

Carbon Disclosure Project

CDP 2012 CDP Water Disclosure 2012 Information Request

Saint-Gobain

Module: Introduction - 2012 CDP Water Disclosure

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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 65% 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 11 General Delegations (GD):

- Brazil Argentina Chile GD
- North & Central Europe GD
- Spain, Morocco and Portugal GD
- UK, Ireland and South Africa GD
- India GD
- Italy, Egypt, Greece and Turkey GD
- Asia Pacific GD
- Mexico Colombia Venezuela - Central America GD
- Eastern Europe GD
- Russia and the Ukraine 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.

Sat 01 Jan 2011 - Sat 31 Dec 2011

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: Please see Further Information text box.

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.	640 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 2011, about 30 facilities monitored their mine drainage water pumping.

Further Information

All the sites that belong to consolidated companies with more than 50 % control by Saint-Gobain (every business and every country) are followed up. Annual consolidation only includes 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 2011, 1032 reporting entities out of 1670 were selected to report on their environmental performance, and in particular on water-related aspects. The water accounting data reporting perimeter covers these 1032 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: 544 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.

Module: 2012-Water-Management

Page: 2012-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 geographical reach	Description of policy, strategy or plan	Position of responsible person
Global	<p>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</p>	Individual board member

Country or geographical reach	Description of policy, strategy or plan	Position of responsible person
	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.).	

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 geographical reach	Category of target or goal type	Description of target or goal	Progress against target or goal
Global	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. The Chemillé site in France, inaugurated in 2010, has already achieved its target of zero industrial process water discharged into the natural environment by recycling 100 percent of the water used.
Global	Direct operations	Reduce water withdrawals by 6% between 2011 and 2013, based on 2010 output.	In 2011, based on 2010 output, the Group's concerned sites (see 0.3) reduced withdrawals by 3.3%. Based on actual output, water withdrawals were reduced by 3.6%.
Global	Direct operations	Assess water-related risks on all its sites in the most comprehensive way.	A water-related risks assessment grid is developed and applied to all sites in 2012, in order to identify the exposure level of every site. Action plans will be implemented on sites with high exposure levels as a priority.
Global	Supply chain and watershed management	Systematically include water-related challenges in the tools and programmes used for raising the awareness of purchasers about responsible purchasing and environmental issues. The objective is to ensure that purchasers clearly understand these challenges in all their activities and that they effectively handle them in the longer term.	The Purchasing department just started in 2012 the implementation of the Supply Chain chapter of the Water Policy, which was published in October 2011. A general Responsible Purchasing training program started in 2012. Training sessions were carried out in France, Spain, United Kingdom, Mexico and the United States. Additional sessions are scheduled in Germany, China and Eastern Europe. The Purchasing department formalizes its commitment to the respect of the environment through: 1. a Purchaser Charter : EHS issues are systematically taken into account when preparing purchasing specifications. Suppliers must comply to be selected. 2. a Supplier Charter that all suppliers and subcontractors are asked to support. They commit to implementing policies to limit their environmental footprint throughout the life cycle of the products they supply. In particular, they strive to reduce their impact on ecosystems and biodiversity and optimize consumption of natural resources. We are willing to make this commitment contractual in the future.
Global	Community engagement	Promote a reasoned and constructive dialogue with the local communities living close to its sites,	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.

Country or geographical reach	Category of target or goal type	Description of target or goal	Progress against target or goal
Global	Transparency	to facilitate a better understanding of its activities and enable sustainable and shared management of local water resources.	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 2011" fulfils the requirement of Application Level A+.
		Measure performance by using common indicators that are coherent with existing guidelines and reference tools at an international level.	

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 geographical reach	Category of action	Description of action and outcome
Global	Direct operations	Since 2011, Saint-Gobain has been awarding the Environment Emeralds which reward the most exemplary projects in these categories: greenhouse gases, waste, water and biodiversity. In 2011 the Worcester Campus (MA, USA) project was awarded a Water Emerald. Several business units significantly reduced the use of well water from their furnace equipment cooling process, in particular by switching from water-cooled to air-cooled compressors and creating closed-loop cooling systems.
Global	Collective action	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.
Global	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.
Global	Transparency	We have set an objective to evaluate the environmental impacts of our 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). We use a common EPD (Environmental Product Declaration) format to report on life cycle assessment results. The Group decided to have these EPDs verified by independent third-parties. EPDs are already available for 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.
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		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.

Attachments

[https://www.cdproject.net/Sites/2012/51/16151/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/1.WaterManagementandGovernance/Water Policy.pdf](https://www.cdproject.net/Sites/2012/51/16151/CDP%20Water%20Disclosure%202012/Shared%20Documents/Attachments/CDPWaterDisclosure2012/1.WaterManagementandGovernance/Water%20Policy.pdf)

Module: 2012-Water-RisksOps**Page: 2012-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 and 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 level has been carried out on the 'concerned perimeter' only (see 0.3). The 544 '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 geographical reach	Region within country	Proportion of operations located in this region (%)	Further comments
Global	We operate in water-stressed regions of China, India, Mediterranean countries and United States.	11 – 20	The mapping of sites and water-stressed regions described above enabled us to identify the watersheds concerned. Yet, we are not able to communicate on water stress at the watershed level this year because we are still in the process of verifying that information 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?

No

2.2b

You may explain here why you do not wish to report or why you do not use other indicators to identify which of your operations are located in regions subject to water-related risk.

The Group is still developing its internal water-related risk assessment methodology (see 3.2), so we do not wish to report on our choice of risk indicators this year.

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 we choose the number of facilities as the basis to calculate proportions. Since we are still in the process of verifying the water stress information 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?

Don't know

2.5b

You may explain here why you are not able to identify if any of your key inputs or raw materials come from regions subject to water-related risk and whether you have plans to explore this issue in the future.

The Purchasing departments are not able to identify if any of your key inputs or raw materials come from regions subject to water-related risk 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 purchases. 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, we just started in 2012 the implementation of the Supply Chain chapter of the Water Policy, which was published in October 2011.

Page: 2012-water-3-riskassess-op

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 geographical reach	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
Global	02. Physical: Flooding	Floods may cause important damages to our installations and lead to production disruption, significant financial and market losses, plus threaten jobs and pose challenges to human and environmental safety.	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 group has an adapted insurance coverage for property damage and subsequent business interruption, including contingent business interruption.
Global	03. Physical: Increased water stress or scarcity	Considered as a physical risk, water scarcity may cause production disruptions.	Current	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 of our 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. We encourage in-house water recycling, particularly through the use of closed circuits, as this considerably limits withdrawals from natural resources.
Global	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 2011, 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.

Country or geographical reach	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
Global	Other: Environmental liability	An environmental incident caused by one of our site's activity involves the environmental liability of the Group.	Current	The 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, we developed a corporate Environmental Events standard that sets up a common framework and enable 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
We are currently developing a plant-level risk exposure and sensitivity assessment grid, we do not have final results yet. Shared by the entire Group, this tool measures three risks based on quantitative and qualitative criteria: 1. Water constraint risk: factors that might affect or compromise a site's water supply, and so its activity; 2. Pollution risk: factors linked to a site's discharge and its impact on the environment; 3. 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. We developed and deployed a detailed water section, which contains about 50 indicators, in the environmental reporting survey that all relevant sites (see question 0.3) have to fill annually. Moreover, we carried out an analysis of the water consumption patterns of the main production processes.	Facility

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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 purchases. 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, we just started in 2012 the implementation of the Supply Chain chapter of the Water Policy, which was published in October 2011.

Page: 2012-Water-4-Impacts

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.

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, in Thailand in 2011 and in Spain in 2011.

The total amount of financial impacts 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.

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. 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.

Page: 2012-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 geographical reach	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
Global	Sales of new products or services	The needs 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.	Current	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. We provide 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.

Page: 2012-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
Water reuse systems reduce the volume of withdrawals and discharges but may increase energy consumption.	The 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.
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. 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.

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Page: 2012-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 geographical reach	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
Global	Surface	35.5	1-25	The contribution of the audited sites represents between 12% and 37% of the selected indicators.
Global	Groundwater	25.3	1-25	The contribution of the audited sites represents between 12% and 37% of the selected indicators.
Global	Rainwater	0.8	1-25	The contribution of the audited sites represents between 12% and 37% of the selected indicators.
Global	Municipal water	19.7	1-25	The contribution of the audited sites represents between 12% and 37% 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.**

We encourage in-house water recycling, 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, we intend 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 means implemented for EHS reporting is the 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 1032 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% and 37% 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. We intend 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 sources are significantly affected.

Page: 2012-Water-8-Discharges

8.1 Are you able to identify discharges of water from your operations by destination, by treatment method and by 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 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.

In 2011, the sites were asked for the first time to report on the amount of pollution released (total suspended solids, chemical oxygen demand, 5-day biological oxygen demand and total hydrocarbons). We will not communicate on these indicators this year.

We do 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 geographical reach	Impact	Fines and penalties	Company action and outcomes
Global	To date we do not have an impact assessment per nonconformity. In applying the environmental events standard, we intend to make improvements in this area and ultimately produce a reliable metric for the entire scope of reporting.	We are not able to provide any information on fines and penalties. In applying the environmental events standard, we intend to make improvements in this area and ultimately produce a reliable metric for the entire scope of reporting.	In 2011, 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 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. We cannot report on outcomes this year, since the environmental events standard has not been launched yet.

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).

In 2011, for the first time sites were asked if they are in one of these two situations regarding their discharges. We intend 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.

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9.1

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

Country or geographical region	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.
Global	Revenue	Withdrawals	EUR(€)	510000	The group revenue in 2011 was 42.1 billion euros, and total withdrawals amount to 81.7 million cubic meters.

9.2

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

Country or geographical region	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	Cast iron pipe for buildings	Other: 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.

Country or geographical region	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.
France	Glass wool (IBR REVETU KRAFT 100)	Other: square meter	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 www.isover.fr/Documentation/FDE-S 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	Double glazing window pane (CLIMAPLUS)	Other: square meter	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/2012/51/16151/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/9.WaterIntensity/FDES_SGG_CLIMAPLUS_4_16_4_EN_V2.6_05-2012.pdf](https://www.cdproject.net/Sites/2012/51/16151/CDP%20Water%20Disclosure%202012/Shared%20Documents/Attachments/CDPWaterDisclosure2012/9.WaterIntensity/FDES_SGG_CLIMAPLUS_4_16_4_EN_V2.6_05-2012.pdf)

[https://www.cdproject.net/Sites/2012/51/16151/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/9.WaterIntensity/EPD_UK_SGPAM_UK_building_pipes.pdf](https://www.cdproject.net/Sites/2012/51/16151/CDP%20Water%20Disclosure%202012/Shared%20Documents/Attachments/CDPWaterDisclosure2012/9.WaterIntensity/EPD_UK_SGPAM_UK_building_pipes.pdf)