrawal of water.**

Saint-Gobain uses the GRI definition for significantly affected sources: water sources are significantly affected when the withdrawals represent more than 5% of the volume of the groundwater aquifer or river flow, or are made in an area recognized as being protected or threatened (classified river). In 2011, for the first time sites were asked if they are in one of these two situations regarding their withdrawals. The Group intends to make improvements in this area and ultimately produce a reliable metric for the entire scope of reporting.

In addition, the Water standard that was launched in January 2012 and is currently being implemented on 140 sites requires that a detailed environmental study must be available where water sources are significantly affected.

**Page: Water-8-Discharges**

**8.1**  
**Are you able to identify discharges of water from your operations by destination, by treatment method and by quantity and quality using standard effluent parameters?**

No

**8.1a**  
**Please explain why you are not able to identify discharges from your operations by destination, treatment method , quantity and quality, and whether you have any plans to put in place systems that would enable you to do so.**

The company is currently able to identify discharges from operations by destination (natural environment or municipal sewage system) at the Group level. Nevertheless, we are not able to identify discharges by treatment method and quality this year.

Since 2011, the sites are asked to report on the amount of pollution released and the frequency of measurements (total suspended solids, chemical oxygen demand, 5-day biological oxygen demand and total hydrocarbons). This data is still being verified internally and therefore, the Group does not wish to report these indicators this year.

To date, Saint-Gobain does not gather any information on treatment methods from the sites.

Due to the complex nature of many of the Group's processes, it is difficult to produce such reliable metrics at the Group level.

**8.2**  
**Did your company pay any penalties or fines for significant breaches of discharge agreements or regulations in the reporting period?**

Yes

**8.2a**  
**Please describe the location and impact of the discharge that was the subject of the significant breach(es), the associated fines and any actions taken to minimise the risk of future non-compliance.**

Country or region	River basin	Impact	Fines and penalties	Company action and outcomes
Company-wide	Other: Due to the complex nature of the Group's	To date, the Saint-Gobain does not have an impact assessment per nonconformity. In applying the environmental events standard,	The Group is unable to provide any information on fines and penalties. In applying the environmental events standard,	In 2012, breaches of discharge agreements or regulations were monitored at the group level as part of the environmental campaign: all sites were asked whether they discharged water polluted beyond their limits or not. The

Country or region	River basin	Impact	Fines and penalties	Company action and outcomes
	activities, we will report on a Company level this year.	the Group intends to make improvements in this area and ultimately produce a reliable metric for the entire scope of reporting.	the Group intends to make improvements in this area and ultimately produce a reliable metric for the entire scope of reporting.	Environmental Events standard, which will be launched in 2013, requires that all accidents causing a legal nonconformity must be subject to an assessment of severity, an analysis of causes and must be recorded. The Group cannot report on outcomes this year, since the environmental events standard had not been launched for this reporting period.

**8.3**  
**Are any water bodies and related habitats significantly affected by discharges of water or runoff from your operations?**

Don't know

**8.3c**  
**Please explain why you do not know if any water bodies and associated habitats are significantly affected by discharge of water or runoff from your operations.**

Saint-Gobain uses the GRI definition for significantly affected destinations: water bodies or habitats are significantly affected when the discharges represent more than 5% of the volume of the groundwater aquifer or river flow, or are made in an area recognized as being protected or threatened (classified river). Since 2011, sites are asked if they are in one of these two situations regarding their discharges. The Group is still verifying this data internally and therefore, does not wish to report on water bodies and associated habitats significantly affected this year. The Group intends to make improvements in this area and ultimately produce a reliable metric for the entire scope of reporting. In addition, the Water standard that was launched in January 2012 requires that a detailed environmental study must be available where water bodies are significantly affected.

**Page: Water-9-Intensity**

**9.1**  
**Please provide any available financial intensity values for your company's water use across its operations.**

Country or region	River basin	Financial metric	Water use type (megaliters)	Currency	Financial intensity (Currency/mega-liter)	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Company-wide	Other: Due to the complex nature of the Group's activities, we will report on a Company level this year.	Revenue	Withdrawals	EUR(€)	570000	The group revenue in 2012 was 43.2 billion euros, and total withdrawals amount to 75.3 million cubic meters.

**9.2**



Please provide any available water intensity values for your company's products or services across its operations.

Country or region	River basin	Product	Product unit	Water unit	Water intensity (Water unit/product unit)	Water use type	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Other: Europe	Other: Due to the complex nature of the Group's activities, we will not report on a River Basin level this year.	Cast iron pipe for buildings	Other: 1 linear meter	liters	1164	Other: Total water consumption over the whole life cycle of the product (100 years).	The Pipe activity carried out a lifecycle analysis for this product, based on European data, and published an environmental product declaration (in conformity with ISO 21930 norm) in 2009. See attached file.
France	Other: Due to the complex nature of the Group's activities, we will not report on a River Basin level this year.	Glass wool, (IBR REVETU KRAFT 100)	Other: 1 m2	liters	18	Other: Total water consumption over the whole life cycle of the product (50 years).	The Insulation activity carried out a lifecycle analysis for this product, based on French data, and published an environmental product declaration (in conformity with NF P 01-010 norm) in 2009. A number of Isover environmental product declarations can be consulted at <a href="http://www.isover.fr/Documentation/FDE-S">www.isover.fr/Documentation/FDE-S</a> Between 1999 and 2011 fresh water consumption per ton of produced glass wool has been reduced by 30%, thanks to an increased use of closed circuit systems and improved processes.
Other: Europe	Other: Due to the complex nature of the Group's activities, we will not report on a River Basin level this year.	Double glazing window (CLIMAPLUS)	Other: 1 m2	liters	244	Other: Total water consumption over the whole life cycle of the product (30 years).	The Glass activity carried out a lifecycle analysis for this product, based on European data, and published an environmental product declaration (in conformity with ISO 14040 norm) in 2012. See attached file.

**Attachments**

[https://www.cdproject.net/sites/2013/51/16151/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/9.WaterIntensity/EPD\\_UK\\_SGPAM UK building pipes.pdf](https://www.cdproject.net/sites/2013/51/16151/CDP%20Water%20Disclosure%202013/Shared%20Documents/Attachments/CDPWaterDisclosure2013/9.WaterIntensity/EPD_UK_SGPAM_UK_building_pipes.pdf)  
[https://www.cdproject.net/sites/2013/51/16151/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/9.WaterIntensity/EPD\\_SGG CLIMAPLUS 4 16 4 EN V2.6 05-2012.pdf](https://www.cdproject.net/sites/2013/51/16151/CDP%20Water%20Disclosure%202013/Shared%20Documents/Attachments/CDPWaterDisclosure2013/9.WaterIntensity/EPD_SGG_CLIMAPLUS_4_16_4_EN_V2.6_05-2012.pdf)

**Module: Sign Off**

**Page: Sign Off**

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**Please enter the name of the individual that has signed off (approved) the response and their job title**

Pierre Delays, Director of the Environment, Health and Safety Department

**CDP**