

# **Building ambition, adding value**

Corporate Sustainable Development Report 2013



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Our material issues

The following is a summary of our progress against our main sustainable development performance targets.

Area	Target	Progress	Target date	Status 2013	
Vision, strategy	y and corporate governance				
Management systems	ISO 14001 implemented by all cement plants and alternative fuels and raw materials (AFR) pre-treatment platforms.	This is a rolling target as newly acquired Group companies require time to implement management systems. See performance data table on page 38.	ongoing	Cement 96% AFR 95%	
Environmental	performance				
Climate and energy	Reduce global average specific net CO <sub>2</sub> emissions (kg CO <sub>2</sub> /tonne cementitious materials) by 25%, using 1990 as reference.	See page 17, 19, 20, 39 & 40.	2015	24.3%	
Environmental impacts	Emissions monitoring and reporting standard implemented.	The figure reported reflects the percentage of plants with continuous emission monitoring in place and includes our operations in India. This is an ongoing target as newly acquired plants and companies require time to implement systems.	ongoing	92%	
	Reduce global average specific nitrogen oxides, sulfur dioxide and dust emissions (g pollutant/tonne cementitious materials) by 20%, using 2004 as reference.	of cementitious material by 20% by 2013 (against a base year of 2004) was met in 2012. Similarly, our targets to reduce dust and sulfur dioxide			
	Quarry rehabilitation plans.	This is an ongoing target as newly acquired plants and companies require time to develop and implement plans.	ongoing	Cement 99% Aggregates 90%	
	Biodiversity: 80% of sensitive sites to have biodiversity action plans.	The definition of sensitive sites was developed as part of a biodiversity management system developed in conjunction with IUCN. The Biodiversity Management System was launched in late 2010. See page 20 & 41.	2013	90%	
Water	Reduce water consumption per tonne of product by 20% by 2020, when compared with 2012.				
Social perform	ance				
Community involvement	Every Group company to have a community engagement plan covering all sites.	See page 31, 32, 33 & 34	2012	90%	
OH&S	Reduce lost-time injury frequency rate to below 1 and total injury frequency rate to below 5.	See page 24, 25, 26 & 44.	2014	LTIFR: 1.3 TIFR: 5.7	

A number of new targets and aspirations are detailed in the Holcim Sustainable Development Ambition 2030 section (page 6) and in the individual chapters.

### CEO statement

## Reconciling dilemmas to create value for all



We are living in challenging times. Population growth – with 1.4 billion more people expected by 2030, rising living standards and higher urbanization offer significant business and growth opportunities for Holcim. However, these trends bring major challenges for the planet – challenges such as climate change, unsustainable resource consumption and how to include all equitably. This requires companies to reevaluate their solutions portfolio, and to continuously question their business models.

Our material issues

These challenges pose many dilemmas for companies. In reconciling these dilemmas, Holcim aspires to go beyond "business as usual" and wants to become part of the solution to the challenges of our time. In the period since our last report, Holcim has been actively seeking solutions and has worked with a wide range of sustainability experts and interested stakeholders to develop a sustainability strategy with stretching, yet attainable goals which will contribute meaningfully to addressing the sustainability challenges we all face. This strategy – "Holcim Sustainable Development Ambition 2030" - which focuses on activities in the areas of Climate, Resources and Communities, with an intention to significantly increase our portfolio of Sustainability Enhanced Solutions, is released in this report.

This report details our ongoing activities in sustainable development and discloses data on a number of performance indicators. The report also features a number of important achievements. Holcim has significantly strengthened its compliance activities by enlarging and further defining the compliance function. A global whistleblowing system was developed in 2013 and will be deployed in 2014.

We have made progress with the implementation of the Holcim Human Rights Management System, and six human rights impact assessments have been carried out and follow-up actions identified and instituted. Furthermore, a supplier code of conduct, based on the principles of the United Nations Global Compact has been published and communicated to all our suppliers.

Work has continued with the implementation of the Holcim Water Management System and in 2012, a water efficiency target was announced. Holcim is committed to reduce water consumption per tonne of product by 20% by 2020, when compared with 2012.



The very successful and fruitful Holcim - the International Union for Conservation of Nature (IUCN) partnership concluded at the end of 2013, with a series of useful tools and recommendations developed. The parties will continue to collaborate in the future with a focus on implementation of the tools within Holcim. We would like to thank IUCN for sharing their expertise and helping us develop and strengthen our approach to biodiversity and water.

Our material issues

Occupational Health and Safety (OH&S) remains a critical challenge for Holcim. Fatalities and injuries arising from our activities are unacceptable and we will continue to ensure that safety remains our top priority. Holcim expects every single person in the organization to play their part and to be responsible for their own safety and the safety of their colleagues. We have set targets to reduce both our Lost-time Injury Frequency Rate (LTIFR) to below 1 and Total Injury Frequency Rate (TIFR) to below 5.

As in previous reports, we have asked for the inputs of an External Report Review Panel, consisting of a broad range of experts from various stakeholder groups. The panel provided inputs into the materiality review and also the content of the report and has also provided a statement with recommendations and observations which can be found on page 48. Furthermore, at the beginning of 2014 we conducted dialogues in Zurich and Mumbai with a number of eminent stakeholders to discuss our sustainability strategy. We are humbled by the level of attendance and the significant goodwill extended to us by our stakeholders.

We are extremely grateful to them for their honest, forthright and constructive comments for both the report and our sustainability agenda going forward.

Finally, a comment on the planned merger between Holcim and Lafarge which was announced on April 7, 2014. Holcim is convinced that the strategic orientation of its sustainability agenda is an essential asset for the future in the building materials industry. Holcim is committed to successfully implement it, creating value for all.

The sustainability agenda of LafargeHolcim will emerge from the ambitious commitments from both companies to sustainable development. Building on its unique network of partners, its expertise and global footprint, the new Group will be even stronger and will have an even greater capacity and expertise to effect change.

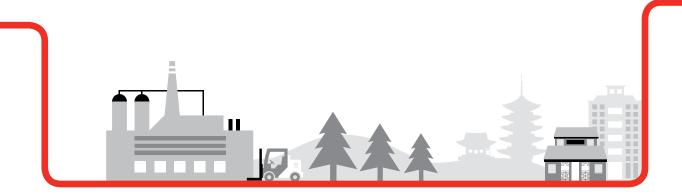


**Bernard Fontana** Chief Executive Officer

# **Building ambition, adding value**

Our material issues

For many years, we have acted as an agent for change, while continuing to create and sustain shared value for all our stakeholders.



In the face of ever-increasing competition for skills, we have continued to attract and retain the most talented people, who have helped us flourish and grow. At the same time, we have taken a leadership role in:

- helping to meet the housing and mobility needs of millions of people
- providing the materials that make modern structures more resilient and sustainable
- leveraging new markets and including low-income customers and producers at the "base of the pyramid."

We are aware that currently the cost of resources does not fully reflect the reality of the true value of those resources. Change is inevitable and it could be disruptive.

Sensitive to this and aspiring to be part of the solution to the problems of our time, we have been working with a wide range of experts and interested stakeholders to develop a new long-term strategy, the Holcim Sustainable Development Ambition 2030, and define a number of stretching yet attainable goals to help us address the sustainability challenges that lie ahead.



### Holcim

Supplier of sustainability enhanced solutions

Our material issues



Aligned with our vision "to provide foundations for society's future," the Sustainable Development Ambition 2030 aims to significantly increase the interest in, and uptake of, our innovative range of sustainability enhancing products and services.

By 2030, we aspire to generate one third of our revenue from our portfolio of sustainability enhanced products and services. These products and services have proven sustainability benefits. They offer superior environmental and social performance in the manufacturing phase, and/or in the use and disposal phases, of buildings and other infrastructure, compared with current standards. In particular, they will help us to take advantage of the growing number of opportunities arising in the sustainable and resilient construction segment.

The Sustainable Development Ambition 2030 has a number of aspirations and intermediate targets to help us address three focus areas: **Climate, Resources and Communities**.



### **Sustainability Enhanced Solutions**

Grow our portfolio of sustainability solutions to 1/3 of revenues by 2030



### **Climate**

Acting to cap the carbon footprint across the lifecycle

 Achieve no net increase in absolute carbon emissions vs 2013



### **Resources**

Minimize the use of primary resources; show a positive impact on water and a positive change for biodiversity

- Valorize 1 Bio tonnes of waste and other secondary materials
- Water index in water scarce areas > 0 in 2030
- Biodiversity condition index 2030 > 2020



### **Communities**

Invest strategically and develop "inclusive business models" to create positive social impact and business returns

 Improve the quality of life – in particular with regard to livelihoods and shelter – of 100 million people at the base of the pyramid

To provide foundations for society's future



Acting to cap the carbon footprint across the lifecycle

Our material issues



We have a continuing commitment to a wide variety of measures to mitigate our CO<sub>2</sub> emissions, such as improving the energy efficiency of our own operations and substituting fossil fuels for lower-carbon alternatives.

But the global climate challenge requires an altogether more collaborative and far-reaching response.

As a forward-looking and responsible company, our approach to sustainability must reach beyond our own business and encompass our entire value chain. Throughout the building lifecycle, there is great potential for carbon reduction so instead of focusing on just our own operations, we recognize our responsibility to make all the elements in our value chain more sustainable.

Therefore, by 2030, we aspire to maintain net absolute CO₂ emissions at 2013 levels, across the whole lifecycle of our products.

Avoiding a net increase in absolute carbon emissions is an ambitious undertaking. It requires us to cap our carbon footprint, regardless of the expected growth in the volume of cement we produce. It acknowledges that any increases in emissions from our operations will be offset or compensated through products, services and solutions that reduce emissions from buildings, infrastructure and transportation.



By doing so, we adopt a pioneering approach in our industry, becoming the first to not only monitor and account for  $\rm CO_2$  savings beyond our own operations, but also set an ambition on absolute emissions.

# Our pathway to achieving the **Holcim Ambition for Climate**

### 2015

 Reduce specific CO<sub>2</sub> emissions by 25% compared with 1990 levels

### 2020

 Reduce specific CO<sub>2</sub> emissions by 30% compared with 1990 levels

### 2030

- Achieve no net increase in CO<sub>2</sub> emissions compared with 2013 levels<sup>1</sup>
- 1 This means that any increase in absolute net  $\mathrm{CO}_2$  emissions from operations compared with 2013 needs to be smaller than the amount of emissions that Holcim contributes to reduce outside operations.



### Resources

Maximize the use of secondary resources Impact positively on water and show a positive change for biodiversity



We appreciate that our business success depends on nature and ecosystem services. That is why we have set ourselves very clear targets to be less dependent on primary materials and manage natural resources and ecosystems in a sustainable way.

By 2030, we aspire to use 1 billion tonnes of secondary resources, replacing approximately 25% of the primary materials we need.

We will replace more fossil fuels with alternative energy sources, and increase our use of industrial by-products such as fly ash and slag. We will also use more construction and demolition waste replacing natural resources. These waste solutions also provide a valuable service for our local communities, by offering a responsible solution to the ever-increasing problem of waste. The benefits include better health, environmental protection and even provision of livelihoods.

### We aspire to have a positive impact on water resources in water-scarce areas by 2030.

We remain conscious of how precious water is. We will continue to manage water resources even more efficiently, equitably and sustainably. In water-scarce areas, Holcim sites will work to provide more water to communities than we use by, for example, building check dams and reservoir pits.

By 2030, we also aspire to achieve a positive change for biodiversity.

By 2020, we will use a biodiversity reporting system we have developed with the International Union for Conservation of Nature (IUCN) to assess our extraction sites against a number of habitat indicators and report year-on-year improvements in biodiversity management. Between 2020 and 2030, we aspire to demonstrate a positive change for biodiversity.

### Our pathway to achieving the **Holcim Ambition for Resources**

### 2015

- Define our operational water footprint across all sites
- · Implement Biodiversity Action Plans for all sensitive sites

### 2020

- Achieve a Thermal Substitution Rate of 20%
- Use 10 million tonnes of construction and demolition waste and other alternative aggregates
- Improve water efficiency by 20% compared with 2012 and meet water-quality criteria in all sites
- Assess the biodiversity quality at all our extraction sites

### 2030

- Use 1 billion tonnes of secondary materials between 2013 and 2030
- · Positive impact on water resources in water-scarce areas
- Positive impact on biodiversity across the Group

## **Communities**

Our material issues



Invest strategically and develop "inclusive business" models to create positive social impact and business returns



We recognize that market-based solutions that address social issues will drive both business and societal benefits, creating shared value for all.

Our 2030 aspiration is to improve the quality of life – in particular with regard to livelihoods and shelter – of 100 million people at the base of the pyramid through inclusive business solutions and strategic social investments.

**Inclusive business solutions** approach social problems as business opportunities. By using our core competencies and expertise, we can improve the living conditions of low-income communities while extending access to our products, services and solutions in ways that create mutual value.

To succeed, these initiatives must be profitable, strategic, address social needs, provide measurable benefits to the company, and drive product or service development. Examples include:

- housing and sanitation solutions for low-income customers
- micro-enterprises that market products and services relating to our core business
- supplying Holcim facilities with goods and services.

Inclusive business initiatives are intended to complement and not to replace traditional CSR programs, as not all social needs can be addressed through market-based solutions.

**Strategic social investments** remain therefore important.

They seek to improve people's quality of life in a sustainable way, by providing seed capital for activities, and building capacity among community stakeholders. Social investment is considered to be "strategic" if it focuses on the needs of local communities, is implemented in close collaboration with stakeholders, and builds on our core business knowledge and assets.

# Our pathway to achieving the **Holcim Ambition for Communities**

#### 2015

 Invest 75% of our CSR spending in strategic social and collaborative projects

#### 2020

 40 million people at the base of the pyramid to benefit from our strategic social investment and inclusive business initiatives between 2013 and 2020

#### 2030

 Impact 100 million people at the base of the pyramid between 2013 and 2030, progressively focusing on inclusive business solutions **Sustainable Development Ambition 2030** 

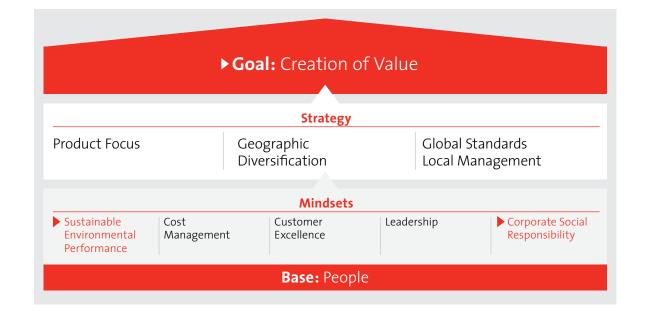


An essential building block of our strategic framework



The Sustainable Development Ambition 2030 aspires to address three essential aspects of our longstanding and successful strategic framework: Creation of Value, Sustainable Environmental Performance and Corporate Social Responsibility.

We implement separate strategies, policies and programs aimed at OH&S, compliance and employees under our People, Leadership and Global Standards pillars.



#### Methodology and assurance

# Vision and strategy

Providing the foundations for society's future, adding value to all stakeholders

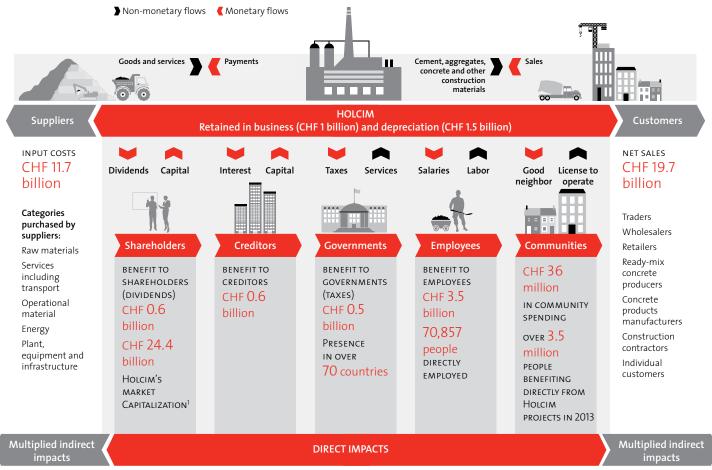
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### Vision and values

Holcim's vision is to provide foundations for society's future. In line with this vision, our sustainable development goal is to create value for both business and society. We do this by providing products, services and solutions that generate profits while also contributing to societal and environmental well-being.

The starting points are our corporate values of strength, performance and passion – which reflect our promise to be a solid partner, to deliver on our promises and to provide the best solutions for our customers while caring about everything we do. This care extends to our people, our customers and suppliers, our communities and the environment.

### Adding value and sharing outcomes – economic impacts along the value chain



1 On 31.12.2013

### **Building ambition**

"Overall, Holcim is advanced in the area of sustainable development. In future reports, in order to cover all issues of the OECD guidelines for Multinational Guidelines, topics about competition and taxation should be additionally addressed."

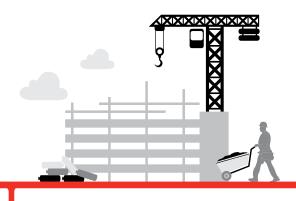
Alex Kunze, External Report Review Panel



# Managing sustainable development

Holcim's commitment to sustainable development is driven from the Holcim Executive Committee (Exco) and Board of Directors. However, ultimately responsibility for sustainability rests with every employee. The dedication and commitment of line managers and their teams to implement Group programs and achieve sustainability targets is key to achieving our growth ambitions.

A steering group for sustainable development operates as a subcommittee of the Holcim Exco. It is chaired by Exco member Andreas Leu and comprises senior managers including Holcim CEO Bernard Fontana, Exco member Roland Köhler and CEO of Holcim Technology, Urs Bleisch. A second committee, comprising Holcim Group company CEOs and functional experts, advises on the design and implementation of sustainable development programs.



Methodology and assurance

## Business standards

To facilitate managing our performance and ensure the maintenance of global standards, various management systems are in place. The point of reference are ISO certified management systems. Some specific issues are handled with appropriate internally developed systems. For example, our biodiversity and water management systems have been developed in collaboration with International Union for the Conservation of Nature. A further example is our Occupational Health and Safety system, which exceeds the requirements of OSHAS 18001.

### Sustainable procurement

Holcim recognizes the importance of responsibility along our value chain. A supplier code of conduct, informed by the principles of the UN Global Compact, has been developed and communicated to all suppliers. Furthermore, Group companies identify and prioritize those suppliers posing a higher sustainability risk. Those suppliers, together with all new suppliers, are evaluated with assessment tools appropriate to the level of perceived risk. Tools range from selfassessment questionnaires through to full audit and action plans are implemented to address any shortfall. Group companies report annually on the status of their supplier assessments in the annual procurement scorecard. Details of supplier assessments can be found in the performance table on page 38. The supplier code of conduct can be downloaded from our web site.



### **Determining material issues**

Holcim has a well-established Business Risk Management process for identifying risks at corporate as well as Group company level, which covers not only financial but also key sustainable development concerns such as safety and air emissions (see Annual Report and Accounts page 120). In addition to this, Holcim also conducts sustainable development material issue reviews to ensure the full range of sustainability risks and opportunities are correctly weighted and addressed. Furthermore, we consider the views and expectations of stakeholders through our External Report Review Panel and reflect the internal and external views in a regularly updated materiality matrix.



#### More info

Details of the External Review Panel are available at <a href="https://www.holcim.com/sustainable">www.holcim.com/sustainable</a>

Methodology and assurance

Our 2013 Group materiality matrix was reviewed in September 2013 following a series of workshops with internal stakeholders and the External Review Panel. The results of the materiality reviews are shown in the matrix below.

### Comparison internal and external ranking

	Importan	Importance of issues – global view			
	Low	Medium	High	Very high	Page
Economic dimension					
Business ethics and compliance				•	15, 16
Economic impact				•	12, 38
Customer management			•		22, 23, 38
Supplier management		•			13, 38
Environmental dimension					
Resource management				•	17–18
Water			•		18, 41, 42
Energy				•	17, 39, 40
Raw materials			•		17, 18
Waste & recycling			•		17, 42, 43
Managing environmental impacts				•	19-21
$CO_2$				•	19, 20, 39
Biodiversity			•		20, 41
Other atmospheric emissions			•		21, 40
Environmental incidents			•		39
Sustainable construction			•		22
Social dimension					
Employment practices				•	27-28, 43, 44
Human rights			0		29-30, 44

Holcim view – result of Holcim business risk management process.

External stakeholder view – result of interviews with a range of external stakeholders.

View from Holcim and external stakeholders coincide.

Range of external stakeholder views.

Low: Low level of concern to stakeholders and low level of current impact on Holcim.

High: High level of concern to stakeholders and high level of current or potential impact on Holcim.

24-25, 44

34,44

35-37

Community engagement and stakeholder relations

OH&S

Inclusive business solutions

Opportunity

# Integrity

We are very clear about what we expect and violations are not tolerated

### **Building ambition**

"In times of continuing corruption allegations and low public trust in business, it is vital for Holcim to emphasize its commitment to integrity and to follow best practice in reporting how ethical values are an effective guide for its people from top to bottom."

Jermyn Brooks, External Report Review Panel





Holcim applies the highest standards to the way we conduct our business. At a corporate level, we follow the Swiss Code of Best Practice for Corporate Governance. Furthermore the Holcim Code of Business Conduct is applied throughout the Group, providing consistent direction for the daily decisions we make in business.

Our Code of Business Conduct covers all aspects of our operations, and Group companies are responsible for ensuring that all employees are aware of their responsibilities. To strengthen compliance across the Group, a Chief Legal and Compliance Officer was appointed in 2013 assuming responsibility for all legal and compliance matters. Furthermore, the internal audit function was reorganized and strengthened.

During the course of 2014, our Code of Business

Conduct will be revised and the renewed code will be
communicated to all employees in a global campaign.

Further details on corporate governance and our code of
business conduct can be found in the Annual Report and
Accounts, page 113.



# Combating bribery and corruption

In 2012, an Anti-Bribery and Corruption Directive (ABCD) was issued by the Group across all Companies. As part of the Directive, Holcim has mandated that all Group companies must implement a whistleblowing system (WBS) or that their existing WBS is in line with guidance provided.

In 2013 work was ongoing to implement the ABCD and WBS globally. In 2012 and 2013 designated "Relevant Employees" in all regions underwent face-to-face training on the Directive. E-learning certification is also required of these employees every year and is currently available in 17 languages. The message to our employees is unambiguous: violations will not be tolerated. Noncompliance will be subject to disciplinary measures which may include termination of employment.

Responsibility

Innovation

Care

Respect

Relationships

Opportunity





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# **Creating value in a competitive environment**

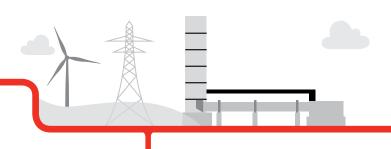
Value creation must abide by a number of fundamental rules and principles. This is why Holcim has issued not only a Code of Business Conduct defining the expected business behavior for all employees, but also a specific program – "Value Creation in a Competitive Environment" requiring strict respect for competition laws. Here, Holcim also applies a zero-tolerance policy. Measures have been introduced to ensure that the Group companies comply with the applicable legislation and the relevant regulations. These include a centrally coordinated training program and instructions on good business conduct in line with modern competition law. Training and support materials are continuously updated in line with the latest developments in competition law and in 2013 relevant employees received face-toface or online training in all regions. As with the ABCD, the message is unambiguous: violations will not be tolerated, a message backed up by our compliance and audit functions.

# Monitoring performance

During 2013, Holcim significantly strengthened its compliance activities by enlarging and further defining the compliance function. Regarding its organizational structure, Holcim appointed a Chief Compliance Officer and a Head Group Compliance. Additional compliance officers have been engaged to further address compliance-related topics, such as policy development and revision, training and third party due diligence. Holcim has started to build its investigations team who assess, investigate where needed and track compliancerelated reports. A global whistleblowing system (WBS) with an integrated case management tool was under development in 2013. The WBS will additionally enable employees to ask compliance-related questions and will be implemented throughout the Group during the course of 2014.

In 2013, 116 reports were brought to the attention of Group Compliance. Eighty-five (85) of these reports were without merit or were investigated and closed. Of those 85 cases, 71 required remediation actions, including employment consequences where warranted. The remaining 31 cases are still under investigation.

# Energy and resource efficiency are key business drivers



### **Building ambition**

"With its water management system and its commitment to biodiversity conservation, Holcim strives to sustain these natural resources while at the same time providing a benefit to the local community for example by ensuring water sustainability. The positive impacts and contributions at the local level are interesting and should be highlighted."

**Guillaume Habert, External Report Review Panel** 



### **Energy**

Cement production is highly energy intensive so efficiency and security of supply are key business drivers. Holcim's cement production has increased by almost 120% since 1990, but due to increased energy efficiency in the same period Holcim's annual energy consumption increased by only 45%. Energy from traditional sources (primarily coal and petcoke) increased by only 25% – mainly due to the use of waste as alternative fuel. Holcim has reduced the energy consumption per tonne of clinker from 4500MJ in 1990 to just 3466MJ per tonne in 2013.

Alongside the use of alternative fuels, Holcim has achieved this energy consumption reduction by optimization of processes, equipment and operational efficiency. Holcim invested in upgrading equipment using best available and ecologically viable new technologies as well as projects to recover and utilize heat from cement kilns to further reduce total thermal energy consumption.

### **Alternative resources**

The use of waste as an "alternative fuel and resource" (AFR) makes a significant contribution to Holcim's sustainable development and economic performance. Co-processing AFR provides a solution to society's waste problem while also offering opportunities for employment. Furthermore, it improves the environmental footprint of our operations by limiting the use of fossil fuels and lowering emissions. With the full recovery of waste in the combustion process, Holcim mitigates the risk of rising energy costs, improves energy security and reduces the consumption of natural resources. In 2013 13.7% of Holcim's thermal energy demand was covered by co-processing alternative fuels.

To continue the responsible handling and storage of waste materials throughout the Group, Holcim has developed and implemented an AFR Certification program (ACERT) to minimize risks at alternative fuels processing facilities. The ACERT system has been implemented at all sites using AFR. See <a href="https://www.holcim.com/sustainable/casestudies">www.holcim.com/sustainable/casestudies</a> for further information.

### Building ambition, adding value

### Our 2030 aspirations and interim targets

### **Aspirations**

- Holcim aspires to valorize 1 billion tonnes of secondary materials (including waste) between 2013 and 2030.
- Holcim aspires, by 2030, to have a positive impact on water resources in water-scarce areas.

### Interim targets (2020)

- Achieve a Thermal Substitution Rate of 20%
- Valorise 10 million tonnes of construction demolition waste (CDW) and other alternative aggregates
- Reduce water consumption by 20% against a 2012 baseline and meet water quality criteria across all sites

Responsibility

Innovation

Care

Respect

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Opportunity

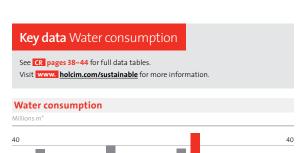


# Water

Water is an essential natural resource for all Holcim operational sites across the world. Although the construction material industry is typically not a large consumer of water compared with other sectors, we remain conscious of growing global water sustainability challenges. In response to this, Holcim, in partnership with the International Union for Conservation of Nature (IUCN), has developed and implemented a water risk assessment methodology, as part of a broad water management approach for all business units worldwide. Striving to sustain this resource, Holcim has been employing innovative approaches alongside practical solutions and engaging with stakeholders to use water efficiently and ensure water sustainability.

We have been working with sector partners to address the challenges posed in managing this precious resource. Holcim was instrumental in developing a global water tool for the cement sector which was launched at the Budapest Water Summit in October 2013.

\* http://www.wbcsdcement.org/index.php/2013/441-csi-launches-global-water-tool-for-the-cement-sector



In 2011 and 2012 we only measured water withdrawal for aggregates Water consumption in aggregates was not reported prior to 2013.

#### More info

Further details of the methodology can be found online\*

### Adding value

### Natural value measurement in India

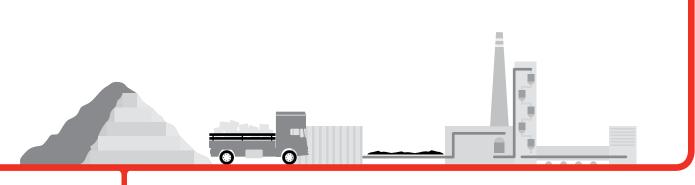
As competition for resources intensifies, assessing the value of environmental and social impacts and opportunities – currently not priced in the cost of goods – is instrumental to anticipate future development and gain a competitive advantage. One of our Group companies in India, Ambuja Cements (ACL), supported by KPMG, undertook a project to understand the value of its social and environmental impacts and to gain insights as to the value that could be at risk by 2020.

The study estimated the costs and benefits of aspects such as water usage and rainwater harvesting, carbon and other emissions to air, the use of alternative fuels and raw materials and agri-based livelihoods. The study showed that overall, ACL shows a positive financial impact on net environmental and social values, but highlighted where the company needs to invest in reducing negative values — especially in the environmental domain. The study specifically showed that ACL could profitably maximize its "true value" focusing its resources on carbon emissions, water and further expanding its social engagements.

See our web site for further details of the study, including methodology and actions.

## Responsibility

Mitigating the impacts of production responsibly is key to maintaining our license to operate

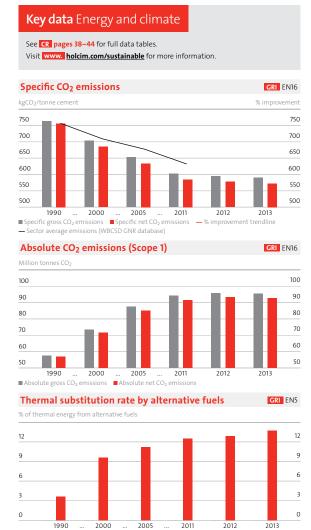


# Reducing CO<sub>2</sub>

Holcim converts natural limestone and other minerals into clinker, which is further processed and sold for mixing construction concrete. Clinker production is not only energy intensive, but the carbon originally captured in limestone escapes during the production process. This results in the emission of large amounts of CO<sub>2</sub>.

Apart from the environmental impacts, carbon emissions in cement production are a measure of resource and energy efficiency. Therefore since 1990 we have strived to reduce  $CO_2$  emissions per tonne of product. Holcim's current target is to reduce its  $CO_2$  emissions per tonne of cement by 25 percent by 2015, compared with the reference year of 1990. By the end of 2013, we had achieved a reduction of 24.3%, so are on track to achieve this target. With net emissions of 572kg of  $CO_2$  per tonne of cement, Holcim remains the leader in the industry with the lowest  $CO_2$  intensity.

Our focus has been on the continuous reduction of clinker in cement through the use of carbon-neutral mineral components such as blast furnace slag or bottom fly ash from the power industry. Natural pozzolanic material such as volcanic ash rock can also be used in areas where this is available and viable. In 2013, Holcim had an average of 69.8% clinker in its cement – among the lowest in the industry.



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### **Building ambition**

"Efficiency improvements in the area of climate change are not enough. Holcim should highlight what the company is doing to substitute clinker, what kind of research they are involved in and the resources invested in R&D."

Leena Srivastava, External Report Review Panel



Other levers for reducing  $CO_2$  emissions are improving the energy efficiency of our production processes and the substitution of fossil fuels with waste and other alternative fuels such as biomass. See the chapter on Efficiency for more details.

Holcim has directly and indirectly supported the development of climate change policies, promoting the implementation of efficient, effective, fair and consistent regulations.

Holcim estimates that in the next five years roughly 60% of its cement production will be subject to climate change regulations. Holcim sees this development as an opportunity to manage and reduce carbon emissions, which could result in higher efficiency, reduced regulation compliance costs and help us maintain good relationships with communities and regulators.

Besides reducing the  $CO_2$  embedded in its products, Holcim is conscious of the value of developing solutions that reduce  $CO_2$  emissions in buildings and infrastructures, since they represent a form of inefficiency. For more information of our solutions, please see the Innovation chapter.

From the trading of  $CO_2$  allowances, the Group realized revenues of CHF 27 million (2012: 62) during 2013. Further details of Holcim's  $CO_2$  emissions can be found in the performance data table on page 38.





# Biodiversity

Holcim has been working with the International Union for Conservation of Nature (IUCN) since 2007, striving to achieve better biodiversity conservation. Our first IUCN partnership developed a Biodiversity Management System (BMS). The second was focused on the implementation of the BMS across the Group. This included creating an indicator system to measure biodiversity changes at extraction sites and guidelines for the cement and aggregates sector for integrating biodiversity management into business operations.

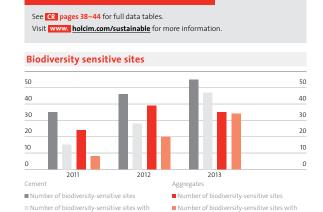
The partnership with the IUCN concluded at the end of 2013, with a series of useful tools and recommendations developed. The parties will continue to collaborate in the future with a focus on implementation of the tools within Holcim and to scale up in the wider sector. With support from IUCN and the Biodiversity Advisory Panel, Holcim will begin the implementation of a Biodiversity Indicators System to assist operations understand and carry out habitat assessments.

Holcim committed to a target that by the end of 2013, 80% of "biodiversity sensitive" sites would have a Biodiversity Action Plan in place. At year end, 90% of such sites had implemented a Biodiversity Action Plan.

Details of our Biodiversity Management System and case studies can be found on our web site at <a href="https://www.holcim.com/biodiversity">www.holcim.com/biodiversity</a>

Key data Efficiency – Biodiversity

Biodiversity Action Plans in place



Biodiversity Action Plans in place







# Mitigating other environmental impacts

Holcim's target to reduce nitrogen oxide (NOx) emissions per tonne of cementitious material by 20% by 2013 (against a base year of 2004) was met in 2012. Similarly, our targets to reduce dust and sulfur dioxide ( $SO_2$ ) emissions per tonne of cementitious material by 20% were also achieved ahead of schedule.

Efforts are continuing to ensure these reductions are sustained, and in 2013 we recorded reductions against the 2004 baseline of 22% for NOx, 55% for dust and 66% for SO<sub>2</sub>.

Holcim has an advanced internal Emissions Monitoring and Reporting standard that allows consistent and reliable tracking of main stack emissions and related improvements. This standard is well-implemented throughout the Group with 92% of the kiln lines reporting continuously measured emissions data.

Holcim has strengthened its measuring and reporting of waste and a number of additional indicators, which have been externally assured, are reflected in the performance data table on page 38.



#### More info

Details of absolute emissions and emissions per tonne of cement of NOx,  $SO_2$ , dust and volatile organic compounds can be found in the performance data table on page 38 and on our web site at  $\frac{www.holcim.com/sustainable}{}$ 

### Building ambition, adding value

### Our 2030 aspirations and interim targets

By 2030, we aspire to maintain net absolute  $CO_2$  emissions at 2013 levels, across the whole lifecycle of our products services and solutions.

### 2015

• Reduce specific CO<sub>2</sub> emissions by 25% compared with 1990 levels

### 2020

 Reduce specific CO<sub>2</sub> emissions by 30% compared with 1990 levels

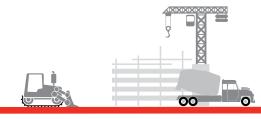
#### 2030

- Achieve no net increase in CO<sub>2</sub> emissions compared with 2013 levels<sup>1</sup>
- 1 This means that any increase in absolute net  ${\rm CO_2}$  emissions from operations compared with 2013 needs to be smaller than the amount of emissions that Holcim contributes to reduce outside operations.

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### **Innovation**

Value creation through new solutions



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### **Sustainable construction**

Resources management, climate change, urbanization – the world and with it the demands of society and stakeholders are ever-changing. Innovation across the company helps Holcim develop new solutions to meet these global needs.

According to the United States Environmental Protection Agency, buildings account for 39% of total energy use, 12% of total water consumption, 68% of total electricity consumption and 38% of carbon dioxide emissions. So, throughout the building lifecycle, there is great potential for innovation, be it through low carbon materials, recycled resources or energy savings.

Many product and service innovations are created every year across Holcim's Group companies and our specialist innovation division Holcim Technology (HTEC). This activity strengthens our position as a global leader in producing high quality, sustainable building materials. Working with societal stakeholders and clients, innovation improves product offerings, develops integrated market solutions and drives gains for society and the environment. Demonstrable innovation and differentiation turns building materials into high-value, sustainable products and services. It is our mission to replicate this across global operations. To facilitate this mission Holcim has developed an innovation strategy with the aim to reduce carbon emissions and to have the best products at a reasonable cost. There is an innovation committee leveraging internal and external expertise and collaboration with several universities. For more details on our innovation activities, please visit www.holcim.com/sustainable.

As a supplier of construction materials, Holcim strives for sustainable construction, a strategy which supports the entire construction lifecycle.

At Holcim, we always try to take a holistic approach to construction. From insulation to reduced energy use, high-performance components and concrete recycling, today Holcim offers several cutting-edge sustainability enhanced solutions:

Indoor Climate Solutions (ICS) in Indonesia utilizes the thermal flow within a building's concrete structure to cool and improve indoor air quality (and significantly reduce the energy bill). Holcim offers ICS with our partner, Uponor, specifically for hot and humid climates.

Green Building Centers in India offer products alongside skills training in rural areas. Green Building Centres are formed around local stakeholders (including local builders) to create low-carbon, locally sourced, safe and affordable construction projects with a 100% recycling potential.

**G100 concrete in Singapore** is a high-strength solution for tall buildings, offering high material efficiency. G100 reduces the Concrete Usage Index (CUI) by up to 50% – helping to achieve excellent ratings in the Singapore "Green Mark" building scheme.

Furthermore, through the Holcim Foundation for Sustainable Construction, Holcim promotes sustainable construction in science and in practice. By organizing forums, publications and the Holcim Awards Competition, the foundation promotes sustainable construction around the globe and facilitates the exchange of know-how among experts.



#### More info

For more information on the Holcim Foundation, go to www.holcimfoundation.org

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### **Building ambition**

"What we begin to see are forward looking and customer-oriented services. Holcim is providing consultancy, R&D as well as customer support as a growing field of work compared with the traditional production of building materials. However these services are implicit and it would be interesting to understand if Holcim is determined to be a service provider."

Ashok B. Lall, External Report Review Panel





### Sustainable products, services and solutions

For sustainable construction, sustainable products are needed. Holcim is determined to offer sustainable products and solutions in all its business fields, be it cement, concrete or aggregates.

Improved energy efficiency is achieved by different thermal insulation and conductive products. More energy efficiency is achieved by improved insulation with Lightpact®, a lightweight concrete from Holcim Germany and Switzerland, Thermicimo by Holcim France to avoid thermal bridges – or integrated systems like Bardon ICFCrete®, combining polystyrol insulation panels with a special high flowable concrete.

EnerGrout by Holcim Spain offers a highly thermal conductive mortar for geothermal drills and floor heating systems which transfers heat efficiently.

Aggregate Industries UK uses the thermal mass of aggregates in its Thermastore® heat storage systems to store thermal energy.

Integrated water management systems such as Aggregate Industries Hydrain and Surface Water Solutions SUDS in the UK and US offer a pervious concrete combined with water collection and recycling systems. Another example of water saving is Humes Stormwater management system, which includes special elements like Humes' HydroFilter® for water cleaning.

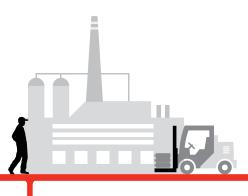
To mitigate the growing scarcity of natural sand, more and more manufactured sand is used in our ready-mix operation by utilizing and engineering crusher fines from own aggregate production. Holcim Singapore offers Holcim Green S, a self-compacting, early-strength structural concrete with sand partially replaced by washed copper slag – used extensively at Marina Bay.

The next step in environmental reporting will include the embedded impacts of construction materials – be it within green building rating schemes (like LEED in the US) or within construction Lifecycle Assessments. Holcim already offers Environmental Product Declarations (EPD) for a variety of its cements and concretes. We are strongly engaged in the joint development of an EPD-tool within the Cement Sustainability Initiative. This guarantees the responsible sourcing of all our products and solutions to our customers.

Opportunity

### Care

# OH&S Holcim's most important priority.



# Occupational health and safety

Holcim believes that a safe and healthy workplace is a prerequisite for motivated, productive and committed people. It is a key feature of a leading organization today and is Holcim's most important priority. We expect our line managers to earn their "license to lead" by demonstrating visible leadership to bring about positive behavior changes throughout the organization. We continue working hard to strengthen the safety competence of the line management and the Health and Safety function itself.



### **Building ambition**

"Since 2003, Holcim's target has been 'zero harm to people'. Nevertheless, the number of fatalities remains high. It's Holcim's indirect responsibility to train people on how to drive in order to avoid vehicle accidents in the future."

Adrienne Williams, External Report Review Panel



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### **OH&S performance**

In 2013 Holcim recorded a Lost Time Injury Frequency Rate (LTIFR) for direct employees of 1.3 and a Total Injury Frequency Rate (TIFR) of 5.8. In line with industry best practice, from the beginning of 2014, Holcim's efforts will move toward achieving a TIFR for direct employees below 5.0. See the table for a regional breakdown of LTIFR and TIFR performance:

		GRI LA8
LTIFR and TIFR per region; 2013		
	LTIFR	TIFR
Europe	2.5	7.0
North America	1.5	14.7
Latin America	1.5	4.9
Africa Middle East	1.2	3.1
Asia Pacific	0.8	4.0
Corporate	0.7	3.6
Total	1.3	5.7

Despite Holcim's continuing efforts, 30 individuals lost their lives in 2013 while working for Holcim. 23 were indirectly employed through contractors or service providers, and 11 were involved in road accidents outside of plants. A further 17 individuals not connected to Holcim lost their lives mainly as a result of traffic accidents with vehicles carrying Holcim products. Holcim deeply regrets these fatalities and will continue to work to pursue our "Zero Harm to People" objective.



# Safety excellence

To foster a culture where safety excellence is recognized and shared for the benefit of everybody, we have created an annual safety awards competition, which is now in its second cycle. The competition rewards best practice at regional and global levels with additional credit given to initiatives which can (or have been) used elsewhere in the Group. See the case study (on the following page) for details of one of the winning projects.

Embedding the Holcim Fatality Prevention Elements and the Contractor Safety Management Directives continues throughout the business. Holcim is in the middle of assessing progress against implementation across the Group to identify and address any performance gaps.

Following a tragic accident at the Bhatapara plant in India, a "Design Safety and Construction Quality Program" was launched in 2013 with the objective of preventing major hazards such as fires, explosions, geotechnical risks and failures of civil structures. As design, construction and operation of quarries and facilities are essential components to improve safety, its implementation will reduce the risks at their source.

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Road safety remains one of Holcim's biggest challenges. Following the road safety study undertaken in 2012, an accident reduction program was launched in 2013 focusing initially on countries with a high accident rate. Findings and best practice from the program are disseminated throughout the Group. The program aims to strengthen performance in areas such as vehicle management, driver management, contractor management, journey management plus road and traffic conditions on our own sites.





### Adding value

### Journey to zero fatalities on the road - Holcim Lanka

Following the increased focus on road safety, our Group company in Sri Lanka embarked on a program aimed at ensuring zero fatalities on the road. The initial step was to investigate the root causes behind road accidents involving their vehicles. This investigation found seven main accident causes, ranging from high speed or driver fatigue through to road infrastructure or vehicle condition. A program was then developed to address these root causes.

The main elements of the program were:

- to develop a set of "ten commandments," based on the Holcim cardinal rules, which all drivers are expected to honor. These are communicated through ongoing training to all drivers transporting Holcim products
- for all drivers to undergo defensive driving training conducted by Holcim Lanka. At the end of the course the drivers receive a nationally recognized defensive driving certificate
- to implement maximum working hours and mandatory rest periods, monitored through time sheets and vehicle tracking systems
- to enforce stringent minimum standards for vehicle roadworthiness with bi-annual audits and random roadside inspections to ensure compliance
- assessing journey risks on high-traffic routes conducted in collaboration with the police and local communities.

To back up the program, Holcim Lanka conducts comprehensive induction programs for new drivers, places awareness posters at key points and also makes medical facilities available for drivers (including contractors) at its plants to ensure they are fit to drive.

The campaign goes beyond the company's own operations. Road safety awareness centres have been put in place at sales points to raise the awareness among the drivers of customers. Furthermore, a road safety campaign has been produced in conjunction with the United Nations Development Programme and Red Cross to educate and raise awareness. This campaign is aimed at private school bus drivers, and a number of road safety billboards erected to increase public awareness.

Opportunity

## Respect

Holcim takes its responsibility with regard to labor and human rights seriously



"The UN Guiding Principles on Business and Human Rights represent the core framework for steering the corporate responsibility to respect human rights. Holcim's approach to respect labor and human rights is going in the right direction and should formally refer to the UN Guiding Principles."

Christine Kaufmann, External Report Review Panel



### Responsible employment

Holcim recognizes the crucial role employees and contract labor play in achieving our goal of creating value, and our strategy and success is built on a base of competent and dedicated people. The vital role played by our employees is articulated in Holcim's strategy.

Our aim to be the employer of choice results in our efforts to implement labor standards throughout the supply chain and in our wages matching or exceeding local industry standards. At entry level our Group companies pay a median of 47% above minimum wage. This is backed up with professional and individual development programs throughout the Group. In 2013, Group companies reported a total of 1 614 909 hours of training for employees. Details of training hours per employee group can be found in the performance data table on page 38.

Unfortunately, the business environment in some regions, especially Europe, where cement consumption has declined since 2008 by as much as 75% in some countries, means adjustments and reduction of capacity is unavoidable. Holcim is aware that the reduction of employment is a painful process, and thus not only complies with local applicable laws – especially with regard to appropriate involvement of labor councils and

unions – but commits to treating employees with respect and tries to find the best possible solution in the interest of both the employees and the company.

The management of contract labor across many diverse countries is an ongoing challenge. In this regard, Holcim is a long-term supporter of the UN Global Compact (UNGC) and is indeed active in local networks in a number of countries around the globe. Holcim takes its responsibility with regard to the UN Human Rights frameworks extremely seriously. Holcim uses these frameworks and related instruments such as the ILO Core Labor Standards, to inform a number of policies, directives and programs which are binding on all Group companies, and against which our Group companies are required to report progress to us annually. These programs include:

 Contractor Safety Directive: Issued in December 2009, this Directive sets the minimum requirements for Contractor Safety Management which each Holcim Group company must apply when outsourcing services to contractors. The Directive outlines the requirements for ensuring that adequate processes are developed and implemented to control or minimize the risks associated with contracted activities. Responsibility

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- Contract Workers Directive: Issued in 2012, this Directive refers specifically to the principles of the UNGC and is supported by detailed implementation steps which are mandatory for Group companies to follow. The implementation process is overseen by the Procurement and CSR departments, and progress is tracked annually through the CSR Questionnaire. To underline the importance of this initiative, we have individually revised the data provided by the Group companies in 2012 and 2013, and included it into the scope of the assurance for this report, carried out by PriceWaterhouseCoopers. The assurance statement can be found on page 46. The substance of the Contract Workers Directive can be found on our web site at the following link: www.holcim.com/sustainable
- Sustainable Procurement Initiative: Also informed by the UNGC principles, this initiative was developed to strengthen existing practices in managing this specific aspect of our supply chain and using our influence to promote sustainable and responsible business practices. It comprises a Supplier Code of Conduct and a methodology for identifying and assessing high-risk suppliers. Once a supplier is considered high-risk, a red flag is generated to ensure issues are properly addressed. Progress is tracked through the Procurement Scorecard and feedback is provided annually to Group companies notably through the CSR Questionnaire. The Supplier Code of Conduct can be found at the following link: www.holcim.com/sustainable

As a result of our global structure, we have a highly diverse workforce, especially in terms of culture and age: for instance, our senior management team has over 60 nationalities represented. Holcim's CSR policy lays down our commitment in this regard, stating: "we value diversity and promote equal opportunities in recruitment, employment, development and retention." This includes non-discrimination in respect of gender, religion, sexual orientation or ethnic origin.

**Diversity** 

Driving gender diversity remains a challenge and provides an opportunity for Holcim. In 2013, 12% of the total workforce was represented by women, with 11% of top and senior managers also being female. Aware of the importance of this challenge, CEO Bernard Fontana has mandated an internal task force to investigate means by which diversity can be improved.

See performance data table on page 38 for details of gender representation per management level.

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### **Respecting human rights**

Holcim recognizes that managing business-related human rights risks is a requirement of doing business in a globalized world. Developed in 2011 and 2012 and implemented in 2013, Holcim's approach is risk-based and fully in line with the internationally recognized UN Guiding Principles on Business and Human Rights (Ruggie principles). The methodology is further based on a categorization of countries based on the UN Human Development Index (HDI) and the Freedom House Index (FH) according to low, medium or high-risk business environments.

Group companies operating in high-risk countries are required to conduct a full impact assessment by 2015, supported by a trained facilitator. Group companies operating in low-risk environments are required to conduct a self-assessment, for which support is also provided if needed.

The diagram on the following page gives an overview of the approach.

A total of 16 Group companies are required to conduct a human rights impact assessment based on a highrisk country categorization. Six impact assessments had been completed by the end of 2013, and the final ten are planned to be completed in 2014. A guidance manual and tools have been distributed to all Group companies, and face-to-face and online trainings delivered. Progress on assessments and follow-up action plans will continue to be monitored through the CSR Questionnaire.

Holcim has also been working with others to promote human rights, particularly the United Nations, through the UN Global Compact and the expert group on Principles for Responsible Investment (PRI). The UNGC and PRI have been developing a "Guidance on Responsible Business in Conflict-Affected and High-Risk Areas." Holcim was part of an expert group of companies that tested the implementation of the guidance, and two Holcim Group companies are featured prominently in a case study report about progress on this initiative. The report can be found at the following link:



Guidance on Responsible Business report

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### Holcim human rights management system

### 1. Categorization of Operating Environments



### Based on global indices:

- Freedom House Index
- UN Human Development Index

### 2. Assessments



### High Risk Business Environment

Impact assessment required: 7–10 days per Group company led by a trained facilitator



### Medium Risk Business Environment

Impact assessment in cases of opposition or human rights related claims or problems, otherwise self-assessment



### Low Risk Business Environment

Self-assessment required: 1/2 day internal workshop with line management and representatives of key functions

### 3. Action Plan Implementation and Monitoring

### Addressing identified risks and seizing opportunities in:

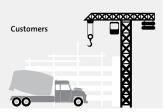
- Own operations
- Business relationships











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## Relationships

Holcim's social engagement is based on a strategic approach

### Building ambition

"By 2015, Holcim aims to invest 75% of its CSR spending in strategic social and collaborative projects. Holcim could enumerate how the company will channel this spending. This will be a good example for other companies in India and will also demonstrate Holcim's compliance to the Indian government's mandate to spend 2% of net profit on CSR."

Seema Arora, External Report Review Panel



## CSR projects and spending

Holcim defines CSR as "our commitment to work as partners with all our stakeholders, building and maintaining relationships of mutual respect and trust." It's our aim to effectively improve the quality of life of our employees, their families, the communities around our operations, as well as our customers and suppliers. We identified two ways to achieve this: through strategic social investment and through Inclusive Business solutions (see page 35).

At Holcim, social investment is strategic if it focuses on the needs of the communities where we operate, builds upon our core business knowledge and resources and improves people's living conditions in a sustainable way. For example, we might provide initial "seed capital" funding and essential skills for a microenterprise development project that is then self-sustained by the participants.

Strategic social investment is achieved through collaborative projects grouped in the three focus areas of Education, Community Development and Infrastructure, and implemented together with our community stakeholders. This engagement, while addressing societal needs, helps maintain our social license to operate.

Our material issues



In 2013, CHF 36 million was invested in community engagement activities, more than 1.5% of net company income. An estimated over eight million people benefited either directly or indirectly from these projects. Further details on CSR spending can be found in the table on page 38. See <a href="www.holcim.com/sustainable">www.holcim.com/sustainable</a> for case studies on some of our projects.

To ensure that social investments are strategic, we encourage Group companies to use the Holcim "Social Engagement Scorecard." The scorecard is used to evaluate the feasibility of proposed projects and to evaluate the efficiency and impact of projects that are under implementation or concluded. In 2013, 73% of Group companies reported that they used the scorecard to evaluate projects.

Because it recommends projects that align community needs with core business expertise, the scorecard will be instrumental to help us achieve the goals of investing 75% of CSR spending in strategic social and collaborative projects by 2015, and enhancing shelter and livelihood for 100 million people by 2030. CSR investment will be focused on strategic projects rather than donations, creating a more sustainable impact on the communities where we operate. Progress will continue to be tracked through the CSR Questionnaire, with direct feedback provided annually to Group company CEOs.

### Building ambition, adding value

### Our 2030 aspirations and interim targets

Our 2030 aspiration is to improve the quality of life
– in particular with regard to livelihoods and shelter
– of 100 million people at the base of the pyramid
through inclusive business solutions and strategic
social investments.

#### 2015

• Invest 75% of our CSR spending in strategic social and collaborative projects

### 2020

 40 million people at the base of the pyramid to benefit from our strategic social investment and inclusive business initiatives between 2013 and 2020

#### 2030

 Impact 100 million people at the base of the pyramid between 2013 and 2030, progressively focusing on inclusive business solutions Responsibility

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### Adding value

### **Training local masons**

Masonry is a key trade in the construction industry, and masons are one of Holcim's largest and most important stakeholder groups. Proper training and capacity building of self-employed builders and clients are key to ensuring both the adequate application of cement products and building quality, yet formal training is scarce and results in workers lacking the necessary skills, which limits the prospects of working in well-paid and secure jobs. Our Group companies in India, the Philippines and Romania have been addressing this challenge for a number of years.

Ambuja Cements in India, in collaboration with local government, has implemented a training program in Dahod, Gujarat. The indigenous population of Dahod migrates seasonally to large cities to work as unskilled workers on construction sites. While they have the basic knowledge required to work, there is still potential to increase their technical skills, which is why Ambuja organizes training camps in selected villages. The camps provide basic mason training for 60 days and advanced mason training for 30 days, with encouraging results: youth participants have seen an increase of up to 130% in their daily wages, while the vast majority (80%) of the 1,750 masons trained have found employment. Ambuja's training camps have a twofold effect: they train semi- and unskilled workers by having them build needed infrastructure for the local villages, such as cattle sheds, school compound walls and offices for village institutions. An estimated USD 25,000 (Rs.1.5m) worth of community assets have been built to date.

In the Philippines, Holcim has responded to this challenge with the "Holcim 'galing Mason" program, which offers skills training, social recognition and livelihood through employment for out-of-school youths and uncertified masons. The project consists of a certified seven-day training course, regional and national masonry skills competitions, as well as an award recognizing outstanding masons. The program is run in collaboration with local government, the Philippine Constructors Association and a local labor union. Thanks to its positive impact and wellestablished reputation, the Holcim 'galing Mason initiative strongly enhances alumni's chances of finding decent jobs. It also improves the masonry's image as a respectable and highly skilled trade, while also promoting concrete technology and the appropriate use of concrete products.

In Romania, the Masonry School offers training courses in 10 cities across the country, through which 300 people became qualified masons in 2013. The project is done in collaboration with local technical colleges and instructors, with the help of Holcim employees. It directly addresses Romania's need for a qualified technical workforce created by the regime change in 1989, and foments adequate working practices in the construction sector. For Holcim, the project means ensuring the qualification of masons and contributing to the heightened quality of the country's masonry works. Further, Holcim is currently exploring ways to leverage the Masonry School as a customer-oriented initiative and platform for promoting and selling Holcim products and services.

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# Stakeholder and community engagement

Holcim recognizes the value of engaging with the communities in which we operate and uses a number of vehicles to achieve this. Details of the different types of engagement activities carried out by Holcim Group companies are included in the performance data summary on page 38. All Group companies are expected to have a Community Engagement Plan (CEP) in place which includes all of their operational sites. 90% of Group companies had plans in place by the end of 2013.

The CEP is developed in collaboration with local stakeholders, which include representatives from local government, associations, schools, national NGOs, etc. These stakeholders normally also participate in our Community Advisory Panels (CAPs), local platforms for dialogue provided by Holcim where community representatives discuss project ideas, address conflicts or voice concerns. Concerns generally touch upon topics such as waste co-processing activities, dust, emissions, transport and employment and are usually resolved within these community meetings.

A list of engagements and partnerships undertaken by Holcim Group companies is available at www.holcim.com/sustainable

Holcim further engages with key stakeholders on a global level. For example, Holcim often collaborates with GIZ and IUCN, and is a member of the Corporate Support Group of the International Committee of the Red Cross (ICRC), an organization with exceptional credibility in protecting the lives and dignity of victims of conflict and other life-threatening situations. This engagement allows us to implement our commitment to sustainable development in conflict-affected regions where both Holcim and the ICRC operate. One such initiative is working with the ICRC to help develop a training course for ICRC water and habitat engineers. See our website <a href="https://www.holcim.com/sustainable">www.holcim.com/sustainable</a> for more details.

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## **Opportunity**

Developing inclusive business solutions to create positive social impact and generate business returns

### **Building ambition**

"Holcim's aspiration to improve shelter and livelihood for 100 million people between 2013 and 2030 is ambitious. More inclusive business examples and a continued focus on training of Holcim's products users will be needed to achieve this objective."

Relationships

Vanderley John, External Report Review Panel



The premise behind inclusive business (also referred to as Creating Shared Value) is that the competitiveness of a company and the well-being of its community are interdependent. Companies should therefore develop market-based solutions using core assets and competencies to capitalize on pressing social issues, driving both profit and social benefits.

Inclusive business initiatives are not meant to replace traditional CSR, as not all social needs can be addressed through market-based solutions. To succeed, inclusive business initiatives must be profitable, have a clear business strategy, address social needs and provide measurable business benefits. They should also be an important driver of product and service development, embedded in the company as a whole.

Holcim is currently working on four pilot projects targeting base of the pyramid (low-income) populations, mainly in Asia and Latin America. In order to meet the target of 40 million people benefiting from our strategic social investment and inclusive business initiatives, we will analyze the strengths and weaknesses of current initiatives in order to improve and replicate in other regions wherever possible, as well as explore new opportunities. We expect these opportunities will be found in the areas of products and services (shelter, sanitation, livelihoods, water, supplychain biomass, waste management) and distribution channels (distribution networks, employability, masons training).

Between strategic social investment and inclusive business projects, the goal is to have a positive social impact on 100 million low-income people and local Holcim community members by 2030. Impact will be assessed through the CSR Questionnaire, as well as through inclusive business committees involving internal and external inclusive business experts and implementers.

### Building ambition, adding value

- By 2020, 40 million people at the base of the pyramid to benefit from our strategic social investment and inclusive business initiatives
- By 2030, impact 100 million people progressively focusing on inclusive business solutions





# **A** Low-income housing

For many years now Holcim has been developing housing solutions for low-income, or base of the pyramid, people who cannot afford adequate housing. Initiatives include the "Mi Casa" project in Mexico, "Construyendo Juntos" in Costa Rica and "Solusi Rumah" in Indonesia.

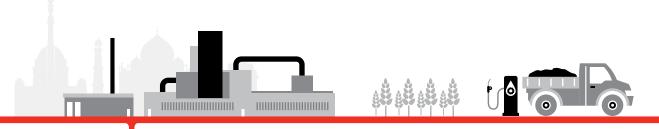
Although these projects currently do not provide a significant financial return, Holcim recognizes that addressing the significant need for low-income housing has the potential to trigger large-scale societal change while providing tangible business benefits.

For this reason we launched a low-income housing pilot project in Argentina called "Shelter for Livelihood" (S4L), which aims to provide innovative and sustainable solutions to the lowest income segments of population by integrating technical, financial, capacity building and

community development components. Through S4L, families who could not normally afford decent housing are provided with micro-credit solutions, specially designed construction materials and community support. By facilitating this process, Holcim contributes to reducing the housing deficit in Argentina while opening a new business market.

As part of meeting our inclusive business target, Holcim is exploring ways in which the S4L methodology can be replicated to other Group companies in countries where appropriate, making it adaptable to regional differences and acceptable to local partners. This model is expected to provide new business opportunities for selling building materials to low-income customers, while enhancing their livelihood.





# Biomass procurement as an alternative fuel

Our Group company in India, Ambuja Cements Ltd (ACL), is currently exploring how it can make its biomass sourcing more sustainable, while enhancing the livelihood of local communities. Working together with the Ambuja Cement Foundation, ACL has found that by working with local farmers and cooperatives, it could develop an inclusive business model that creates "shared value." ACL is buying agricultural waste materials from local farmers, securing cheaper and easier access to fuel for the company's co-processing activities while protecting natural resources and reducing Holcim's carbon footprint and cement production costs. Doing so, ACL is enabling additional income for about 2,000 farmers involved by supplying waste biomass such as crop residues of cumin and

mustard to the company's alternative fuels operations. In addition to creating employment for local people, this model enhances livelihood and quality of life, provides a cleaner and safer environment, helps prevent environmentally hazardous practices, allows for the constructive use of waste and improves understanding of the company's activities within the community. ACL is committed to continuously evaluate whether this is the most responsible way to source biomass.

Further examples of inclusive business pilots include municipal solid waste management in Sri Lanka and the construction of sanitation facilities (cement-based toilets) in India.



#### More info

See www.holcim.com/sustainable for further details.

# **Performance**

Economic performance	CSI GRI	2011	2012	2013
Net sales (CHF billion)	G4-EC1	20.7	21.1	19.7
Input factor (cost of all goods, materials and services provided) (CHF billion)		12.6	13.1	11.7
Depreciation and amortization (CHF billion)		2.4	2.2	1.5
Value spection for Holsim and key stakeholders				
Value creation for Holcim and key stakeholders Benefit to employees	G4-EC1	3.9	4.0	3.6
Benefit to governments (taxes)	G4 EC1	0.4	0.6	0.5
Benefit to shareholders (including minorities)		0.7	0.5	0.6
Benefit to creditors		1.1	0.7	0.6
Benefit to communities		0.038	0.045	0.036
Retained in business		0.0	0.5	1.0
Sales of cement (million tonnes)		144.3	142.3	138.9
Sales of mineral components (million tonnes)		5.1	4.8	4.1
Sales of aggregates (million tonnes)		173.0	158.2	154.5
Sales of ready-mix concrete (million m³)		48.4	45.3	39.5
Sales of asphalt (million tonnes)		10.3	9.1	8.9
Sustainable product % of cement products containing mineral components		77	76	79
			,,,	
Cement types produced by Holcim Slag cement (%)		10	10	10
Pozzolan cement (%)		10	10	10
Fly ash cement (%)		8	8	8 27
Limestone cement (%)		25 15	25 16	2 <i>1</i> 15
Multiple blend cement (%)		14	13	15
Masonry cement, oilwell cement, white cement,		5	4	4
special binder, MIC and other (%)		3	4	4
Ordinary Portland cement (%)		23	24	21
Suppliers  Coods consider and materials purchased (CUE hillion)	CA FC1	12.6	12.1	11 7
Goods, services and materials purchased (CHF billion)  % of suppliers identified as "High Risk" (for sustainability criteria aligned with the Holcim	G4-EC1 G4-LA14	12.6	13.1	11.7
Supplier Code of Conduct)	G4-EN32 G4-HR10 G4-SO9	N/A	5.2 <sup>1</sup>	6.9
Group companies screening local suppliers for sustainability criteria (%)				
OH&S (%)	G4-LA14	98	91 <sup>1</sup>	91*
Environment (%)	G4-EN32	91	66¹	77*
Human rights and labor (%)	G4-HR10	N/A	64 <sup>1</sup>	75*
Bribery and corruption (%)	G4-SO9	N/A	25 <sup>1</sup>	52*
Local suppliers screened				
OH&S (%)	G4-LA14	31	15 <sup>1</sup>	27*
Environment (%)	G4-EN32	26	10 <sup>1</sup>	14*
Human rights and labor (%)	G4-HR10	N/A	15 <sup>1</sup>	17*
Bribery and corruption (%)	G4-SO9	N/A	5 <sup>1</sup>	11*
National market suppliers				
% of Group companies with a policy to favor national market suppliers	G4-EC9	21	18	20
% of suppliers from national markets		89	88	84
Government relations				
Political contributions (CHF)	G4-SO6	151,304	91,677	52,295
Number of Group companies making political donations		4	2	3
Average subsidies from national governments (grants, tax relief and other financial benefits) (CHF million)	G4-EC4	1.1	1.4	1.2
Number of Group companies receiving subsidies		14	14	11
Customer relations				
% of Group companies conducting a customer survey		80	76	75
% of those surveyed measuring customer satisfaction		92	95	100
% of Group companies with a specific customer health and safety policy		33	41	51
% of Group companies with a specific product information and labeling policy		35	45	51
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Performance

<sup>1</sup> Measured using the new Procurement Scorecard Methodology introduced in 2012.

Number of plants included in evaluation	Environmental performance	CSI GRI	2011	2012	2013
Cement         149         152         146           Aggregates         330         320         292           Ready-mix concrete         1205         1,143         325           Management systems         Implementation of 150 Uapon (% of plants)           Cement plants         95         95         95           AFR pre treatment platforms         95         95         95           AFR pre treatment platforms         95         95         95           Ready-mix concrete plants         95         95         95           Ready-mix concrete plants         93         95         95           Ready-mix concrete plants         95         95         95           Environmental investments and environmental compliance         75         83         70           Environmental investments and environmental liabilities (CHF million)         64-EN2         77         83         70           Cement         64-EN2         1         2         3         70         2         3         70         2         3         70         2         2         2         2         2         2         2         2         2         2         2         3         70         2	Number of plants included in evaluation				
Aggregates         359         332         7.94           Ready-mix concrete         1,205         1,143         325           Management systems         Implementation of ISO upon (% of plants)           Cernent plants         93         95         96           Aggregate plants         43         43         43         45           Aggregate plants         43         43         40         40           Environmental investments and environmental compliance         877         843         79           Provisions for site restoration and other environmental liabilities (CHF million)         C4-EN31         43         42         38           Provisions for site restoration and other environmental liabilities (CHF million)         C4-EN31         42         38         79           Number of plants/quarries reporting noncompliance cases         G4-EN32         10         2         3         29         20           Cernent         10         2         3         29         20         3         7         29         20         20         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2	·		149	152	146
Name   Name					
Management systems					
Implementation of ISO 4pon (% of plants)   Cement plants	•		,		
Cement plants         93         95         96           AFR pre-treatment platforms         95         95         95           Aggregate plants         43         43         45           Ready-mix concrete plants         32         34         40           Environmental investments and environmental compliance         Tervision of plants (CHF million)         64 EN31         43         42         38           Provisions for site restoration and other environmental liabilities (CHF million)         64 EN32         757         843         719           Number of plants/quarries reporting noncompliance cases         61         10         10         2         3         29         20           Cement         1         1         2         3         29         20					
AFR pre-freatment platforms         95         95         95           Aggregate plants         43         43         43           Ready-mix concrete plants         32         34         40           Environmental investments (CHF million)         C4-EN1         43         42         38           Provisions for site restoration and other environmental liabilities (CHF million)         C4-EN2         75         843         719           Provisions for site restoration and other environmental liabilities (CHF million)         C4-EN29         1         2         3         29         20           Cement         6         40         37         29         20					
Aggregate plants         43         43         45           Ready-mix concrete plants         32         34         40           Environmental investments and environmental compliance         Service of the million         C4-EN31         43         42         38           Provisions for site restoration and other environmental liabilities (CHF million)         C4-EN31         43         42         38           Provisions for site restoration and other environmental liabilities (CHF million)         C4-EN31         43         42         38           Provisions for site restoration and other environmental liabilities (CHF million)         C4-EN31         43         42         38           Provisions for site restoration and other environmental liabilities (CHF million)         C4-EN32         43         719         2         38         79         20         30         30         70         2         30         30         20         30         30         30         20         20         30         30         20         20         30         30         20         20         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30					
Ready-mix concrete plants   32   34   40					
Environmental investments and environmental compliance   Environmental investments (CHF million)					
Privisions for site restoration and other environmental liabilities (CHF million)	keady-mix concrete plants		32	34	40
Provisions for site restoration and other environmental liabilities (CHF million)         757         843         719           Number of plants/quarries reporting noncompliance cases         G4-EN29         Carrier	Environmental investments and environmental compliance				
Number of plants/quarries reporting noncompliance cases	Environmental investments (CHF million)	G4-EN31	43	42	38
Cement         1         2         3           Aggregates         10         10         2           Ready-mix concrete         37         29         20           Noncompliance cases         1         2         3           Cement         1         2         3           Aggregates         11         12         2           Ready-mix concrete         89,600         80,300         347,000           Aggregates         2,492         150         2,490           Ready-mix concrete         33,702         131,116         7,860           Ready-mix concrete         2,492         150         2,490           Absolute gross CO2 emissions (million tonnes)         4         64-ENIS         94.2         95.9         95.5           Absolute ent CO2 emissions (kg CO2/t cementitious materials)         4         64-ENIS         0.3         0.3         0.2           Specific gross CO2 emissions (kg CO2/t cementitious materials)         4         64-ENIS	Provisions for site restoration and other environmental liabilities (CHF million)		757	843	719
Aggregates         10         10         2           Ready-mix concrete         37         29         20           Noncompliance cases         11         2         3           Cerment         11         1         2         3           Aggregates         111         12         2         2         27           Associated fines and penalties (CHF)         89,600         80,300         347,000	Number of plants/quarries reporting noncompliance cases	G4-EN29			
Ready-mix concrete	Cement		1	2	3
Noncompliance cases         Image: Cerement of the production (%) of the production of th			10	10	2
Cement         1         2         3           Aggregates         11         12         2           Ready-mix concrete         54         32         27           Associated fines and penalties (CHF)         89,600         80,300         347,000           Aggregates         2,492         150         2,490           Ready-mix concrete         33,702         131,116         7,860           Reducing CO₂ emissions (million tonnes)         ✓ C4-ENI5         94.2         95.9         95.4           Absolute gross CO₂ emissions (million tonnes)         ✓ C4-ENI5         94.2         95.9         95.4           Absolute gross CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4-ENI5         60.2         95.9         59.2           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4-ENI5         0.3         0.2         29.2           Absolute gross CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4-ENI5         0.3         0.2         29.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2         39.2<			37	29	20
Aggregates         11         12         2           Ready-mix concrete         54         32         27           Associated fines and penalties (CHF)         89,600         80,300         347,000           Aggregates         2,492         150         2,490           Ready-mix concrete         33,702         131,116         7,860           Reducing CO2 emissions           Reducing CO2 emissions (million tonnes)         V G4-ENIS         94,2         95,9         95,4           Absolute gross CO2 emissions (million tonnes)         V 91,5         93,2         92,6           Specific gross CO2 emissions (kg CO2/t cementitious materials)         V G4-ENIS         602         595         590           Specific net CO2 emissions (kg CO2/t cementitious materials)         V G4-ENIS         602         595         590           Specific gross CO2 emissions (kg CO2/t cementitious materials)         V G4-ENIS         0.3         0.3         0.2           Specific gross CO2 emissions (kg CO2/t cementitious materials)         G4-ENIS         0.3         0.3         0.2           Specific gross CO2 emissions (kg CO2/t cementitious materials)         G4-ENIS         0.3         0.3         0.2           Specific gross CO2 emissions (kg CO2/t cementicus)					
Ready-mix concrete         54         32         27           Associated fines and penalties (CHF)         89,600         80,300         347,000           Cement         2,492         150         2,490           Ready-mix concrete         33,702         31,116         7,860           Reducing CO2 emissions           Cement           Absolute gross CO2 emissions (million tonnes)         V G4-ENIS         94.2         95.9         95.4           Absolute gross CO2 emissions (kg CO2/t cementitious materials)         V G4-ENIS         602         595         590           Specific gross CO2 emissions (kg CO2/t cementitious materials)         V G4-ENIS         602         595         590           Specific gross CO2 emissions (kg CO2/t cementitious materials)         V G4-ENIS         602         595         590           Specific gross CO2 emissions (kg CO2/t cementitious materials)         V G4-ENIS         602         595         590           Specific gross CO2 emissions (kg CO2/t cementitious materials)         V G4-ENIS         1.8         2.0         1.8           Ready-mix concrete         S4         50.1         0.1         0.1         0.2           Specific gross CO2 emissions (kg CO2/tonne of product)         G4-ENIS         1.8         1.			1	2	3
Associated fines and penalties (CHF)         89,600         80,300         347,000           Aggregates         2,492         150         2,490           Ready-mix concrete         33,702         131,116         7,860           Reducing CO₂ emissions           Reducing CO₂ emissions           Reducing CO₂ emissions           Reducing CO₂ emissions           Reducing CO₂ emissions (million tonnes)         ✓ G4 ENIS         94.2         95.9         95.4           Absolute gross CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4 ENIS         69.2         95.9         59.6           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         ✓ 64 ENIS         60.2         595         590           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         ✓ 64 ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         G4 ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/tonne of product)         G4 ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/tonne of product)         G4 ENIS         0.1         0.1         0.1			11		
Cement         89,600         80,300         347,000           Aggregates         2,492         150         2,490           Ready-mix concrete         33,702         131,116         7,860           Reducing CO₂ emissions           Cement           Absolute gross CO₂ emissions (million tonnes)         ✓ G4-ENIS         94.2         95.9         95.4           Absolute net CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4-ENIS         602         95.5         590           Specific net CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4-ENIS         602         95.5         590           Aggregates           Absolute gross CO₂ emissions (kg CO₂/t cementitious materials)         G4-ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         G4-ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         G4-ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         G4-ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         G4-ENIS         0.1         0.1 <t< td=""><td></td><td></td><td>54</td><td>32</td><td>27</td></t<>			54	32	27
Aggregates         2,492         150         2,490           Ready-mix concrete         33,702         131,116         7,860           Reducing CO2 emissions           Cement           Absolute gross CO2 emissions (million tonnes)         ✓ G4-ENIS         94.2         95.9         95.4           Absolute net CO2 emissions (kig CO2/t cementitious materials)         ✓ G4-ENIS         602         595         590           Specific gross CO2 emissions (kig CO2/t cementitious materials)         ✓ G4-ENIS         602         595         590           Specific net CO2 emissions (kig CO2/t cementitious materials)         ✓ G4-ENIS         0.3         0.3         0.2           Aggregates           Absolute gross CO2 emissions (kig CO2/tonnes)         G4-ENIS         0.3         0.3         0.2           Specific gross CO2 emissions (kig CO2/tonne of product)         G4-ENIS         0.3         0.3         0.2           Specific gross CO2 emissions (kig CO2/tonne of product)         G4-ENIS         0.1         0.1         0.1           Specific gross CO2 emissions (kig CO2/m³)         G4-ENIS         0.1         0.1         0.1           Specific gross CO2 emissions (kig CO2/m³)					
Ready-mix concrete         33,702         131,116         7,860           Reducing CO₂ emissions           Cement         Cement           Absolute gross CO₂ emissions (million tonnes)         ✓ G4-ENIS         94.2         95.9         95.4           Absolute net CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4-ENIS         60.2         595         590           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4-ENIS         60.2         595         590           Specific net CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4-ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         G4-ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         G4-ENIS         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         G4-ENIS         1.8         2.0         1.8           Ready-mix concrete         G4-ENIS         1.8         2.0         1.8           Ready-mix concrete         G4-ENIS         0.1         0.1         0.1           Specific gross CO₂ emissions (kg CO₂/m³)         G4-ENIS         1.8         1.9         2.2					
Reducing CO2 emissions           Cement         Cement           Absolute gross CO2 emissions (million tonnes)         ✓ G4-ENIS         94.2         95.9         95.4           Absolute net CO2 emissions (kg CO2/t cementitious materials)         ✓ G4-ENIB         602         595         590           Specific net CO2 emissions (kg CO2/t cementitious materials)         ✓ G4-ENIB         602         595         590           Specific net CO2 emissions (kg CO2/t cementitious materials)         ✓ G4-ENIB         0.3         0.3         0.2           Absolute gross CO2 emissions (million tonnes)         G4-ENIB         1.8         2.0         1.8           Ready-mix concrete         Absolute gross CO2 emissions (million tonnes)         G4-ENIB         1.8         2.0         1.8           Ready-mix concrete         Absolute gross CO2 emissions (million tonnes)         G4-ENIB         1.8         1.0         1.0           Absolute gross CO2 emissions (million tonnes)         G4-ENIB         1.8         1.9         2.2           Indirect CO2 from purchased power (million tonnes)         G4-ENIB         1.8         1.9         2.2           Indirect CO2 from purchased power (million tonnes)         G4-ENIB         6.0         6.8         6.4           Energy           Ther					
Cement       C4-EN15       94.2       95.9       95.4         Absolute gross CO₂ emissions (million tonnes)       ✓ G4-EN18       94.2       95.9       95.4         Absolute net CO₂ emissions (million tonnes)       ✓ G4-EN18       602       595       590         Specific gross CO₂ emissions (kg CO₂/t cementitious materials)       ✓ G4-EN18       602       595       590         Specific net CO₂ emissions (kg CO₂/t cementitious materials)       ✓ S85       578       572         Aggregates       — Absolute gross CO₂ emissions (million tonnes)       G4-EN15       0.3       0.3       0.2         Specific gross CO₂ emissions (kg CO₂/tonne of product)       G4-EN18       1.8       2.0       1.8         Ready-mix concrete       Absolute gross CO₂ emissions (kg CO₂/m³)       G4-EN18       1.8       1.0       0.1         Specific gross CO₂ emissions (kg CO₂/m³)       G4-EN18       1.8       1.9       2.2         Indirect CO₂ from purchased power (million tonnes)       G4-EN18       1.8       1.9       2.2         Emergy       Thermal energy mix of clinker production (%)       G4-EN16       6.0       6.8       6.4         Energy       The production (%)       G4-EN16       6.0       6.9       59       59       59       59	Ready-mix concrete		33,702	131,116	7,860
Cement       C4-EN15       94.2       95.9       95.4         Absolute gross CO₂ emissions (million tonnes)       ✓ G4-EN18       94.2       95.9       95.4         Absolute net CO₂ emissions (million tonnes)       ✓ G4-EN18       602       595       590         Specific gross CO₂ emissions (kg CO₂/t cementitious materials)       ✓ G4-EN18       602       595       590         Specific net CO₂ emissions (kg CO₂/t cementitious materials)       ✓ S85       578       572         Aggregates       — Absolute gross CO₂ emissions (million tonnes)       G4-EN15       0.3       0.3       0.2         Specific gross CO₂ emissions (kg CO₂/tonne of product)       G4-EN18       1.8       2.0       1.8         Ready-mix concrete       Absolute gross CO₂ emissions (kg CO₂/m³)       G4-EN18       1.8       1.0       0.1         Specific gross CO₂ emissions (kg CO₂/m³)       G4-EN18       1.8       1.9       2.2         Indirect CO₂ from purchased power (million tonnes)       G4-EN18       1.8       1.9       2.2         Emergy       Thermal energy mix of clinker production (%)       G4-EN16       6.0       6.8       6.4         Energy       The production (%)       G4-EN16       6.0       6.9       59       59       59       59	Reducing CO <sub>2</sub> emissions				
Absolute net CO₂ emissions (million tonnes)       ✓       91.5       93.2       92.6         Specific gross CO₂ emissions (kg CO₂/t cementitious materials)       ✓ G4-EN18       602       595       590         Specific net CO₂ emissions (kg CO₂/t cementitious materials)       ✓       585       578       572         Aggregates       Security       G4-EN15       0.3       0.3       0.2       0.2       Specific gross CO₂ emissions (kg CO₂/tonne of product)       G4-EN18       1.8       2.0       1.8       1.8       2.0       1.8       8       2.0       1.8       8       2.0       1.8       8       2.0       1.8       8       2.0       1.8       8       2.0       1.8       8       2.0       1.8       8       2.0       1.8       1.8       2.0       1.8       1.8       2.0       1.8       1.8       2.0       1.8       1.8       2.0       1.8       1.9       2.2       2.2       1.0					
Specific gross CO₂ emissions (kg CO₂/t cementitious materials)         ✓ G4-EN18         602         595         590           Specific net CO₂ emissions (kg CO₂/t cementitious materials)         ✓ S85         578         572           Aggregates         Absolute gross CO₂ emissions (million tonnes)         G4-EN15         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/tonne of product)         G4-EN18         1.8         2.0         1.8           Ready-mix concrete         Absolute gross CO₂ emissions (million tonnes)         G4-EN18         0.1         0.1         0.1           Specific gross CO₂ emissions (kg CO₂/m³)         G4-EN18         1.8         1.9         2.2           Indirect CO₂ from purchased power (million tonnes)         G4-EN18         6.0         6.8         6.4           Energy           Thermal energy mix of clinker production (%)         G4-EN16         6.0         6.8         6.4           Energy         Thermal energy mix of clinker production (%)         G4-EN3         59         56         52           Petcoke         19         21         25           Heavy fuel         1         1         0           Natural gas         7         7         7           Shale and lignite	Absolute gross CO <sub>2</sub> emissions (million tonnes)	✓ G4-EN15	94.2	95.9	95.4
Specific net CO₂ emissions (kg CO₂/t cementitious materials)         ✓         585         578         572           Aggregates         Absolute gross CO₂ emissions (million tonnes)         G4-EN15         0.3         0.3         0.2           Specific gross CO₂ emissions (kg CO₂/tonne of product)         G4-EN18         1.8         2.0         1.8           Ready-mix concrete         Absolute gross CO₂ emissions (million tonnes)         G4-EN15         0.1         0.1         0.1           Specific gross CO₂ emissions (kg CO₂/m³)         G4-EN18         1.8         1.9         2.2           Indirect CO₂ from purchased power (million tonnes)         G4-EN18         1.8         1.9         2.2           Energy         Thermal energy mix of clinker production (%)         G4-EN18         6.0         6.8         6.4           Coal         G4-EN18         G4-EN18         59         56         52           Petcoke         19         21         25           Heavy fuel         1         1         0           Natural gas         7         7         7           Shale and lignite         2         2         2	Absolute net CO <sub>2</sub> emissions (million tonnes)	✓	91.5	93.2	92.6
Aggregates       Absolute gross CO2 emissions (million tonnes)       G4-ENIS       0.3       0.3       0.2         Specific gross CO2 emissions (kg CO2/tonne of product)       G4-ENI8       1.8       2.0       1.8         Ready-mix concrete       Ceal ENIS       0.1       0.1       0.1       0.1         Absolute gross CO2 emissions (million tonnes)       G4-ENIS       1.8       1.9       2.2         Indirect CO2 emissions (kg CO2/m³)       G4-ENIS       1.8       1.9       2.2         Indirect CO2 from purchased power (million tonnes)       Cement       G4-ENIS       6.0       6.8       6.4         Energy       Thermal energy mix of clinker production (%)       G4-ENIS         Coal       59       56       52         Petcoke       19       21       25         Heavy fuel       1       1       0         Natural gas       7       7       7         Shale and lignite       2       2       2       2		✓ G4-EN18	602	595	590
Absolute gross CO2 emissions (million tonnes)       G4-EN15       0.3       0.3       0.2         Specific gross CO2 emissions (kg CO2/tonne of product)       G4-EN18       1.8       2.0       1.8         Ready-mix concrete       Use of the Entity of the Entit		✓	585	578	572
Specific gross CO2 emissions (kg CO2/tonne of product)       G4-EN18       1.8       2.0       1.8         Ready-mix concrete       Absolute gross CO2 emissions (million tonnes)       G4-EN15       0.1       0.1       0.1         Specific gross CO2 emissions (kg CO2/m³)       G4-EN18       1.8       1.9       2.2         Indirect CO2 from purchased power (million tonnes)       Cement       G4-EN16       6.0       6.8       6.4         Energy         Thermal energy mix of clinker production (%)       G4-EN3         Coal       Petcoke       19       21       25         Heavy fuel       1       1       0         Natural gas       7       7       7         Shale and lignite       2       2       2					
Ready-mix concrete         Absolute gross CO2 emissions (million tonnes)       G4-EN15       0.1       0.1       0.1         Specific gross CO2 emissions (kg CO2/m³)       G4-EN18       1.8       1.9       2.2         Indirect CO2 from purchased power (million tonnes)       Cement       G4-EN16       6.0       6.8       6.4         Energy        Thermal energy mix of clinker production (%)       G4-EN3       59       56       52         Petcoke       19       21       25         Heavy fuel       1       1       0         Natural gas       7       7       7         Shale and lignite       2       2       2       2		G4-EN15	0.3	0.3	0.2
Absolute gross CO2 emissions (million tonnes)       G4-EN15       0.1       0.1       0.1         Specific gross CO2 emissions (kg CO2/m³)       G4-EN18       1.8       1.9       2.2         Indirect CO2 from purchased power (million tonnes)       G4-EN18       6.0       6.8       6.4         Energy       Thermal energy mix of clinker production (%)       G4-EN3       59       56       52         Petcoke       19       21       25         Heavy fuel       1       1       0         Natural gas       7       7       7         Shale and lignite       2       2       2		G4-EN18	1.8	2.0	1.8
Specific gross CO2 emissions (kg CO2/m³)         G4-EN18         1.8         1.9         2.2           Indirect CO2 from purchased power (million tonnes)         Cement         G4-EN16         6.0         6.8         6.4           Energy Thermal energy mix of clinker production (%)         G4-EN3         59         56         52           Petcoke         19         21         25           Heavy fuel         1         1         0           Natural gas         7         7         7           Shale and lignite         2         2         2					
		G4-EN15			
Energy         G4-EN3         6.0         6.8         6.4           Thermal energy mix of clinker production (%)         G4-EN3         59         56         52           Petcoke         19         21         25           Heavy fuel         1         1         0           Natural gas         7         7         7           Shale and lignite         2         2         2	Specific gross CO <sub>2</sub> emissions (kg CO <sub>2</sub> /m³)	G4-EN18	1.8	1.9	2.2
Energy         Thermal energy mix of clinker production (%)       G4-EN3         Coal       59       56       52         Petcoke       19       21       25         Heavy fuel       1       1       0         Natural gas       7       7       7         Shale and lignite       2       2       2	·				
Thermal energy mix of clinker production (%)         Coal       59       56       52         Petcoke       19       21       25         Heavy fuel       1       1       0         Natural gas       7       7       7         Shale and lignite       2       2       2	Cement	G4-EN16	6.0	6.8	6.4
Coal         59         56         52           Petcoke         19         21         25           Heavy fuel         1         1         0           Natural gas         7         7         7           Shale and lignite         2         2         2	Energy				
Petcoke         19         21         25           Heavy fuel         1         1         0           Natural gas         7         7         7           Shale and lignite         2         2         2	Thermal energy mix of clinker production (%)	G4-EN3			
Petcoke         19         21         25           Heavy fuel         1         1         0           Natural gas         7         7         7           Shale and lignite         2         2         2	Coal		59	56	52
Heavy fuel       1       1       0         Natural gas       7       7       7         Shale and lignite       2       2       2	Petcoke		19		
Shale and lignite 2 2 2	Heavy fuel				
	Natural gas		7	7	7
Alternative fossil fuels			2	2	2
· · · · · · · · · · · · · · · · · · ·	Alternative fossil fuels		9	9	9
Alternative biomass fuels   ✓ 4 4 5		✓			
Thermal energy efficiency (MJ/tonne clinker) ✓ G4-EN5 3,541 3,499 3,466					
Thermal substitution rate (% thermal energy from alternative fuels)  12.5  12.9  13.7	Thermal substitution rate (% thermal energy from alternative fuels)	✓	12.5	12.9	13.7

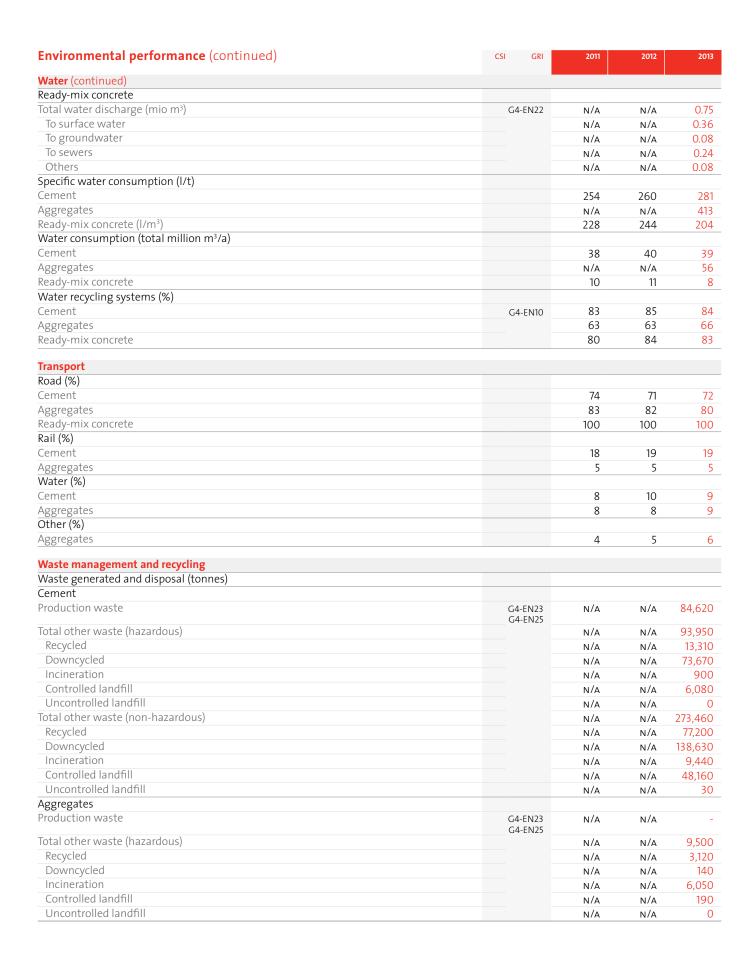
Environmental performance (continued)	CSI GRI	2011	2012	2013
Energy (continued)				
Waste types used as alternative fuels (%)				
Waste oil		5	4	3
Tires		10	9	11
Plastics		9	11	11
Solvents		12	11	9
Impregnated sawdust		5	4	3
Industrial waste and other fossil-based wastes		28	29	29
Animal meal and animal fat		3	3	1
Agricultural waste/charcoal		9	14	15
Wood/non-impregnated sawdust		1	1	1
Other biomass		15	14	16
Dried sewage sludge, paper, carton and diaper waste		2	2	1
Clinker factor (average % of clinker in cement)	✓	70.7	70.1	69.8
Fuel consumption (specific MJ/t) <sup>1</sup>	G4-EN3			
Cement		2,857	2,804	2,751
Aggregates		25	27	24
Ready-mix concrete (MJ/m³)		37	28	32
Fuel consumption (total MGJ/a) <sup>1</sup>	G4-EN3			
Cement		447	452	445
Aggregates		4	4	3
Ready-mix concrete		1.2	1.2	1.2
Power consumption (specific) kWh/t¹	G4-EN3			
Cement		100	96	94
Aggregates		3	2.6	2.9
Ready-mix concrete (kWh/m³)		3.7	3.5	3.8
Power consumption (total million kWh/a) <sup>1</sup>	G4-EN3			
Cement		15,889	15,525	15,368
Aggregates		482	410	387
Ready-mix concrete		163	157	140
Other atmospheric emissions				
NOx				
Number of kilns reporting	G4-EN21	125	127	122
Total emissions (tonne/a)	✓	157,710	165,710	154,540
Average specific concentration (g/tonne cementitious materials)	✓	1,070	1,100	1,125
$SO_2$				
Number of kilns reporting	G4-EN21	126	130	122
Total emissions (tonne/a)	✓	24,680	26,330	27,250
Average specific concentration (g/tonne cementitious materials) <sup>2</sup>	✓	170	175	200
Dust				
Number of kilns reporting	G4-EN21	133	130	122
Total emissions (tonne/a)	✓	9,850	6,660	6,260
Average specific concentration (g/tonne cementitious materials) <sup>2</sup>	✓	67	44	46
Mercury				
Number of kilns reporting	G4-EN21	120	127	116
Total emissions (tonne/a)	✓	1.4	1.63	1.2
Average specific concentration (g/tonne cementitious materials) <sup>2</sup>	✓	0.010	0.011	0.009
Organics				
Number of kilns reporting	G4-EN21	123	129	119
Total emissions (tonne/a)	✓	5,250	5,540	5,150
Average specific concentration (g/tonne cementitious materials) <sup>2</sup>	✓	36	37	38
Dioxins/furans				
Number of kilns reporting	G4-EN21	120	127	117
Total emissions (grams/a)	✓	2.4	2.6	3.1
Average specific concentration (micrograms TEQ/tonne cementitious materials) <sup>2</sup>	✓	0.016	0.017	0.022

 $<sup>1\ \ \</sup>text{Measured using the new Procurement Scorecard Methodology introduced in 2012}.$ 

 $<sup>\,2\,</sup>$  See our web site for specific concentration per tonne of clinker.

Implementation rate of continuous emission monitors (%)   92   92	Environmental performance (continued)	CSI GRI	2011	2012	2013
Number of biodiversity-sensitive sites			88	91	92
Cement         Y         35         46         55           Augregates         Y         24         39         35           Number of biodiversity-sensitive sites with Biodiversity Action Plans in place         3         20         34           Appropales         9         100         39         30         39         94           Appropales         98         99         100         100         40         30         99         90         Aggregates         8         99         90         100         40         99         90         90         90         90         90         90         90         90         90         90         90         90					
Aggregates	Number of biodiversity-sensitive sites	G4-EN11			
Number of blodiversity-sensitive sites with Biodiversity Action Plans in place Cement Aggregates 98 99 90 Aggregates 98 99 90 Aggregates 98 99 99 Aggregates 98 99 99 Agretates Cement 90 100 99 99 Aggregates 98 99 99 Agretates Cement Aggregates 98 99 99 Agretates Cement Aggregates 98 99 99 Aggregates 89 89 89 Alva N/A N/A 26 Aggregates 89 89 89 Aggregates 89 Aggregates 89 89 Ag	Cement	✓	35	46	55
Cement         V         15         28         47           Aggregates         V         8         20         34           Approved mining plans by local authorities (% sites)         U         100         100         100         100         100         99         9 <td></td> <td>✓</td> <td>24</td> <td>39</td> <td>35</td>		✓	24	39	35
Aggregates	Number of biodiversity-sensitive sites with Biodiversity Action Plans in place				
Approved mining plans by local authorities (% sites)		✓	15	28	47
Cement         99         100         100           Aggregates         98         99         94           % of sites with quarry rehabilitation plans in place		✓	8	20	34
Aggregates         98         99         94           % of sites with quarry rehabilitation plans in place         TION         99         99           Aggregates         93         95         90           Water           Number of sites with water risks¹           Cement         N/A         N/A         16         6         Ready-mix concrete         N/A         N/A         66         Ready-mix concrete         N/A         N/A         16         6         Ready-mix concrete         N/A         N/A         18         2         6         Ready-mix concrete         N/A         N/A         18         2         6         Ready-mix concrete         N/A         N/A         18         2         6         N/A         N/A         18         4	Approved mining plans by local authorities (% sites)				
% of sites with quarry rehabilitation plans in place         V         100         99         90         98         90         90         98         80         1         4         4         2         26         4         4         4         2         4         4         4         8         8         3         7         4         4         4         4         4         4         4         4	Cement		99	100	100
Cement         Image: Company of the company of t			98	99	94
Magnegates   93 95 99   99   99   99   99   99   9	% of sites with quarry rehabilitation plans in place				
Water           Number of sites with water risks³         Cement         N/A         N/A         5           Aggregates         N/A         N/A         N/A         66           Ready-mix concrete         N/A         N/A         N/A         226           Water withdrawal         Cement           Total water withdrawal (mio mi)         G4EN8         N/A         N/A         48           From public grid         N/A         N/A         N/A         4.0           From groundwater/springs         N/A         N/A         N/A         18.2           From surface waters         N/A         N/A         N/A         18.2           From all water harvested         N/A         N/A         N/A         4.0           Quarry water used         N/A         N/A         N/A         4.0           From public grid         N/A         N/A         N/A         4.0           From groundwater/springs         N/A         N/A         N/A         1.0           From surface waters         N/A         N/A         N/A         1.0           From surface waters         N/A         N/A         N/A         1.0           From public grid		✓	100	99	99
Number of sites with water risks   Security   Securit	Aggregates	✓	93	95	90
Cement         N/A         N/A         51           Aggregates         N/A         N/A         A6           Ready-mix concrete         N/A         N/A         226           Water withdrawal         Cement         Total water withdrawal (mio m³)         G4-EN8         N/A         N/A         48.3           From public grid         N/A         N/A         N/A         40.0           From groundwater/springs         N/A         N/A         17.6           From surface waters         N/A         N/A         17.6           From rainwater harvested         N/A         N/A         4.0           Purchased and transported         N/A         N/A         4.0           Aggregates         Segregates         Segregates         Segregates         Segregates         Segregates         N/A         N/A         4.0           Quary water used         C4-EN8         98         93         72.4           From groundwater/springs         N/A         N/A         10           From surface waters         N/A         N/A         10           From surface waters         N/A         N/A         10					
Aggregates         N/A         N/A         266           Ready-mix concrete         N/A         N/A         226           Water withdrawal         Water withdrawal         Secondary         Secondary         Secondary         Secondary         Aggregates         N/A         N/A         48.3         Aggregates         N/A         N/A         ANA         48.3         Aggregates         N/A         N/A         N/A         ANA         18.2         From public grid waters         N/A         N/A         N/A         ANA         18.2         From public grid water used         N/A         N/A         N/A         ANA         41.0         Aggregates         N/A         N/A         N/A         ANA         Aggregates         Aggregates         N/A         N/A         N/A         ANA         Aggregates         AnA         N/A         ANA         Aggregates         AnA         N/A         ANA         ANA         AGGREGATE         AnA         N/A         ANA         AGGREGATE         ANA         N/A         ANA         AGGREGATE         ANA         N/A         ANA         AGGREGATE         ANA         N/A         ANA         AGGREGATE         ANA         ANA         ANA         AGGREGATE         ANA         ANA         ANA					
Ready-mix concrete         N/A         N/A         226           Water withdrawal         Water withdrawal         Vision of Manage			N/A	N/A	
			N/A	N/A	
Cement         GA-EN8         N/A         N/A         48.3           Tord I water withdrawal (mio ms)         N/A         N/A         44.3           From groundwater/springs         N/A         N/A         N/A         18.2           From surface waters         N/A         N/A         N/A         17.6           From rainwater harvested         N/A         N/A         N/A         0.4           Purchased and transported         N/A         N/A         N/A         0.4           Quarry water used         N/A         N/A         N/A         0.4           Aggregates         N/A         N/A         N/A         0.4           From public grid         N/A         N/A         N/A         0.7           From gundwater/springs         N/A         N/A         0.4         0.7           From gundwater/springs         N/A         N/A         1.0         0.0<			N/A	N/A	226
Total water withdrawal (mio m²)         G4-EN8         N/A         N/A         48.3           From public grid         N/A         N/A         4.0           From groundwater/springs         N/A         N/A         17.6           From surface waters         N/A         N/A         17.6           From rainwater harvested         N/A         N/A         4.1           Purchased and transported         N/A         N/A         N/A         4.0           Quarry water used         N/A         N/A         N/A         4.0           Aggregates         Total water withdrawal (mio m³)         G4-EN8         98         93         72.4           From public grid         N/A         N/A         N/A         6.7           From surface waters         N/A         N/A         1.0         2.0           From surface waters         N/A         N/A         1.0         1.0           Total water withdrawal (mio m³)         G4-EN8         N/A <td>Water withdrawal</td> <td></td> <td></td> <td></td> <td></td>	Water withdrawal				
From public grid         N/A         N/A         4.0           From groundwater/springs         N/A         N/A         18.2           From surface waters         N/A         N/A         17.6           From rainwater harvested         N/A         N/A         4.1           Purchased and transported         N/A         N/A         4.0           Quarry water used         N/A         N/A         4.0           Aggregates         Vary water widdrawal (mio mi)         G4-EN8         98         93         72.4           From groundwater/springs         N/A         N/A         6.7         From groundwater/springs         N/A         N/A         6.6         From surface waters         N/A         N/A         1.0         26.4         From surface waters         N/A         N/A         1.0         2.0         N/A         N/A         1.0         2.0         N/A         N/A         1.0         2.0         2.0 <td></td> <td></td> <td></td> <td></td> <td></td>					
From groundwater/springs         N/A         N/A         18.2           From surface waters         N/A         N/A         N/A         17.6           From rainwater harvested         N/A         N/A         N/A         0.4           Purchased and transported         N/A         N/A         N/A         0.4           Quarry water used         N/A         N/A         N/A         4.0           Aggregates         Total water withdrawal (mio m³)         G4-ENS         98         93         72.4           From public grid         N/A         N/A         N/A         6.7           From goundwater/springs         N/A         N/A         N/A         26.4           From surface waters         N/A         N/A         N/A         1.2           Purchased and transported         N/A         N/A         1.2           Purchased and transported water used         N/A         N/A         1.1           Ready-mix concrete         N/A         N/A         N/A         1.1           Total water withdrawal (mio m³)         G4-ENS         N/A         N/A         4.5           From groundwater/springs         N/A         N/A         N/A         1.4         4.5           Fr		G4-EN8	N/A	N/A	48.3
From surface waters			N/A	N/A	4.0
From rainwater harvested         N/a         N/a         4.1           Purchased and transported         N/a         N/a         0.4           Quarry water used         N/a         N/a         0.4           Aggregates         Column water withdrawal (mio m³)         G4-EN8         98         93         72.4           From public grid         N/a         N/a         N/a         2.6           From groundwater/springs         N/a         N/a         2.6           From surface waters         N/a         N/a         1.2           From rainwater harvested         N/a         N/a         1.0           Quarry water used         N/a         N/a         N/a         1.0           Quarry water used         N/a         N/a         N/a         1.1           Ready-mix concrete         N/a         N/a         N/a         1.1           Total water withdrawal (mio m³)         G4-EN8         8.4           From groundwater/springs         A         N/a         N/a         4.5           From groundwater harvested         N/a         N/a         0.4         4.5           From groundwater harvested         N/a         N/a         N/a         0.9         9.8      <			N/A	N/A	18.2
Purchased and transported         N/a         N/a         0.4           Quarry water used         N/a         N/a         4.0           Aggregates         Valent withdrawal (mio m²)         G4-EN8         98         93         72.4           From public grid         N/a         N/a         N/a         6.7           From groundwater/springs         N/a         N/a         N/a         6.7           From groundwater/springs         N/a         N/a         N/a         1.2           From groundwater harvested         N/a         N/a         1.0 <td< td=""><td>From surface waters</td><td></td><td>N/A</td><td>N/A</td><td>17.6</td></td<>	From surface waters		N/A	N/A	17.6
Quarry water used         N/A         N/A         4.0           Aggregates			N/A	N/A	4.1
Aggregates   Standard (mio mi)   G4-EN8   98   93   72.4     From public grid   N/A   N/A   6.7     From public grid   N/A   N/A   26.4     From surface waters   N/A   N/A   26.5     From rainwater harvested   N/A   N/A   1.2     Purchased and transported   N/A   N/A   1.2     Quarry water used   N/A   N/A   1.0     Quarry water used   N/A   N/A   N/A   1.0     Quarry water used   N/A   N/A   N/A   1.0     Ready-mix concrete   Stall water withdrawal (mio mi)   S4.5     From groundwater/springs   S4.5     From groundwater/springs   N/A   N/A   N/A   2.3     From groundwater saters   N/A   N/A   N/A   0.4     From rainwater harvested   N/A   N/A   0.4     From rainwater harvested   N/A   N/A   0.9     Water Discharge   S4.5     Total water discharge (mio mi)   S5.5     Total water discharge (mio mi)   S5.5     Total water discharge (mio mi)   N/A   N/A   0.3     To groundwater   N/A   N	Purchased and transported		N/A	N/A	0.4
Total water withdrawal (mio m³)         G4-EN8         98         93         72.4           From public grid         N/A         N/A         N/A         6.7           From groundwater/springs         N/A         N/A         N/A         26.4           From surface waters         N/A         N/A         N/A         26.6           From rainwater harvested         N/A         N/A         N/A         1.0           Quarry water used         R         8.4           From public grid         N/A         N/A         N/A         4.5           From groundwater/springs         R         N/A         N/A         4.5           From groundwater harvested         N/A         N/A         N/A         0.3           Purchased and transported         N/A         N/A         N/A         N/A         9.78           Total water discharge (mio m³)         G4-EN22 <td>Quarry water used</td> <td></td> <td>N/A</td> <td>N/A</td> <td>4.0</td>	Quarry water used		N/A	N/A	4.0
From public grid         N/A         N/A         6.7           From groundwater/springs         N/A         N/A         26.4           From surface waters         N/A         N/A         26.4           From surface waters         N/A         N/A         N/A         26.4           From a minwater harvested         N/A         N/A         N/A         1.2           Purchased and transported         N/A         N/A         N/A         11.2           Ready-mix concrete         Total water withdrawal (mio m³)         G4-EN8         8.4           From public grid         N/A         N/A         4.5           From groundwater/springs         N/A         N/A         4.5           From groundwater withdrawal (mio m³)         G4-EN8         N/A         N/A         4.5           From groundwater springs         N/A         N/A         1.4         4.5           From groundwater springs         N/A         N/A         1.4         4.5           From groundwater dwaters         N/A         N/A         0.3           Purchased and transported         N/A         N/A         N/A         0.9           Water Discharge         Cement         N/A         N/A         N/A <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
From groundwater/springs         N/A         N/A         26.4           From surface waters         N/A         N/A         N/A         26.4           From rainwater harvested         N/A         N/A         1.2           Purchased and transported         N/A         N/A         N/A         1.0           Quarry water used         N/A         N/A         N/A         11.2           Ready-mix concrete         Total water withdrawal (mio m³)         G4-EN8         8.4           From public grid         N/A         N/A         N/A         4.5           From groundwater/springs         N/A         N/A         N/A         4.5           From surface waters         N/A         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         N/A         0.9           Water Discharge         Value         N/A         N/A         0.9           Water Discharge         N/A         N/A         N/A         9.78           Total water discharge (mio m³)         G4-EN22         N/A         N/A         0.14           To sewers         N/A         N/A		G4-EN8	98	93	72.4
From surface waters         N/A         N/A         26           From rainwater harvested         N/A         N/A         N/A         1.2           Purchased and transported         N/A         N/A         1.0           Quarry water used         N/A         N/A         N/A         11.2           Ready-mix concrete         Total water withdrawal (mio m³)         64-EN8         8.4           From public grid         N/A         N/A         N/A         4.5           From groundwater/springs         N/A         N/A         N/A         2.3           From surface waters         N/A         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         N/A         0.4           Water Discharge         Value Discharge         N/A         N/A         0.9           Water Discharge         Value Discharge         N/A         N/A         0.9           Water Discharge         Value Discharge         N/A         N/A         0.9           Water Discharge (mio m³)         G4-EN22         N/A         N/A         0.9           Total water discharge (mio m³)         G4-EN22         N/A         N/A         0.20           Aggregates         N/A	From public grid		N/A	N/A	6.7
From rainwater harvested         N/A         N/A         1.2           Purchased and transported         N/A         N/A         1.0           Quarry water used         N/A         N/A         N/A         11.2           Ready-mix concrete         Total water withdrawal (mio m³)         G4-EN8         8.4           From public grid         N/A         N/A         N/A         4.5           From groundwater/springs         N/A         N/A         N/A         2.3           From surface waters         N/A         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         N/A         0.9           Purchased and transported         N/A         N/A         N/A         0.9           Water Discharge         V         N/A         N/A         0.9           Water Quarter discharge (mio m³)         G4-EN22         N/A         N/A         9.78           Tos urface water         N/A         N/A         N/A         9.30           To groundwater         N/A         N/A         N/A         0.14           To severs         N/A         N/A         0.20           Aggregates         N/A         N/A         N/A         11.7<	From groundwater/springs		N/A	N/A	26.4
Purchased and transported         N/A         N/A         1.0           Quarry water used         N/A         N/A         11.2           Ready-mix concrete         Total water withdrawal (mio m³)         Seady-mix concrete           Total water withdrawal (mio m³)         G4-EN8         N/A         N/A         4.5           From public grid         N/A         N/A         4.5         4.5         5         6         8.4         4         4.5         5         8.4         4         5         8.4         4         5         8.4         4         5         8.4         4         5         8.4         8.4         4         5         8.4         4         5         8.4         8.2         8.4			N/A	N/A	26
Quarry water used         N/A         N/A         11.2           Ready-mix concrete         Total water withdrawal (mio m³)         64-EN8         8.4           From public grid         N/A         N/A         N/A         4.5           From groundwater/springs         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         0.4           Purchased and transported         N/A         N/A         0.9           Water Discharge         Cement           Total water discharge (mio m³)         G4-EN22         N/A         N/A         9.78           To groundwater         N/A         N/A         N/A         9.30           To sewers         N/A         N/A         N/A         0.14           To sewers         N/A         N/A         N/A         0.20           Aggregates         Total water discharge (mio m³)         G4-EN22         N/A         N/A         N/A         1.7           To groundwater         N/A         N/A         N/A         1.7           Total water discharge (mio m³)         GF4-EN22         N/A         N/A         N/A         1.8	From rainwater harvested		N/A	N/A	1.2
Ready-mix concrete         Total water withdrawal (mio m³)         G4-EN8         8.4           From public grid         N/A         N/A         4.5           From groundwater/springs         N/A         N/A         2.3           From surface waters         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         0.3           Purchased and transported         N/A         N/A         0.9           Water Discharge         Value of transported         Value of transporte	Purchased and transported		N/A	N/A	1.0
Total water withdrawal (mio m³)         G4-EN8         8.4           From public grid         N/A         N/A         4.5           From groundwater/springs         N/A         N/A         2.3           From surface waters         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         0.9           Purchased and transported         N/A         N/A         0.9           Water Discharge         Vater Discharg	Quarry water used		N/A	N/A	11.2
From public grid         N/A         N/A         4.5           From groundwater/springs         N/A         N/A         N/A         2.3           From surface waters         N/A         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         N/A         0.3           Purchased and transported         N/A         N/A         0.9           Water Discharge         V         V         V         0.9           Water Discharge         V         V         N/A         0.9         V         V         V         0.9         V         V         V         0.9         V         V         V         0.9         V         V         0.0         V         0.0         V         0.0         V         0.0         V         0.0         0.0         V         0.0         V         0.0         0.0         V         0.0         0.0         0.0         0.0         0.0         <					
From groundwater/springs         N/A         N/A         2.3           From surface waters         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         0.3           Purchased and transported         N/A         N/A         0.9           Water Discharge         Cement         Total water discharge (mio m³)         G4-EN22         N/A         N/A         N/A         9.78           To surface water         N/A         N/A         N/A         9.30           To groundwater         N/A         N/A         N/A         0.14           To sewers         N/A         N/A         N/A         0.32           Others         N/A         N/A         N/A         0.20           Aggregates         N/A         N/A         N/A         N/A         11.7           To surface water         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         N/A         0.03	Total water withdrawal (mio m³)	G4-EN8			8.4
From surface waters         N/A         N/A         0.4           From rainwater harvested         N/A         N/A         0.3           Purchased and transported         N/A         N/A         0.9           Water Discharge         Cement         Total water discharge (mio m³)         G4-EN22         N/A         N/A         9.78           To surface water         N/A         N/A         9.30           To groundwater         N/A         N/A         N/A         0.14           To sewers         N/A         N/A         N/A         0.32           Others         N/A         N/A         N/A         0.20           Aggregates         N/A         N/A         N/A         16.8           To surface water         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         N/A         4.9	From public grid		N/A	N/A	4.5
From rainwater harvested         N/A         N/A         0.3           Purchased and transported         N/A         N/A         0.9           Water Discharge         Cement           Total water discharge (mio m³)         G4-EN22         N/A         N/A         9.78           To surface water         N/A         N/A         N/A         9.30           To groundwater         N/A         N/A         N/A         0.14           To sewers         N/A         N/A         N/A         0.32           Others         N/A         N/A         N/A         0.20           Aggregates         N/A         N/A         N/A         N/A         11.7           To surface water         N/A         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         N/A         0.03           To sewers         N/A         N/A         N/A         N/A         0.03	From groundwater/springs		N/A	N/A	2.3
Purchased and transported         N/A         N/A         0.9           Water Discharge         Cement           Total water discharge (mio m³)         G4-EN22         N/A         N/A         9.78           To surface water         N/A         N/A         9.30           To groundwater         N/A         N/A         0.14           To sewers         N/A         N/A         N/A         0.32           Others         N/A         N/A         N/A         0.20           Aggregates         Total water discharge (mio m³)         G4-EN22         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         N/A         0.03	From surface waters		N/A	N/A	0.4
Water Discharge         Cement       Cement         Total water discharge (mio m³)       G4-EN22       N/A       N/A       9.78         To surface water       N/A       N/A       9.30         To groundwater       N/A       N/A       0.14         To sewers       N/A       N/A       N/A       0.32         Others       N/A       N/A       N/A       0.20         Aggregates       Aggregates       N/A       N/A       N/A       16.8         To surface water       N/A       N/A       N/A       11.7         To groundwater       N/A       N/A       N/A       A.9         To sewers       N/A       N/A       N/A       0.03	From rainwater harvested		N/A	N/A	0.3
Cement         Total water discharge (mio m³)       G4-EN22       N/A       N/A       9.78         To surface water       N/A       N/A       9.30         To groundwater       N/A       N/A       0.14         To sewers       N/A       N/A       N/A       0.32         Others       N/A       N/A       N/A       0.20         Aggregates       Segregates       N/A       N/A       N/A       16.8         To surface water       N/A       N/A       N/A       11.7         To groundwater       N/A       N/A       N/A       0.03         To sewers       N/A       N/A       N/A       0.03	Purchased and transported		N/A	N/A	0.9
Total water discharge (mio m³)         G4-EN22         N/A         N/A         9.78           To surface water         N/A         N/A         9.30           To groundwater         N/A         N/A         0.14           To sewers         N/A         N/A         0.32           Others         N/A         N/A         0.20           Aggregates         Segregates         N/A         N/A         N/A         16.8           To surface water         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         N/A         0.03	Water Discharge				
To surface water         N/A         N/A         9.30           To groundwater         N/A         N/A         0.14           To sewers         N/A         N/A         0.32           Others         N/A         N/A         0.20           Aggregates         September         N/A         N/A         N/A         16.8           To surface water         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         N/A         0.03	Cement				
To surface water         N/A         N/A         9.30           To groundwater         N/A         N/A         0.14           To sewers         N/A         N/A         0.32           Others         N/A         N/A         0.20           Aggregates         September         N/A         N/A         N/A         16.8           To surface water         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         N/A         0.03	Total water discharge (mio m³)	G4-EN22	N/A	N/A	9.78
To groundwater         N/A         N/A         0.14           To sewers         N/A         N/A         0.32           Others         N/A         N/A         0.20           Aggregates         September         N/A         N/A         N/A         16.8           To surface water         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         N/A         0.03			N/A	N/A	
To sewers         N/A         N/A         0.32           Others         N/A         N/A         0.20           Aggregates         Total water discharge (mio m³)         G4-EN22         N/A         N/A         16.8           To surface water         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         N/A         0.03	To groundwater		N/A	N/A	
Others         N/A         N/A         0.20           Aggregates         Total water discharge (mio m³)         G4-EN22         N/A         N/A         16.8           To surface water         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         0.03					
Aggregates           Total water discharge (mio m³)         G4-EN22         N/A         N/A         16.8           To surface water         N/A         N/A         N/A         11.7           To groundwater         N/A         N/A         N/A         4.9           To sewers         N/A         N/A         N/A         0.03	Others		N/A	N/A	
Total water discharge (mio m³)         G4-EN22         N/A         N/A         16.8           To surface water         N/A         N/A         11.7           To groundwater         N/A         N/A         4.9           To sewers         N/A         N/A         0.03	Aggregates				
To surface water         N/A         N/A         11.7           To groundwater         N/A         N/A         4.9           To sewers         N/A         N/A         0.03		G4-EN22	N/A	N/A	16.8
To groundwater N/A N/A 4.9 To sewers N/A N/A 0.03					
To sewers N/A N/A 0.03					
	9				
			N/A	N/A	0.02

 $<sup>\,\,</sup>$  Based on the Holcim water risk matrix developed in conjunction with IUCN.



Management and recycling (continued)	Environmental performance (continued)	CSI GRI	2011	2012	2013
Total other waste (non-hazardous)         Cat ENZI GALINZA         N/A         N/A         34,090           Recycled         N/A         N/A         43,30           Downwysdd         N/A         N/A         43,30           Incineration         N/A         N/A         45,00           Drownroteled landfill         N/A         N/A         45,00           Readyminx concrete         Production waste         N/A         N/A         75,790           Total other waste (hazardous)         N/A         N/A         N/A         64,00           Recycled         N/A         N/A         N/A         100           Incineration         N/A         N/A         N/A         100           Controlled landfill         N/A         N/A         N/A         50           Downwysded         N/A         N/A         N/A         100           Incineration         N/A         N/A         N/A         100           Downwysded         N/A         N/A         N/A         100           Downwysded         N/A         N/A         N/A         100           Downwysded         N/A         N/A         N/A         100           Contal tion fill	Waste management and recycling (continued)				
Recycled         NA         NA         A,830           Downspeled         NA         NA         4,830           Incineration         NA         NA         4,830           Controlled landfill         NA         NA         4,540           Droom tolled landfill         NA         NA         NA         0           Ready-mix controlled         C4 ENS         NA         NA         3,579           Total other waste (hazardous)         C4 ENS         NA         NA         4,60           Downsycled         NA         NA         NA         4,60           Downsycled Incineration         NA         NA         NA         70           Centrolled landfill         NA         NA         NA         10           Incineration         NA         NA         NA         10           Total other waste (non hazardous)         NA         NA         NA         NA         10           Total price waste (non hazardous)         NA         NA         NA         NA         9,0         9         7         10         10         10         10         10         10         10         10         10         10         10         10         10			N/A	N/A	34,090
Downcycled   NA NA 430   NA NA 140   NA 140   NA NA	Recycled	G4-EN25	N/A	N/A	24 820
Incineration					
Controlled landfill         N/A         N/A         4,540           Duncontrolled landfill         N/A         N/A         75,70           Ready-mix concrete         Concrete         N/A         N/A         75,70           Production waste         G6-EN23 (ALT)         N/A         N/A         75,70           Total other waste (hazardous)         N/A         N/A         440           Downeyded         N/A         N/A         100           Incineration         N/A         N/A         100           Controlled landfill         N/A         N/A         100           Droad policy         N/A         N/A         100           Downeyded         N/A         N/A         100					
Uncontrolled landfill         N/A         N/A         0           Ready-mix concrete         G4-EN23 G4-EN23 G4-EN23 (A+ N/A)         N/A         N/A         735,790           Total other waste (hazardous)         N/A         N/A         404         640         80,70         N/A         N/A         400         640         80,70         N/A         100	Controlled landfill				
Poduction waste (hazardous)	Uncontrolled landfill				
C4-FN05	Ready-mix concrete				
Total Other waste (hazardous)	Production waste		N/A	N/A	735,790
Domorcycled Incineration         NMA NA	Total other waste (hazardous)	0 / 2/123	N/A	N/A	640
N/A	Recycled		N/A	N/A	420
Controlled landfill         N/A         N/A         50           Uncontrolled landfill         N/A         N/A         N/A         30,80           Recycled         N/A         N/A         N/A         2,800           Downcycled         N/A         N/A         N/A         9,960           Incineration         N/A         N/A         N/A         6,940           Controlled landfill         N/A         N/A         6,940           Uncontrolled landfill         N/A         N/A         8/A           Cemeral waste management system (%)         83         87         89           Cemeral waste management system (%)         83         83         89         99         97           Aggregates         91         95         92         88         89         99         97         88         89         99         97         88         89         99         97         88         89         99         99         97         88         99         99         97         88         89         99         99         97         88         89         99         99         98         88         89         88         80         88         80	Downcycled		N/A	N/A	100
Uncontrolled landfill	Incineration		N/A	N/A	70
Total other waste (non-hazardous)         N/A         N/A         30,080           Recycled         N/A         N/A         2,800           Downcycled         N/A         N/A         9,910           Incineration         N/A         N/A         9,910           Controlled landfill         N/A         N/A         9,910           Uncontrolled landfill         98         99         97           General waste management system (%)         98         99         99           Aggregates         91         95         92           Ready-mix concrete         88         96         88           Returned concrete recycling system (%)         21         22         22           Social performance         21         20         20           Sed y-mix concrete         88         96         84           Employment practices         21         20         22           Scoial performance         88         96         84           Employment practices         88         96         84           Employment practices         88         96         84           Employment practices         88         96         84           Employment	Controlled landfill		N/A	N/A	50
Recycled Downcycled         N/A         N/A         2,800 Downcycled         N/A         N/A         9,960 Incineration         N/A         N/A         N/A         N/A         9,960 Incineration         N/A	Uncontrolled landfill		N/A	N/A	0
Domoycled Incineration         N/A         N/A         9,960 Incineration         N/A         N/A         9,960 Incineration         N/A         N/A         9,960 Incineration         N/A         N/A         9,960 Incineration         N/A         N/A         0,940 Incineration         N/A         N/A         0,940 Incineration         N/A         N/A         0,940 Incineration         <	Total other waste (non-hazardous)		N/A	N/A	30,080
Incineration	Recycled		N/A	N/A	2,800
Controlled landfill         N/A         N/A         6,940           Uncontrolled landfill         N/A         N/A         70           General waste management system (%)         9         97           Cement         98         99         97           Aggregates         91         19         59           Returned concrete recycling system (%)         83         87         89           Redy-mix concrete         21         22         22         22           Social performance         csi stal         201         20         20         22         22         22           Social performance         csi stal         201         202         20 <td>Downcycled</td> <td></td> <td>N/A</td> <td>N/A</td> <td>9,960</td>	Downcycled		N/A	N/A	9,960
Controlled landfill         N/A         N/A         6,940           Uncontrolled landfill         N/A         N/A         470           General waste management system (%)         99         97           Raggregates         91         95         92           Ready-mix concrete         83         87         89           Returned concrete recycling system (%)         21         22         22           Social performance         csi on         301         202         22           Social performance         csi on         301         202         22           Social performance         csi on         301         202         22           Social performance         s8         96         84           Employment systems         88         96         84           Employment practices         88         96         84           Europe         19,602         11,765         1	Incineration		N/A	N/A	9,910
Conceral waste management system (%)         N/A         N/A         470           Cement         98         99         97           Aggregates         91         95         92           Ready-mix concrete         83         87         88           Ready-mix concrete         21         22         22           Social performance         csi on a concrete         30         20         20           Startaegy         8         96         84           Employment practices         8         96         84           Employee ty region         80,967         76,359         70,857           Asia Pacific         3,942         36,523         34,080           Latin America         2,140         21,267         11,765         11,818           Arica Adide East         2,140         2,153         2,248         2,794         12,286         13,91         13,11         161         10	Controlled landfill		N/A	N/A	
Cement         98         99         97           Aggregates         91         95         92           Ready-mix concrete         83         87         88           Ready-mix concrete         21         22         22           Social performance         21         22         22           Social performance         88         96         84           Employment practices           Employment practices           Group employees by region         80,967         76,359         70,857           Asia Pacific         37,942         36,523         34,080           Latin America         19,602         17,924         15,868           North America         19,602         17,924         15,868           North America         2,140         2,153         3,10         6,79           Africa Middle East         2,140         2,153         3,20         6,00           Corporate         80         67         6,7         8.5           Europe         13,9         13,1         13,1         16,1           North America         10,6         10,5         18,5           Latin America         13,9         13,	Uncontrolled landfill		N/A	N/A	
Cement         98         99         97           Aggregates         91         95         92           Ready-mix concrete         83         87         88           Ready-mix concrete         21         22         22           Social performance         21         22         22           Social performance         88         96         84           Employment practices           Employment practices           Group employees by region         80,967         76,359         70,857           Asia Pacific         37,942         36,523         34,080           Latin America         19,602         17,924         15,868           North America         19,602         17,924         15,868           North America         2,140         2,153         3,10         6,79           Africa Middle East         2,140         2,153         3,20         6,00           Corporate         80         67         6,7         8.5           Europe         13,9         13,1         13,1         16,1           North America         10,6         10,5         18,5           Latin America         13,9         13,	General waste management system (%)				
Ready-mix concrete         83         87         89           Returned concrete recycling system (%)         coral per formance         csi GRI         2011         2022         22           Social performance         csi GRI         2011         2012         2013           CSR strategy           % Group companies with a specific CSR strategy         8         96         84           Employment practices           Employment practices         8         96         84           Asia Pacific         80,967         76,399         70,857           Asia Pacific         37,942         36,523         34,000           Latin America         12,867         11,181         11,181           Europe         9,602         17,924         15,868         10,212         13,36         13,122           Corporate         873         858         80			98	99	97
Ready-mix concrete         83         87         89           Returned concrete recycling system (%)         coral per formance         csi GRI         2011         2022         22           Social performance         csi GRI         2011         2012         2013           CSR strategy           % Group companies with a specific CSR strategy         8         96         84           Employment practices           Employment practices         8         96         84           Asia Pacific         80,967         76,399         70,857           Asia Pacific         37,942         36,523         34,000           Latin America         12,867         11,181         11,181           Europe         9,602         17,924         15,868         10,212         13,36         13,122           Corporate         873         858         80	Aggregates		91	95	92
Ready-mix concrete         21         22         22           Social performance         cs sal			83	87	89
Social performance         cs or language of the program of the					
CSR strategy         88         96         84           Employment practices         88         96         84           Group employees by region         80,967         76,359         70,857           Asia Pacific         37,942         36,523         34,080           Latin America         12,867         11,765         11,181           Europe         19,602         179,24         15,868           North America         7,543         7,136         6,791           Africa Middle East         2,140         2,153         2,128           Corporate         873         858         809           Employee turnover (%)         G4-LAI         4         7.543         7,136         6,791           Asia Pacific         6-7         6-7         8.5         809         <			21	22	22
Employment practices         Section of the process of the proce	Social performance	CSI GRI	2011	2012	2013
Employment practices         Section of the process of the proce	CSR strategy				
Employment practices         Section of the proper of the propers of the proper			88	96	84
Group employees by region         80,967         76,359         70,857           Asia Pacific         37,942         36,523         34,080           Latin America         12,867         11,765         11,181           Europe         19,602         17,924         15,868           North America         7,543         7,136         6,791           Africa Middle East         2,140         2,153         2,128           Corporate         873         858         809           Employee turnover (%)         64-Lal         6.7         6.7         8.5           Latin America         10.6         19.5         18.5           Latin America         10.6         19.5         18.5           Latin America         11.0         10.8         13.8           Africa Middle East         3.6         3.0         5.2           Corporate         12.2         15.3         2.29           Personnel expenses (CHF million)         3,859         4,023         3,653           Asia Pacific         10.0         1,090         894           Latin America         519         549         548           Europe         1,283         1,275         1,122					
Asia Pacific         37,942         36,523         34,080           Latin America         12,867         11,765         11,181           Europe         19,602         17,924         15,868           North America         2,140         2,153         2,128           Africa Middle East         2,140         2,153         2,128           Corporate         873         858         809           Employee turnover (%)         64-LAI           Asia Pacific         6,67         6,7         8,5           Latin America         10,6         19,5         18,5           Europe         13,9         13,1         16,1           North America         14,0         10,8         13,8           Africa Middle East         3,859         4,023         3,653           Asia Pacific         1,001         1,009         894           Latin America         1,223         1,275					
Latin America         12,867         11,765         11,181           Europe         19,602         17,924         15,868           North America         7,543         7,136         6,79           Africa Middle East         2,140         2,153         2,128           Corporate         873         858         809           Employee turnover (%)         67         6.7         8.5           Latin America         10.6         19.5         18.5           Europe         13.9         13.1         16.1           North America         14.0         10.8         13.8           Africa Middle East         3.6         3.0         5.2           Corporate         12.2         15.3         22.9           Personnel expenses (CHF million)         3.859         4,023         3,653           Asia Pacific         1,001         1,090         894           Latin America         519         549         548           Europe         1,283         1,275         1,122           North America         744         779         777           Africa Middle East         84         86         86           Corporate         227				76,359	70,857
Europe         19,602         17,924         15,868           North America         7,543         7,136         6,791           Africa Middle East         2,140         2,153         2,128           Corporate         87         858         809           Employee turnover (%)         64-LAI         6.7         8.5           Latin America         10.6         19.5         18.5           Europe         13.9         13.1         16.1           North America         14.0         10.8         13.8           Africa Middle East         3.6         3.0         5.2           Corporate         12.2         15.3         2.9           Personnel expenses (CHF million)         3,859         4,023         3,653           Asia Pacific         1,001         1,090         894           Latin America         1,001         1,090         894           Latin America         519         549         548           Europe         1,283         1,275         1,122           North America         84         86         86           Corporate         227         244         227           % of female workforce         6-4LAI2 </td <td>Asia Pacific</td> <td></td> <td>379/12</td> <td></td> <td></td>	Asia Pacific		379/12		
North America         7,543         7,136         6,791           Africa Middle East         2,140         2,153         2,128           Corporate         873         858         809           Employee turnover (%)         G4-LAI         Asia Pacific         6.7         6.7         8.5           Latin America         10.6         19.5         18.5           Europe         13.9         13.1         16.1           North America         14.0         10.8         13.8           Africa Middle East         3.6         3.0         5.2           Corporate         12.2         15.3         22.9           Personnel expenses (CHF million)         3,859         4,023         3,653           Asia Pacific         1,001         1,090         894           Latin America         519         549         548           Europe         1,283         1,275         1,122           North America         744         779         777           Africa Middle East         84         86         86           Corporate         64-LAI2         227         244         227           % of female workforce         64-LAI2         9	Latin America		31,342		
Africa Middle East         2,140         2,153         2,128           Corporate         873         858         809           Employee turnover (%)         G4-LA1           Asia Pacific         6.7         6.7         8.5           Latin America         10.6         19.5         18.5           Europe         13.9         13.1         16.1           North America         14.0         10.8         13.8           Africa Middle East         3.6         3.0         5.2           Corporate         12.2         15.3         22.9           Personnel expenses (CHF million)         3,859         4,023         3,653           Asia Pacific         1,001         1,090         894           Latin America         519         549         548           Europe         1,283         1,275         1,122           North America         744         779         777           Africa Middle East         84         86         86           Corporate         64-LA12         277         244         227           % of female workforce         64-LA12         67-LA12         67-LA12         67-LA12         67-LA12         67-LA12			12,867	11,765	11,181
Corporate         873         858         809           Employee turnover (%)         G4-LAI	Europe		12,867	11,765	11,181
Employee turnover (%)       G4-LAI         Asia Pacific       6.7       6.7       8.5         Latin America       10.6       19.5       18.5         Europe       13.9       13.1       16.1         North America       14.0       10.8       13.8         Africa Middle East       3.6       3.0       5.2         Corporate       12.2       15.3       22.9         Personnel expenses (CHF million)       3,859       4,023       3,653         Asia Pacific       1,001       1,090       894         Latin America       519       549       548         Europe       1,283       1,275       1,122         North America       744       779       777         Africa Middle East       84       86       86         Corporate       84       86       86         Corporate       64-LAI2       227       244       227         Top management level       9       10       11         Senior management level       9       9       9       9         Middle management level       13       13       13       13	Europe North America		12,867 19,602 7,543	11,765 17,924 7,136	11,181 15,868
Asia Pacific       6.7       6.7       8.5         Latin America       10.6       19.5       18.5         Europe       13.9       13.1       16.1         North America       14.0       10.8       13.8         Africa Middle East       3.6       3.0       5.2         Corporate       12.2       15.3       22.9         Personnel expenses (CHF million)       3,859       4,023       3,653         Asia Pacific       1,001       1,090       894         Latin America       519       549       548         Europe       1,283       1,275       1,122         North America       744       779       777         Africa Middle East       84       86       86         Corporate       227       244       227         % of female workforce       G4-LAI2       9       10       11         Senior management level       9       9       9       9         Middle management level       13       13       13	Europe North America		12,867 19,602 7,543	11,765 17,924 7,136	11,181 15,868 6,791
Latin America       10.6       19.5       18.5         Europe       13.9       13.1       16.1         North America       14.0       10.8       13.8         Africa Middle East       3.6       3.0       5.2         Corporate       12.2       15.3       22.9         Personnel expenses (CHF million)       3,859       4,023       3,653         Asia Pacific       1,001       1,090       894         Latin America       519       549       548         Europe       1,283       1,275       1,122         North America       744       779       777         Africa Middle East       84       86       86         Corporate       227       244       227         % of female workforce       G4-LA12       9       10       11         Senior management level       9       9       9       9         Middle management level       13       13       13       13	Europe North America Africa Middle East Corporate		12,867 19,602 7,543 2,140	11,765 17,924 7,136 2,153	11,181 15,868 6,791 2,128
Europe       13.9       13.1       16.1         North America       14.0       10.8       13.8         Africa Middle East       3.6       3.0       5.2         Corporate       12.2       15.3       22.9         Personnel expenses (CHF million)       3,859       4,023       3,653         Asia Pacific       1,001       1,090       894         Latin America       519       549       548         Europe       1,283       1,275       1,122         North America       744       779       777         Africa Middle East       84       86       86         Corporate       64-LA12       9       10       11         Senior management level       9       9       9       9         Middle management level       13       13       13	Europe North America Africa Middle East Corporate Employee turnover (%)	G4-LA1	12,867 19,602 7,543 2,140 873	11,765 17,924 7,136 2,153 858	11,181 15,868 6,791 2,128 809
North America         14.0         10.8         13.8           Africa Middle East         3.6         3.0         5.2           Corporate         12.2         15.3         22.9           Personnel expenses (CHF million)         3,859         4,023         3,653           Asia Pacific         1,001         1,090         894           Latin America         519         549         548           Europe         1,283         1,275         1,122           North America         744         779         777           Africa Middle East         84         86         86           Corporate         G4-LA12         227         244         227           % of female workforce         G4-LA12         9         10         11           Senior management level         9         9         9           Middle management level         13         13         13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific	G4-LA1	12,867 19,602 7,543 2,140 873	11,765 17,924 7,136 2,153 858	11,181 15,868 6,791 2,128 809
Africa Middle East       3.6       3.0       5.2         Corporate       12.2       15.3       22.9         Personnel expenses (CHF million)       3,859       4,023       3,653         Asia Pacific       1,001       1,090       894         Latin America       519       549       548         Europe       1,283       1,275       1,122         North America       744       779       777         Africa Middle East       84       86       86         Corporate       227       244       227         % of female workforce       G4-LA12         Top management level       9       10       11         Senior management level       9       9       9         Middle management level       13       13       13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America	G4-LA1	12,867 19,602 7,543 2,140 873	11,765 17,924 7,136 2,153 858	11,181 15,868 6,791 2,128 809
Corporate         12.2         15.3         22.9           Personnel expenses (CHF million)         3,859         4,023         3,653           Asia Pacific         1,001         1,090         894           Latin America         519         549         548           Europe         1,283         1,275         1,122           North America         744         779         777           Africa Middle East         84         86         86           Corporate         227         244         227           % of female workforce         G4-LA12           Top management level         9         10         11           Senior management level         9         9         9           Middle management level         13         13         13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6	11,765 17,924 7,136 2,153 858 6.7 19.5	11,181 15,868 6,791 2,128 809 8.5 18.5
Personnel expenses (CHF million)       3,859       4,023       3,653         Asia Pacific       1,001       1,090       894         Latin America       519       549       548         Europe       1,283       1,275       1,122         North America       744       779       777         Africa Middle East       84       86       86         Corporate       227       244       227         % of female workforce       G4-LA12         Top management level       9       10       11         Senior management level       9       9       9         Middle management level       13       13       13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9	11,765 17,924 7,136 2,153 858 6.7 19.5	11,181 15,868 6,791 2,128 809 8.5 18.5
Asia Pacific       1,001       1,090       894         Latin America       519       549       548         Europe       1,283       1,275       1,122         North America       744       779       777         Africa Middle East       84       86       86         Corporate       227       244       227         % of female workforce       G4-LA12         Top management level       9       10       11         Senior management level       9       9       9         Middle management level       13       13       13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8
Latin America       519       549       548         Europe       1,283       1,275       1,122         North America       744       779       777         Africa Middle East       84       86       86         Corporate       227       244       227         % of female workforce       G4-LA12         Top management level       9       10       11         Senior management level       9       9       9         Middle management level       13       13       13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2
Europe         1,283         1,275         1,122           North America         744         779         777           Africa Middle East         84         86         86           Corporate         227         244         227           % of female workforce         G4-LA12           Top management level         9         10         11           Senior management level         9         9         9           Middle management level         13         13         13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9
North America         744         779         777           Africa Middle East         84         86         86           Corporate         227         244         227           % of female workforce         G4-LA12         Top management level         9         10         11           Senior management level         9         9         9           Middle management level         13         13         13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894
Africa Middle East         84         86         86           Corporate         227         244         227           % of female workforce         G4-LA12         9         10         11           Senior management level         9         9         9           Middle management level         13         13         13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001 519	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090 549	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894 548
Corporate         227         244         227           % of female workforce         G4-LA12         Top management level         9         10         11           Senior management level         9         9         9           Middle management level         13         13         13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001 519 1,283	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090 549 1,275	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894 548 1,122
% of female workforce         G4-LA12           Top management level         9         10         11           Senior management level         9         9         9           Middle management level         13         13         13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001 519 1,283	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090 549 1,275	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894 548 1,122
Top management level91011Senior management level999Middle management level131313	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001 519 1,283 744	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090 549 1,275 779	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894 548 1,122
Senior management level99Middle management level1313	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Corporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Europe North America Africa Middle East Corporate	G4-LA1	12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001 519 1,283 744	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090 549 1,275 779 86	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894 548 1,122 777 86
Middle management level 13 13 13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Corporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Europe North America Africa Middle East Corporate		12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001 519 1,283 744	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090 549 1,275 779 86	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894 548 1,122 777 86
Middle management level 13 13 13	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Orporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Europe North America  Europe North America Orporate Orporate % of female workforce		12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001 519 1,283 744 84 227	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090 549 1,275 779 86 244	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894 548 1,122 777 86 227
	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Forporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Europe North America Forporate % of female workforce Top management level		12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001 519 1,283 744 84 227	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090 549 1,275 779 86 244	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894 548 1,122 777 86 227
	Europe North America Africa Middle East Corporate Employee turnover (%) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Africa Middle East Corporate Personnel expenses (CHF million) Asia Pacific Latin America Europe North America Europe North America Furope North America Africa Middle East Corporate % of female workforce Top management level Senior management level Middle management level		12,867 19,602 7,543 2,140 873 6.7 10.6 13.9 14.0 3.6 12.2 3,859 1,001 519 1,283 744 84 227	11,765 17,924 7,136 2,153 858 6.7 19.5 13.1 10.8 3.0 15.3 4,023 1,090 549 1,275 779 86 244	11,181 15,868 6,791 2,128 809 8.5 18.5 16.1 13.8 5.2 22.9 3,653 894 548 1,122 777 86 227

Social performance (continued)	CSI GRI	2011	2012	2013
Employment practices (continued)				
Notice given for operational changes		5–6	5–6	5-6
Notice given for operational changes	G4-LA4	weeks	weeks	weeks
% Group companies conducting employee satisfaction surveys		47	57	49
% Group companies with employee grievance procedures		86	86	86
% where grievances can be submitted anonymously		65	69	73
Training				
Hours of training per employee	G4-LA9			
Senior management		35	37	41
Middle management		47	55	54
Other organizational levels		37	23	28
Average all levels		38	28	32
Occupational health and safety				
Number of fatalities – cement, aggregates and ready-mix concrete	G4-LA6			
Directly employed	<b>√</b>	2	5	7
Indirectly employed	<u>·</u>	24	22	23
Other <sup>4</sup>	✓	27	18	17
Lost-time injury frequency rate (LTIFR)				
Directly employed (Own and subcontractors onsite)	✓ G4-LA6	1.6	1.3	1.3
Indirectly employed (3rd party service providers on site)	✓	3	1.6	1.2
Total Injury Frequency Rate (TIFR)				
Directly employed (Own and subcontractors onsite)	G4-LA6	7.4	6.6	5.7
Indirectly employed (3rd party service providers on site)		5.9	5.2	5.0
% Group companies with serious disease programs		94	94	3.0 86
% Group companies with joint health and safety committees		98	96	100
% of workforce represented by committees		88	87	84
Not worklored represented by committees		- 00	01	04
Human rights				
% Group companies giving training on equal opportunity policies		43	47	37
% Group companies giving training on human rights policies	G4-HR2	31	37	37
Community involvement				
Community involvement Community spending total (CHF million)	CA FC1	20	4.5	27
% Donations and charity	G4-EC1	38	45	37
		21	17	19
% Education projects % Community development projects		14	14	21
% Infrastructure community projects		22	24	22
		20	24	10
% Low income housing		20	1.0	2
% CSR overhead % Other		20	16	21
% Other		3	5	5
Stakeholder engagement				
Stakeholder engagement at local level (% of Group companies)	G4-S01			
Needs assessment		59	69	78
Stakeholder involvement in CSR planning		80	80	82
CSR/SD memberships		80	80	71
Stakeholder dialogues		84	82	76
Community engagement plans in place		24	94	90
Community advisory panels		61	74	76
Cooperations		76	76	65

 $<sup>4\</sup> These\ reflect\ casual ties\ in\ areas\ outside\ of\ our\ direct\ control\ and\ influence,\ mainly\ traffic-related\ accidents\ on\ public\ roads.$ 

Performance



# Methods of data collection

We collect information from Group companies using the following tools: Plant Environmental Profile (PEP) questionnaire; equipment data and operating statistics based on annual plant technical reports; corporate  $CO_2$  inventory according to the WBCSD/WRI Cement  $CO_2$  Protocol; corporate Occupational Health and Safety questionnaire; corporate social responsibility questionnaire.

Our data collection systems enable monitoring of performance at three operational levels: individual plant performance, Group company and corporate consolidation of global performance.

# **System boundaries**

The scope of our reporting is outlined below.

**Economic performance** – Data included represent consolidated data from Holcim Group plants and companies covering all of the Group's operations, and are consistent with those reported in the Holcim Annual Report 2013.

**Environmental performance** –  $CO_2$  and energy: the scope of data collection for  $CO_2$  and resources use includes integrated cement plants, grinding and blending stations. Consolidation of data is consistent with the WBCSD/WRI Cement  $CO_2$  Protocol where operational control is used as a criterion. Where Holcim owns between 20% and 50% of the Group company and does not have management control, data are proportionally consolidated; below 20%, the data are not reported; all other companies are reported 100%.

### Other environmental data – The Plant

Environmental Profile (PEP) self-assessment questionnaire is the source of performance information and data related to all other environmental impacts of the cement, aggregates and ready-mix concrete business segments. All data from all principal consolidated Group companies are included in this report at 100%.  ${\rm CO_2}$  data from the noncement business segments is reported based on data from the PEP.

**Restatement of historical data** – Holcim now reports  $CO_2$  and resources use according to Version 3.1 of the WBCSD/WRI Cement  $CO_2$  Protocol. All historical data have been recalculated according to the updated Protocol, to enable comparison of data over time. Historical data are also restated to reflect changes in consolidation of companies and acquisitions/divestments.

Social performance – Personnel data represent consolidated data from Holcim Group plants and companies covering the entire Group's consolidated operations. OH&S data are collected for all operations via monthly reports and an annual survey, which is then revalidated by our regular business process system. Data are segregated according to on-site and off-site (logistics-related) incidents, and cover directly and indirectly employed, third-party service providers, visitors and others. This is consistent with the WBCSD CSI Guidelines for Reporting. All other social performance data are derived from the CSR questionnaire, which covers all Group companies, and are fully consolidated.

### **Reporting cycle**

Holcim has publicly reported SD performance since 2002. Until 2013 a full report was published each second year (the last in 2011), with data and performance information updated on our web site every year. From 2013 a full report will be published every year.

### **External assurance**

PwC has undertaken external assurance of our reporting, including a review of our materiality process and of the draft report. Full details of the scope of the assurance which included  $CO_2$ , OH&S and selected environmental data and the data collection process for social data can be found in the assurance statement on page 46. An independent expert panel also informed the materiality process and reviewed the report and their statement is on page 48.

# Independent Assurance Report

Our material issues



#### To the Executive Committee of Holcim Ltd. Rapperswil-Jona ('Holcim'):

We have been engaged to perform assurance procedures to provide limited assurance on the following aspects of the 2013 Corporate Sustainable Development Report of Holcim. ("CSDR").

#### Scope and subject matter

Our limited assurance engagement focused on the following data and information disclosed with the CSDR of Holcim and its consolidated subsidiaries, for the period January 1, 2012 to December 31, 2013:

- a) Nature and extent of Holcim's incorporation of the GRI G4 materiality principles (materiality, sustainability context, and stakeholder Inclusiveness) with respect to stakeholder dialogue;
- b) The application of the WBCSD Cement Sustainability Initiative (CSI) guidelines to the reporting and disclosure of CO<sub>2</sub> emissions, other emissions (NOx, SO<sub>2</sub>, dust) and OH&S data;
- c) The internal reporting system and procedures, including the control environment, to collect and aggregate CO2 emissions, other emissions (NOx, SO<sub>2</sub>, dust), water, biodiversity, transport, waste management, recycling, OH&S data and ethical and sustainability issues regarding Holcim's contracted workforce;
- d) The internal reporting system and procedures, including the control environment, to collect and aggregate social data and information from Holcim's CSR Questionnaire; and
- e) The cement-related CO<sub>2</sub> emissions data in the tables in the section Environmental Performance on page 39, the other emissions data (NOx, SO<sub>2</sub>, dust) on page 40, water, biodiversity, transport, waste management and recycling data in the tables in the section Environmental Performance on pages 41–43, the OH&S data (Fatalities, LTIFR & TIFR) in the tables in the section Social Performance on page 44 and ethical and sustainability issues regarding Holcim's contracted workforce disclosed in the 2013 CSDR.

## Criteria

The management reporting processes with respect to the CSDR were assessed against the internal and external policies and procedures as set forth in the following:

- Global Reporting Initiative G4 reporting guidelines, May 2013
- The following WBCSD Cement Sustainability Initiative
  - Cement CO<sub>2</sub> and Energy Protocol (version 3.1), December 2013
  - Safety in the Cement Industry: Guidelines for measuring and reporting (version 4.0), May 2013
  - Guidelines for Emissions Monitoring and Reporting in the Cement Industry (version 2.0), March 2012
- Holcim internal data reporting guidelines to the  ${\rm CO_2}$  emissions, other emissions (NOx,  $SO_2$ , dust), environmental, OH&S and social (CSR) data reporting;
- The defined procedures by which the CO<sub>2</sub> emissions, other emissions (NOx, SO<sub>2</sub>, dust), environmental, OH&S and social (CSR) data are gathered, collated and aggregated internally as part of the data management of Holcim; and
- The principles summarized in the section "Methodology and assurance" on page 45 of the CSDR which define the scope of the reporting.

The accuracy and completeness of sustainability indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. Our assurance report should therefore be read in connection with Holcim's internal guidelines, definitions and procedures on the reporting of its sustainable development performance.

#### **Responsibility and Methodology**

The Holcim Executive Committee is responsible for both the preparation and the presentation of the selected subject matter in accordance with the reporting criteria. Our responsibility is to  $% \left\{ \left( 1\right) \right\} =\left\{ \left( 1\right) \right\} =$ form an independent conclusion, based on our limited assurance procedures, on whether anything has come to our attention to indicate that the subject matter is not stated, in all material respects, in accordance with the reporting criteria.

We planned and performed our procedures in accordance with the International Standard on Assurance Engagements (ISAE 3000) 'Assurance engagements other than audits or reviews of historical financial information'. This standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance on the identified environmental data.

For the subject matter for which we provide limited assurance, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

During 2012 and 2013 we have not performed any tasks or services for Holcim that would conflict with our independence, nor have we been responsible for the preparation of any part of the CSDR; and therefore qualify as independent as defined by Code of Ethics and applicable legal and regulatory requirements.

#### Main Assurance Procedures

Our assurance procedures included the following work:

Evaluation of the application of external and internal reporting guidelines

Reviewing and assessing the application of the external WBCSD CSI measuring, monitoring and reporting guidelines and the Holcim internal data reporting guidelines (see section 'Criteria');

# Site visits and management inquiry

Visiting selected plants of Holcim in Russia, UK, India and Ecuador. The selection was based on quantitative and qualitative criteria and represents in average the following coverage:

- SO<sub>2</sub>: 11% of Group emissions
- NOx: 24% of Group emissions
- dust: 51% of Group emissions
- CO<sub>2</sub>: 18% of Group emissions (a further 28% of Group emissions have been externally assured in the scope of emissions trading schemes such as the EU ETS and Group company SD reports that have been externally assured)

Interviewing personnel responsible for internal reporting and data collection at the plants we visited and at the country Head Office level:

#### Assessment of the performance indicators

Performing tests on a sample basis of evidence supporting the CO<sub>2</sub> emissions, other emissions (NOx, SO<sub>2</sub>, dust), water, biodiversity, transport, waste management, recycling, OH &Sand ethical and sustainability issues regarding Holcim's contracted workforce related data, relative to completeness, accuracy, adequacy and consistency;

Our material issues

#### Assessment of the processes and data consolidation

Reviewing the appropriateness of the management and reporting processes for CO<sub>2</sub>, other emissions (NOx, SO<sub>2</sub>, dust), water, biodiversity, transport, waste management, recycling, OH&S, ethical and sustainability issues regarding Holcim's contracted workforce and CSR questionnaire reporting;

#### Interviews and management inquiry regarding GRI G4 materiality adherence

Inquiries and interviews with selected executive and senior managers, the SD steering committee and staff from the SD  $department\ representing\ different\ functions\ in\ the\ Group,$ regarding Holcim's adherence to the GRI G4 materiality principles (materiality, sustainability context, and stakeholder Inclusiveness), including Management's commitment to the principles, the existence of systems, procedures and processes to support adherence to the principles and the embedding of the principles at corporate level.

#### **Review the CSDR**

Reviewing the coverage of material issues within the  $\ensuremath{\mathsf{CSDR}}$ against the key issues defined in the stakeholder engagement processes, material issues and areas of performance covered in peers and good practice reports, as well as topics raised by plant and local head office levels of the Holcim organisation.

We have not carried out any work in respect of projections and targets nor such outside of the agreed scope and therefore restrict our conclusion to the 2013 CSDR of Holcim.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

#### **Limited assurance conclusions**

Based on our work described in this report nothing has come to our attention that causes us to believe that:

- a) the GRI G4 materiality principles (materiality, sustainability context, and stakeholder Inclusiveness) have not been appropriately incorporated with respect to the stakeholder dialogue;
- b) the external WBCSD CSI reporting guidelines for the reporting of CO<sub>2</sub> emissions, other emissions (NOx, SO<sub>2</sub>, dust) and OH&S data are not applied in all material respects, in accordance with the reporting criteria;
- the internal CO<sub>2</sub> emissions, other emissions (NOx, SO<sub>2</sub>, dust), water, biodiversity, transport, waste management, recycling, OH&S, ethical and sustainability issues regarding Holcim's contracted workforce and social (CSR) data reporting guidelines are not applied in all material respects, in accordance with the reporting criteria;
- d) the internal reporting system and procedures to collect and aggregate CO<sub>2</sub> emissions, other emissions (NOx, SO<sub>2</sub>, dust), water, biodiversity, transport, waste management, recycling, OH&S, ethical and sustainability issues regarding Holcim's contracted workforce and social (CSR) data are not functioning as designed and does not provide an appropriate basis for the presentation of CSDR data and information, in all material respects; and
- e) the CSDR data and information mentioned in the subject matter and disclosed in the 2013 CSDR is not stated, in all material respects, in accordance with the reporting criteria.

Zurich, June 2014 PricewaterhouseCoopers AG

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Stephan Hirschi

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#### Introduction

Since 2007, Holcim has invited an External Report Review Panel of independent experts to:

- challenge the company's approach to sustainable development,
- · review its most material issues, and
- assess the content and process of preparing its Corporate Sustainable Development Report.

For this year's review, Holcim appointed eight new panel members and retained one member from previous panels.

The names and details of the panelists can be found at <a href="https://www.holcim.com/sustainable">www.holcim.com/sustainable</a>

This statement provides an assessment of Holcim's Corporate Sustainable Development Report 2013. The review did not include verification of performance data underlying the report or the information on which the case studies in the report were based. The members of the External Report Review Panel express their views as individuals, not on behalf of their organizations.

The engagement started in October 2013, when panel members were asked to review the Group level materiality matrix to inform the content of the company's sustainable development reporting. In March 2014, the experts were interviewed individually to give feedback to the draft report and provide input for the joint statement. To finalize the panel statement an online consultation was organized in April 2014. To ensure independence, the external panel process was facilitated by Barbara Dubach, engageability, and monitored by the CSDR assurors, PricewaterhouseCoopers.

The External Report Review Panel (ERRP) is pleased to share with this statement its independent opinion on Holcim's Corporate Sustainable Development Report 2013 (CSDR).

# Feedback to Holcim's Corporate Sustainable Development Report 2013

### Approach and ambitions

The panel welcomes Holcim's approach to sustainable development and is of the opinion that sustainability is evolving well within the company.

To judge if Holcim is addressing the most important trends and challenges relevant for a building materials company, the panel has been invited to challenge the internal review of material issues. Overall, there was great alignment of the views of the external panel and internal stakeholders. The only substantial differences were in the area of supplier management and water where the majority of the panel members rated the issues as more material than internal stakeholders.

As recommended by previous panels, Holcim has defined a new sustainability strategy and aspirations for 2030 in three focus areas: resources, climate and communities. Six members of the ERRP were invited to participate in the stakeholder dialogues conducted in Switzerland and in India to assess the credibility of Holcim's sustainable development ambitions. The panel members welcome the new ambitions and recommend the formulation of quantifiable targets in all priority areas. Future reports should explain the process the company plans to follow to achieve and monitor its sustainability ambitions. It would for example be interesting to understand how many million tonnes of cement Holcim can save with its aspiration to valorize 1 billion tonnes of secondary materials.

#### Report structure and content

The CSDR 2013 provides a good coverage of the main issues facing Holcim, the structure has been thought through and it's an easy read with additional information available on the company's website.

To improve the report, the panel encourages Holcim to address the dilemmas and challenges the company is facing in the different areas and to provide more substance or evidence as well as benchmark information. The report should also clarify how Holcim respects international good practice standards, like ISO standards or the UN Guiding Principles on Business and Human Rights.

#### Opportunities for improvements

Holcim has a number of directives and programs in place such as the Anti-Bribery and Corruption Directive, Holcim's Whistle Blowing System and the Fair Competition Program to inform and educate employees. The panel would be interested in understanding how many employees have been trained and learning more about pending cases as well as the type of remediation actions or employment consequences warranted.

To achieve Holcim's vision and new ambitions and to seriously address climate change challenges, innovation is essential. The ERRP expects more information about Holcim's innovation strategy including its R&D approach as well as the relevance of sustainable construction solutions and sustainable products. The panel members are interested in understanding Holcim's ability to impact and influence sustainable construction for example by engaging in partnerships with customers.

The supply chain is critical for a large company like Holcim. Responsible supply chain management is more than sustainable procurement and should include how Holcim is managing its supply chain, how the company is helping small suppliers to improve, how many audits have been undertaken and how the company is monitoring the outcomes. In addition, a continued focus on raising occupational health and safety standards along the supply chain will be key to achieve improvements in this area.

Holcim has a long history of good stakeholder relations. The panel encourages Holcim to articulate its approach to stakeholder engagement more clearly. Such disclosure would include information about Holcim's significant stakeholders, how stakeholder inputs might influence Holcim's decision making process as well as how existing conflicts with stakeholders or communities are managed.

Future reports should could attempt to capture regional specificities even more with additional regional examples or data. The regional balance given could reflect the economic impact and revenues from the countries and regions where Holcim operates. Furthermore, region-specific information on competition, taxation and legal compliance would be appreciated.

#### Conclusion

The panel members are pleased to see that Holcim has taken on board and incorporated feedback from previous panels as well as comments raised during this review and look forward to further engagement with Holcim over the coming years as their approach continues to evolve.

# Holcim response

Holcim welcomes the constructive comments and recommendations from the independent External Report Review Panel (ERRP) and the findings of the report assuror. We are committed to addressing the challenges incorporated in their statements

We are heartened by the recognition of the progress we have made, but remain conscious of the challenges we still face. Motivated in part by previous stakeholder inputs and in consultation with a wide range of internal and external stakeholders we have developed the "Holcim Sustainable Development Ambition 2030," which is unveiled in this report. The Ambition reflects our aspiration to be part of the solution to the problems of our time and defines a number of stretching yet attainable goals to help us address the sustainability challenges that lie ahead. We are aware that the development of clear, unambiguous and transparent methodologies to measure and report our progress is critical to the credibility of our aspirations. We are also keenly aware that the involvement of all our employees and continued engagement with communities and a broad range of external stakeholders are key to achieving our ambitions.

Our response to the main themes contained in the statements is as follows:

#### Compliance

It is clear that there is an appetite, and indeed an expectation that our reporting on compliance matters should be strengthened. We recognize this and have been strengthening our compliance function. In 2014 a global whistleblowing system with an integrated case management capability will be implemented throughout the Group. In this report we have given some details of the number of cases reported to Group Compliance, and in future reports more robust and detailed figures will be disclosed.

#### Innovation

We recognize the importance of innovation to our business. Indeed, we simply cannot achieve the aspirations set out in our "Sustainable Development Ambition 2030" without ongoing and systemic innovation throughout the Group. This report details some of the innovative products and services already deployed and our web site gives details of Holcim's innovation strategy and innovation fields. Future reports will detail our progress with our range of sustainability enhanced products and services.

#### Supply chain

With the deployment of the "Sustainable Procurement Initiative" (SPI), Holcim has made some good initial steps in responsibly managing our inbound supply chain. Indeed, our approach is recognized as leading practice within the sector. However, we are aware that we need to go even further and we also recognize that we need to look "downstream" as well. We have articulated in the "Communities" stream of the "Holcim Sustainable Development Ambition 2030" that inclusive business will be a key focus, and programs such as masons training will be replicated and similar programs developed. Details of such programs will be featured in future reports.

#### Stakeholder relations

Holcim has a long and proud history of stakeholder engagement, and this is especially true at Group company level, where we are strongly aware that the goodwill of the communities which host us is fundamental to our freedom to operate. We remain committed to engaging with a broad spectrum of stakeholders on a wide range of issues. We will develop a more formal strategic framework for stakeholder engagement at corporate level, and will strengthen our reporting on this in future reports and on our web site. Furthermore, we will review our CSR policy to ensure it addresses evolving societal needs and trends.

#### Regional specificities

We note the Panel's recommendation to capture regional specificities in our reporting. In this report we have given regional data for Lost Time Injury Frequency Rate, Total Injury Frequency Rate, employee numbers, employee turnover and personnel expenses. We will consider expanding the provision of regional data where this makes sense, is meaningful and appropriate and where such deconsolidated data are available.

In conclusion, we thank the panel and our assurors for their goodwill and constructive recommendations to improve our SD performance. Their contribution is highly valued and appreciated.



# Global reporting initiative

This PDF report, with additional information on our web site, is prepared in accordance with the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines at comprehensive level. To locate the elements and information contained within the guidelines, including disclosures on management approach to economic, environmental and social aspects, use the GRI index at www.holcim.com/sustainable

Holcim, along with organizations from over 50 countries, is an Organizational Stakeholder of the GRI and we are a member of the GRI Stakeholder Council. To learn more about the Organizational Stakeholder role in the GRI, go to www.globalreporting.org/OS

For a detailed explanation of the GRI indicators, visit www.globalreporting.org

# **UN Global Compact (UNGC)**

With our integrated approach to sustainable development, Holcim aims at embracing the UNGC principles. We strive to implement the 10 principles of the Compact and to use it as a basis for advancing responsible corporate citizenship. At the same time, the Compact provides Holcim with the opportunity to further push our own ongoing programs and processes in the areas of human rights, labor standards, the environment and anti-corruption.

Holcim is involved in the expert group on "Responsible Business and Investment in conflict-affected and high-risk areas" as well as in the "supra-environmental" stewardship strategy group.

Our annual communication on progress (COP) to the UNGC outlines Holcim's continued commitment to the Compact's philosophy, intent and principles. This latest document highlights key actions implemented in 2013 against the Compact's 10 principles as well as confirming our sustainability priorities and performance targets.

Review the COP at www.holcim.com/sustainable



Holcim is one of the world's leading building materials companies and has a presence on all continents. With its innovative products and services and a commitment to sustainable construction, Holcim is contributing to the success of its customers around the world – as a trusted partner for more than 100 years. In 2013, the Group's global workforce of around 70,000 employees continued to work hard in order to further strengthen Holcim's position as a market leader in cement, aggregates and ready-mix concrete.

