

addressing the  
**urbanization**  
challenge



2013 sustainable development report





This is our Communication on Progress in implementing the principles of the United Nations Global Compact and supporting broader UN goals.

We welcome feedback on its contents.

# table of contents



# 47

Strong Commitment to our Stakeholders



- 3 Company Snapshot**
- 6 Message to our Stakeholders**
- 8 Progress Towards our Targets**
- 9 Building a Sustainable Urban Environment**
  - 10 Creating Greener Products and Services
  - 16 Constructing Resilient and Low Impact Infrastructure
  - 21 Delivering Affordable and Energy-Efficient Housing
  - 24 Promoting Self-Construction through Social and Inclusive Businesses
- 28 Addressing the Global Climate Challenge**
  - 29 From Waste to Value
  - 33 Optimizing our Carbon Footprint
  - 38 Preserving Land, Biodiversity and Water
  - 43 Continuous Improvement of Air Emissions and Environmental Management
- 47 Strong Commitment to our Stakeholders**
  - 48 Placing Health and Safety First
  - 54 Engaging and Retaining our Talent
  - 59 Satisfied Customers and Responsible Suppliers
  - 63 Delivering a High-Impact Social Approach to Empowering Communities
  - 68 Global and Local Alliances
- 70 Embedding Sustainability in our Governance and Corporate Culture**
  - 71 CEMEX's Sustainability Model
  - 73 Strengthening Business Ethics, Compliance and Transparency
- 83 Our Performance in Detail**
- 92 Sustainability Credentials and Awards**
- 94 Advisory Panel Members and Statement**
- 97 PwC's Limited Assurance Report**
- 98 A+ Statement GRI Application Level Check**
- 99 About This Report**

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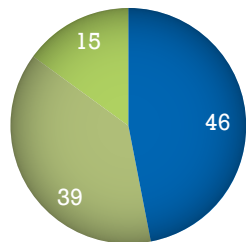
 [www.facebook.com/cemex](http://www.facebook.com/cemex)

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# company SNAPSHOT

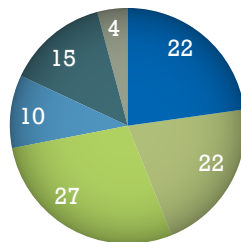
Founded in Mexico in 1906, CEMEX, S.A.B. de C.V. is a global building materials company that provides high quality products and reliable services to customers and communities throughout the Americas, Europe, Africa, the Middle East and Asia. We produce, distribute and sell cement, ready-mix concrete, aggregates and related building materials in more than 50 countries, and we maintain trade relationships in approximately 108 nations.

Sales by product (%)



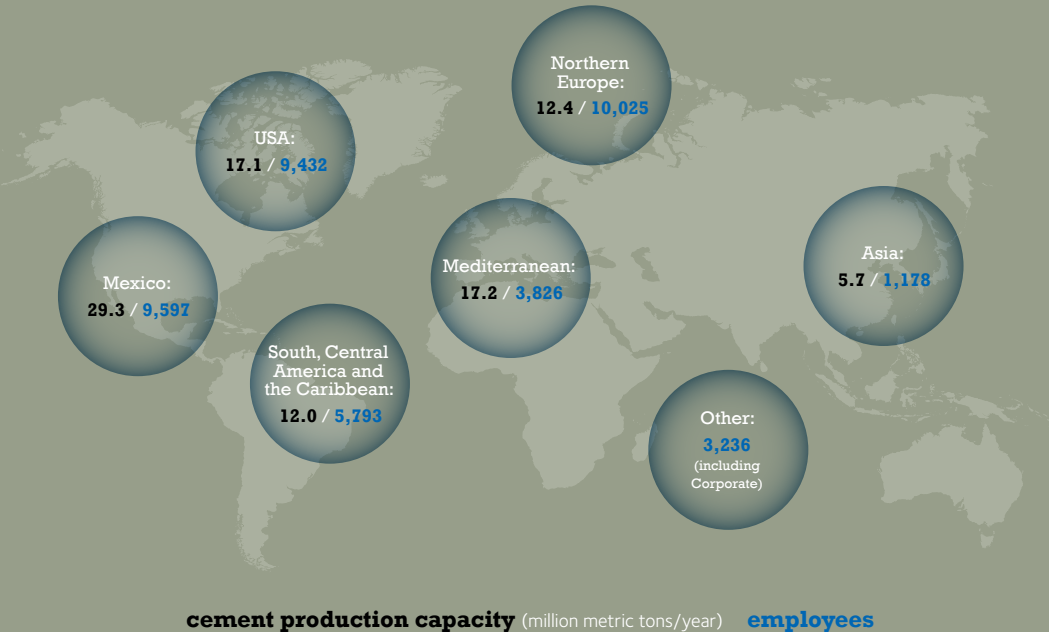
- Cement
- Ready-mix concrete
- Aggregates

Sales by region (%)



- Mexico
- USA
- Northern Europe
- Mediterranean
- South, Central America & the Caribbean
- Asia

## 2013 global operations



## CEMEX by the numbers

as of December 31, 2013

CEMEX, S.A.B. de C.V. (NYSE: CX/BMV: CEMEX), a holding company, is a public stock corporation with variable capital (S.A.B. de C.V.) organized under the laws of Mexico.

<b>50+</b> countries where CEMEX has presence and approximately 108 where it has trade relations.	<b>43,087</b> employees worldwide.	<b>93.7</b> million tons of cement, annual production capacity.	<b>54.9</b> million cubic meters of ready-mix concrete produced.	<b>162</b> million tons of aggregates produced.
<b>55</b> cement plants plus 12 with minority participation.	<b>1,784</b> ready-mix concrete facilities.	<b>362</b> aggregate quarries.	<b>222</b> land-distribution centers.	<b>63</b> marine terminals.

## Financial Highlights

in millions of US dollars<sup>1</sup>, except per-ADS data

	2013	2012	%
Net sales	15,227	14,984	2
Operating Earnings before Other Expenses, net	1,518	1,293	17
Operating EBITDA	2,643	2,624	1
Controlling interest net income (loss)	(843)	(913)	8
Earning (loss) per ADS <sup>2</sup>	(0.71)	(0.77)	8
Free cash flow after maintenance capital expenditures	(89)	167	n/a
Total assets	38,018	37,260	2
Total debt plus perpetual notes	17,470	16,644	5
Total controlling stockholders' equity	10,221	10,984	(7)

## Direct Economic Impacts

in millions of US dollars

	IFRS		Mex Gaap
	2013	2012*	2011
Customers: Net sales <sup>1</sup>	15,227	14,984	15,139
Suppliers: Cost of sales and operating expenses <sup>2</sup>	10,205	10,082	10,283
Employees and their families: Wages and benefits <sup>3</sup>	2,378	2,278	2,524
Investments: CAPEX <sup>4</sup> plus working capital	813	837	485
Creditors: Net financial expense	1,423	1,401	1,278
Government: Taxes	511	393	287
Communities: Donations <sup>5</sup>	(0.56%)	(0.54%)	(0.85%)
Communities donations as % of pre-tax income			
Shareholders: Dividends <sup>6</sup>	0	0	0
Others	102	2	34
Free cash flow	(206)	(10)	237
Net income (loss) before taxes	(265)	(403)	(1,271)

- 1 For the reader's convenience figures are presented in US dollars. For statements of operations accounts, these figures result from translating the local currency amounts into US dollars at the average exchange rate for the year, which approximates a convenience translation of the Mexican peso results for 2013 and 2012 using the average exchange rates of the year of 12.85 MXN/US\$ and 13.15 MXN/US\$, respectively. For balance sheet accounts, US dollar figures result from translating the local currency amounts into US dollars at the closing exchange rate for the year, which approximates a convenience translation of the Mexican peso amounts at the end of each year using the end-of-year exchange rate of 13.05 MXN/US\$ and 12.85 MXN/US\$, respectively.
- 2 Based on an average of 1,170 and 1,161 million American Depositary Shares (ADSs) for 2013 and 2012, respectively.

- 1 Excludes sale of assets.
- 2 Excludes depreciation and amortization.
- 3 Wages and benefits include non-operational and operational employees.
- 4 Capital expenditure for maintenance and expansion.
- 5 Donations as percentage of loss before taxes.
- 6 Dividends paid in cash.
- \* 2012 figures have been modified due to changes in accounting principles.

# product PORTFOLIO

## Cement:

Cement is the main ingredient in ready-mix concrete. CEMEX offers a portfolio of high-quality branded cement products, including Gray Ordinary Portland Cement, White Portland Cement, Masonry or Mortar, Oil-well Cement, and Blended Cement.



## Aggregates:

Materials such as stone, sand and gravel are the primary ingredients in ready-mix concrete. Additional aggregates include asphalt and mortar.



## Ready-mix concrete:

Made from a mixture of cement, aggregates, water and admixtures, ready-mix concrete is an extremely durable building material that can be cast into many different shapes.



## Other related products:

Includes granulated blast furnace slag, gypsum, fly ash, asphalt, concrete blocks, roof tiles, architectural products, concrete pipes and other precast products such as concrete floors, box culverts, bridges, drainage basins, barriers and parking curbs.



For more information about our company, brands and financial performance, please visit our corporate website at [www.cemex.com](http://www.cemex.com)

## Services and Solutions

We are increasingly positioning our company as a provider of value-added services to assist our customers in identifying and addressing trends that affect their industry and in maximizing the sustainability attributes of our products. Among these services are bioclimatic architecture and engineering, modeling of energy performance of buildings, building certification (e.g., LEED, BREEAM, Passive House), development of customized sustainable building solutions and affordable housing solutions.

Our trading network is one of the largest and most widely recognized in the industry. We maintain relationships with more than 100 nations. Additionally, we strive to provide customers with top-level technical assistance and creative solutions in a wide range of areas, including financing, communication, branding and intelligence.



# addressing the urbanization CHALLENGE



## To our Stakeholders:

This year's report responds to one of the most significant and relevant sustainability trends facing the world today – the increasing challenge of urbanization. As the global population expands, the promise of jobs and prosperity increasingly draws people to an urban environment.

Today, half of the global population lives in cities, and the United Nations estimates about 180,000 people are being added to that urban population every day. This means the world's urban infrastructure has to absorb the equivalent of the population of Tokyo every six months. At this rate, it is estimated that by mid-century more than two-thirds of the world's people will be city dwellers.

This rapid urbanization challenges governments and businesses to build hard infrastructure such as buildings, roads, bridges, water systems and power grids, as well as soft infrastructure including governance, policing, schools, businesses and health care. It also challenges the environment as urbanization is projected to be a major driver

of global energy consumption and greenhouse gas (GHG) emissions over the next two decades. It is estimated that, at present, buildings contribute as much as one-third of total global GHG emissions, primarily through the use of fossil fuels during their operational phase.

As a global building materials company, we are uniquely positioned to help address the myriad of environmental and social challenges associated with urbanization.

During 2013, we were responsible for building almost 7.5 million square meters of concrete infrastructure in 15 countries in the form of highways, mass transit projects, airport runways and city streets. We partnered with national and international experts to provide a complete array of sustainable construction services. Working collaboratively, we helped to integrate the construction value chain in order to enhance the solutions we provide and to assure that they reach our end-customers.

Last year we continued expanding our housing solutions. We established ourselves as leaders in high-quality and affordable housing, delivering industrialized, disaster relief, energy efficient and vertical housing in

## FOR OUR STAKEHOLDERS

19 countries. Since 1998, our inclusive businesses – Patrimonio Hoy, ConstruApoyo and Productive Centers of Self-Employment – have benefited more than 2.3 million individuals living in at-risk communities.

Global climate change is one of the most pressing challenges of our time. For urban areas with concentrated populations and corresponding infrastructure, climate change in the form of extreme weather, natural disasters and resource shortages poses a significant threat. We are committed to reduce our direct and indirect GHG emissions, to strive to provide products and solutions that enable a low-carbon economy, and to improve our built environment's resilience to climate change.

In 2013, we avoided more than 7 million tons of CO<sub>2</sub> due to a 23.4 percent reduction in specific net CO<sub>2</sub> emissions from our 1990 baseline. During the year, alternative fuels represented 28.4 percent of our fuel mix including biomass, tires, RDF and other materials. Of the 45 plants burning alternative fuels, 10 have surpassed a 50 percent alternative fuel rate and four achieved a rate above 70 percent.

We also registered six new initiatives as Clean Development Mechanisms and one new Verified Carbon Standard project in the United States. At the end of last year, our portfolio included 21 registered initiatives with the combined potential to offset our CO<sub>2</sub> emissions by more than 2.8 million tons annually.

As a company, we aim to embed a complete sustainability approach in all our activities. In 2013, CEMEX amended our Code of Ethics and Business Conduct to incorporate specific guidance regarding money laundering. We have also engaged Shift, an independent, non-profit center that specializes in business and human rights, to help us implement the UN Guiding Principles on Business and Human Rights. In addition, we designed a comprehensive Human Rights Policy that will expand on our existing programs and reporting mechanisms to provide a more robust approach. This policy will be implemented in 2014.

CEMEX management firmly believes that health and safety are our top priorities. Our employee Lost-Time Injury (LTI) Frequency Rate decreased by 15 percent in 2013 compared to 2012. Regrettably, there were 21 fatalities this year involving three employees, eleven contractors and seven third-parties. The loss of any individual associated with our operations is extremely saddening and completely unacceptable. We will not be satisfied until fatalities are completely eliminated.

As part of our own commitment to sustainable development, we constantly evaluate that of our supply chain partners. In this spirit, last year we engaged a sustainable supply management firm to monitor the environmental, social and governance performance of CEMEX suppliers.

At CEMEX, we understand the importance of aligning global challenges and stakeholders' concerns with our



company's business model and sustainability strategy. To ensure all key issue areas are addressed, we are currently updating our sustainability model, priorities and core KPIs and establishing new 2020 targets.

I want to acknowledge the legacy of Lorenzo H. Zambrano our former CEO and Chairman of the Board of Directors. His strategic vision, passion and relentless commitment guided CEMEX to become an industry leader in sustainability and a key player addressing the challenges of urbanization. As CEMEX's newly elected CEO, I am committed to honor this legacy and continue building the path towards a more sustainable company and a better future.



Finally, on behalf of CEMEX's Board, our management team and our employees, I want to thank the members of our Sustainable Development Panel for their valuable input, the organizations and communities we work with on a daily basis and also all of you who take an interest in the sustainable development of our company and the solutions we provide.

Sincerely,

A handwritten signature in blue ink, which appears to read "Fernando A. Gonzalez".

**Fernando A. Gonzalez**  
Chief Executive Officer

# PROGRESS

## towards our targets

	2011	2012	2013	Target 2015	Progress	Assurance <sup>[2]</sup>
<b>Lead in Sustainable Construction</b>						
Production covered with CEMEX CO <sub>2</sub> Footprint Tool (%)	87	100	100	100	✓	
Cement	100	100	100	100	✓	
Aggregates	83	100	100	100	✓	
Ready-mix	83	100	100	100	✓	
<b>Enhance our Carbon Strategy</b>						
Specific net CO <sub>2</sub> emissions (kg CO <sub>2</sub> /metric ton of cementitious product)	612	612	607	594	▲	●
Reduction in CO <sub>2</sub> emissions per ton of cementitious product from 1990 baseline (%)	22.7	22.7	23.4	25	▲	
Alternative fuel rate (%)	24.7	27.1	28.4	35	▲	●
<b>Excellence in Environmental and Biodiversity Management</b>						
Clinker produced with continuous monitoring of major emissions: Dust, NO <sub>x</sub> and SO <sub>x</sub> (%)	80	80	81	100	▲	●
Specific dust emissions (g/ton clinker) <sup>[1]</sup>	101	78	127	120	▲	●
Specific NO <sub>x</sub> emissions (g/ton clinker) <sup>[1]</sup>	1,094	1,025	1,261	1,600	✓	●
Specific SO <sub>x</sub> emissions (g/ton clinker) <sup>[1]</sup>	335	257	215	520	✓	●
Active sites with quarry rehabilitation plan (%)	89	91	92	100	▲	
Active sites with high biodiversity value where biodiversity action plans are actively implemented (%)	38	41	51	100	◆	
Operations with an Environmental Management System Implemented (%)	86	89	92	100	▲	
<b>High Priority to Health and Safety</b>						
Lost-time injury (LTI) frequency rate, employees (per million hours worked)	2.3	2.0	1.7	0.5	◆	●
Compliance with CSI Driving Safety Recommended Practices (%)	79	85	84	100	▲	
Compliance with CSI Contractor Safety Recommended Practices (%)	82	90	88	100	▲	
Operations with a Health and Safety Management System Implemented (%)	99	100	100	100	✓	

✓ Fully achieved target ▲ On track to achieve target ◆ Extra effort required to achieve target

<sup>[1]</sup> New targets under revision and to be published by the end of 2014.

<sup>[2]</sup> KPIs externally verified by PwC.



building a  
sustainable  
urban

# ENVIRONMENT

Urbanization is creating several challenges that are interconnected and directly related to the well-being of our society and the planet. These challenges are physical, societal and environmental in nature and demand urban infrastructure and buildings that are adaptable, resilient and sustainable.

According to the United Nations Population Fund (UNFPA), the current population of 7.2 billion is projected to increase by 1 billion over the next 12 years and reach 9.6 billion by 2050. Additionally, the urbanization rate is expected to grow from the current 50 percent to approximately 70

percent in 2050. Yet even today, many cities lack sufficient clean water, electricity, reliable public transportation and other basic resources needed to support their expanding populations and strengthen their economies.

Society must embrace innovations that create value by improving resource efficiency. At CEMEX we are leading the way, delivering solutions to the increasingly complex and inter-connected construction demands of society. Solutions that promote economic growth, preserve the environment and improve the quality of urban life.



creating  
**greener**  
products and services

**ecoperating** launched the ecoperating<sup>®</sup> Building certification to distinguish buildings that demonstrate superior sustainability performance.

**27%** of our ready-mix revenues represent products with outstanding sustainability attributes.



CEMEX offers cutting-edge products, services and solutions that meet the most demanding construction standards, provide sustainable performance and are cost competitive. Our global portfolio has been conceived to positively impact safety at the workplace, promote efficient construction practices, preserve natural resources, minimize our carbon footprint and improve the quality of life of our communities.

The CEMEX Research Group AG (CRG) in Switzerland leads, manages and coordinates research and development globally, and aims to offer innovative building solutions through industrialization of their technologies. In 2013, the total combined expense of the technology and energy departments in CEMEX, which includes all significant R&D activities, amounted to approximately USD \$38 million.

As part of our ongoing efforts to integrate our green products and services, CEMEX is now reporting on the percentage of our revenues that represent products with outstanding sustainability attributes for the first time.



The CEMEX Research Group AG (CRG) in Switzerland.

Based on clear, measurable criteria including energy, water and resource efficiency, as well as resilience and health and safety standards throughout the full value chain, 27 percent of our ready-mix revenues are derived from products with outstanding sustainability attributes in 2013. Sustainability is a key area of focus for CEMEX, and we understand that quantifying our efforts is critical to understanding, managing and improving our environmental footprint.

## Highlights

- Developed two new concrete additives and one ready-to-use mortar solution to enhance resource efficiency.
- Added four projects to our CEMEX Green Building Consultancy Services portfolio.
- Implemented our Sustainable Cities Initiative in Merida, Mexico, in collaboration with CESPEDS, the Mexican chapter of the World Business Council for Sustainable Development.

### Maximizing the Sustainability Attributes of Concrete Through Admixtures

Chemical admixtures are ingredients added to concrete during the production process in order to modify its properties by increasing quality, improving durability, delivering cost-benefits and enhancing its sustainability as well as environmental profile.

They contribute to sustainability by reducing the content of clinker (the most energy and greenhouse gas intensive ingredient in cement and concrete), lowering energy and water consumption during production and improving the insulation properties of concrete products. Admixtures, for example, can be introduced during aggregate production to improve quality and, as a consequence, reduce water consumption during the washing process.

### Delivering Improvements from Excavation to Construction

Fine clay particles can lead to increased water demand of concrete and in turn reduce its strength. Furthermore, the



For a full list of our products and their sustainability attributes, please visit our [website](#).

clay particles may also consume the admixtures, and this can lead to rapid loss in workability. Typically, removing fine clay particles during gravel and sand production can be a costly process that generates waste.

In 2013, CEMEX developed a chemical admixture that can be either introduced directly in the aggregates or through ready-mix. It neutralizes fine clay particles that are detrimental to the performance of concrete, allowing for the recovery of excavated material as concrete aggregate. The innovative admixture improves the quality of sand used in concrete, reducing stock waste and enhancing water management by reducing the need to wash the sand.

#### Improving Energy, Water and Carbon Footprints

Another admixture breakthrough occurred when two business lines –Cement and the Admixtures Group– formulated a grinding aid. The admixture allows for decreased clinker content in cement without affecting performance. It can also improve production efficiency of cement (finish) mills, which are the highest consumer of energy in a cement plant.

#### Ready-to-use Mortar Solution Reduces Energy Use

In 2013, we developed a ready-to-use mortar solution to coat expanded polystyrene (EPS) thermal insulation.

Compared to traditional EPS construction, our new solution reduces the embedded environmental impact by making a highly energy-efficient building approach more affordable and convenient, reducing the energy necessary to transport materials to the site and build the structure as well as the energy needed to maintain a comfortable indoor temperature.

#### Delivering Value-Added Green Building Services

CEMEX partners with national and international experts to provide a complete array of services specialized in sustainable construction including Bioclimatic Architecture, Integrated Engineering, Building Energy Modeling and Building Certifications (LEED, BREEAM, etc.). Working collaboratively, we integrate all members of the construction value chain to optimize results for more sustainable construction projects.

#### Green Building Services Projects Portfolio

Project	Location	Start Year	Building Type	Buildable Area	Certification Services
Sofia Residential Tower	Monterrey, Mexico	2012	Mixed use	98,600 m <sup>2</sup>	LEED Silver Certification
Esfera Citelis Shopping Center	Monterrey, Mexico	2012	Commercial	276,925 m <sup>2</sup>	LEED Platinum Certification
San Bernabe Community Center	Monterrey, Mexico	2012	Education & Recreation	29,150 m <sup>2</sup>	LEED Certification
Torre Cosmopolitan	Tijuana, Mexico	2013	Offices	13,950 m <sup>2</sup>	LEED Platinum Certification
ICA, Reserva Escondida	Mexico City, Mexico	2013	Residential	22,584 m <sup>2</sup>	LEED Certification
ICA Minería	Mexico City, Mexico	2013	Offices	17,000 m <sup>2</sup>	LEED Certification
ICA Viaducto	Mexico City, Mexico	2013	Offices	42,050 m <sup>2</sup>	LEED Certification



After a successful introduction in Mexico, CEMEX is beginning to offer our Green Building Services in other countries, mainly in Central and Eastern Europe and Latin America.






### ecoperating® Seal Expands

In 2012, CEMEX launched ecoperating®, a global sustainability identifier for products, services and solutions. The ecoperating® seal enables builders to easily identify CEMEX solutions that reduce the environmental impact of projects, optimizing the use of natural resources and reducing emissions and waste generation. ecoperating® was launched in Croatia, Egypt, the Philippines and the UAE in 2012 and in 2013 we extended it to Panama, Costa Rica and the Dominican Republic.

### New ecoperating® Buildings Certification

In order to promote more sustainable design and execution of building projects we created the ecoperating® Buildings Certification. This accredits buildings during their design, construction and/or operating phase that have notable sustainable features and performance above the market standard. Through this certification, CEMEX recognizes projects that save energy and water and reduce the environmental impact of a building's construction and operation.

This certification is not a substitute for other international building certifications, such as LEED or BREEAM, but a complimentary tool to promote the extensive use of sustainable practices in the construction industry.

<b>Energy efficiency</b> Mandatory Requirement (10% energy savings above ASHRAE)	<b>Sustainable design</b> Elective requirements (Achieve at least 3 of 8 possible points)	
 <b>Energy consumption savings</b> ≥10% Energy consumption reduction against standards ASHRAE 90.1-2007  Using an energy simulation mode, the project must demonstrate at minimum a 10% energy efficiency against a baseline as defined by US standard ASHRAE 90.1-2007.	 <b>Water consumption savings</b> Percentage of low water consumption and/or waterless sanitary fixtures.   ≥ 50% = 1 point   ≥ 75% = 2 points   <b>Local sourcing</b> Percentage of materials extracted and manufactured within 500 km radius of the project.   ≥ 10% = 1 point   ≥ 20% = 2 points	 <b>Heat island effect reduction</b> Percentage of exterior horizontal surfaces with a Solar Reflectance Index [SRI] ≥ 30   ≥ 50% = 1 point   ≥ 75% = 2 points   <b>Innovative sustainable solution</b> Inclusion of an innovative solution [IS] that generates improvements/additional savings.   1 IS = 1 point   2 IS = 2 points

### Characteristics of the Certification

<b>Simple</b>	Few requirements, easy to calculate and implement at any phase of the construction process
<b>Agile</b>	Simple and direct process
<b>Flexible</b>	Balanced mix of mandatory and elective requirements
<b>Affordable</b>	Less expensive than international certifications such as LEED
<b>Rigorous</b>	Based on recognized international standards and regulations

Residential development  
 "LUCENA" in San Pedro Garza  
 Garcia, N.L., Mexico.



**Project Score**

Energy Consumption Reduction



Low Water-Consumption Fixtures



Exterior Surfaces w/ High Solar  
 Reflectance Index



Enhanced Acoustical  
 Performance



To obtain the eoperating® Buildings Certification, a project must meet all requirements in the energy efficiency category and achieve at least three of the eight requirements in the sustainable design category.

**eoperating® Plus**

To distinguish projects with remarkable energy-efficiency performance and sustainable attributes, CEMEX offers eoperating® PLUS.

eoperating® PLUS is awarded to projects that meet a higher threshold in both categories, proving that they are cutting-edge buildings with exceptional sustainability features.

The residential development "LUCENA" in San Pedro Garza Garcia, Mexico, of Promotora Elizondo, was the first project to achieve the eoperating® Plus certification.

The building successfully complied with CEMEX certification's requirements by demonstrating improvements on key features such as high energy-efficiency performance, water-use reduction through the incorporation of low water-consumption fixtures and urban heat island effect reduction through the

use of horizontal external surfaces with high solar reflectance index. Additionally, the building shell, partitions and fenestrations have been designed with a significantly higher STC rating (Sound Transmission Class) than required by national standards (45 percent improvement on average) which provides a higher level of sound attenuation.

**Sustainable Cities Initiative**

Building on previous experience from the Urban Infrastructure Initiative (UII) with the World Business Council for Sustainable Development (WBCSD), CEMEX has created and launched the Sustainable Cities Initiative in Mexico.

In collaboration with CESPEDES, the local partner of the WBCSD, and seven leading national companies, CEMEX has developed a local model to help unlock opportunities for urban authorities to create more sustainable, livable cities. In 2013, the first study was carried out in Merida, Yucatan, Mexico. The engagement provided a platform to help the city identify key issues they face in realizing their sustainability visions and develop plans which will translate this vision into reality.



For projects achieving  
 > 10% energy  
 consumption reduction  
 under the energy  
 efficiency category  
 and > 3 points  
 under the sustainable  
 design category.



For projects achieving  
 > 20% energy  
 consumption reduction  
 under the energy  
 efficiency category  
 and > 5 points  
 under the sustainable  
 design category.

The initiative mobilized a multi-sector team of company experts to work on-site with senior city officials to develop a portfolio of practical system-wide solutions. The range of topics covered included urban infrastructure, building and housing, renewable energy and waste and water management, demonstrating the benefits of this multi-sector engagement.

In 2014, further studies will take shape in cities in Mexico, such as Queretaro, Torreon and Puebla. The program will also extend to cities in Central America and Southeast Asia.

### **CEMEX Building Award**

Each year, CEMEX recognizes building projects that make positive impacts through superior innovation. In 2013, the Tampico Cultural Institute School Building in Tampico, Tamaulipas, Mexico, was the winner of the Sustainable Construction Category. The 8,758 m<sup>2</sup> building incorporates the use of recycled waste and other environmentally friendly materials. The building's environmental impact is significantly reduced through bioclimatic design and the use of advanced clean technologies. Approaches such as optimal classroom orientation, cross-ventilation,

Dorado Beach, a Ritz  
Carlton Reserve at Dorado,  
Puerto Rico.



## **Challenges Ahead**

- Continue to foster the development of innovative products and services that contribute to buildings with higher energy efficiency and lower use of water and other resources.
- Raise awareness in the marketplace about the long-term benefits of green building planning and execution of projects.
- Engage with key organizations in other Latin American locations to adapt and replicate the Sustainable Cities model and continue to expand the initiative in other cities around the world.

abundant natural lighting, rain water collection and other measures enhanced the energy and water efficiency of the building while improving the quality of life for students and faculty.

Dorado Beach, a Ritz Carlton Reserve in El Dorado, Puerto Rico, is another example of a Sustainable Building Award recipient. Encompassing 375,000 m<sup>2</sup>, the project features the insertion of a series of planes and pavilions that use regional woods, taking advantage of the tropical surroundings and high ceilings for improved ventilation and natural light.

The project also includes concepts such as solar water heating, a variable refrigerant-flow air conditioning system, LED lighting to reduce energy consumption and natural ventilation systems that provide a continuous flow of dehumidified fresh air and improved indoor air quality.

CEMEX's Position Papers on [Green Building Schemes](#) and [Sustainable Construction](#).

constructing  
resilient and low impact

# infrastructure

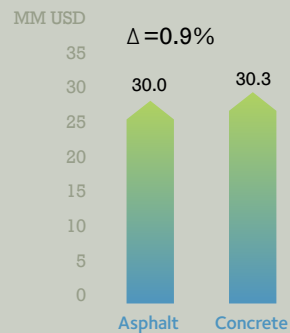
**368** infrastructure projects completed, representing almost 7.5 million m<sup>2</sup> of concrete pavement for highways, mass transit projects, airport runways and city streets in 15 countries.



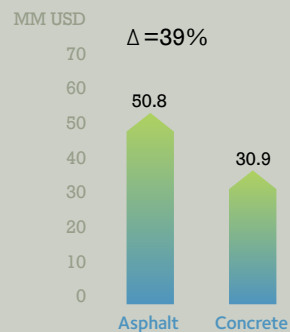
## Highlights

- Used pulverized asphalt as recycled aggregate to pave more than one million m<sup>2</sup> of roads with concrete.
- Secured additional contracts in two Mexican cities, expanding our portfolio of Bus Rapid Transit (BRT) systems to eleven projects.

Cost comparison for 10-mile (16 km) 4-Lane Highway Project in Florida, USA.



Initial construction cost

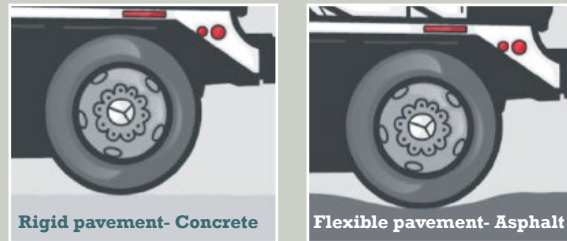


Total life-cycle cost

### Concrete vs. Asphalt

Fuel consumption

On the rigid surface of a concrete pavement the wheels do not sink in as much as they do on flexible, i.e., asphalt pavements. This effect, called deflection, is invisible to the naked eye, but has a noticeable impact on fuel efficiency.



Note: Deflection not to scale

Pavements that are stiffer and more durable, like those made of concrete, can reduce fuel consumption by as much as three percent in the U.S.

Cities are warmer than their surroundings, which in summer leads to discomfort, medical conditions and higher air conditioning use. Light-colored surfaces such as concrete reduce this so-called Urban Heat Island Effect.

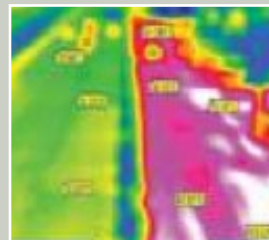
### Pictures of pavements:

Normal



Average Temperature Concrete: 33°C (92°F)

Thermographic



Average Temperature Asphalt: 49°C (121°F)

As urban populations grow and climate change causes more severe weather events, it's critical that cities have the materials and know-how to build resilient infrastructure that serves citizens well, while withstanding the wear and tear of increased use and harsh environmental conditions.

According to the global professional services firm PwC, in the next 20 to 30 years more money will be spent on urbanization worldwide than has been spent in our entire history to date. Ensuring that money is invested in infrastructure that provides lasting protection of the economic wellbeing and health of urban citizens will be critical.

Concrete is an essential component to the development of resilient infrastructure. CEMEX is a leader in building large infrastructure projects and solutions such as highways, airports, roads and bus lanes, among others. We address the challenge of creating a sustainable urban environment by striving to understand the environmental and social benefits and impacts of concrete and its varied applications.

In 2013, we continued to support life cycle and cost analyses by the Massachusetts Institute of Technology (MIT) Concrete Sustainability Hub (CSH) that help us better

understand the environmental footprint of our concrete products and how they can help improve the affordability and sustainability of infrastructure projects. Some of their latest research includes improved models to understand and quantify the advantages of rigid concrete pavements over asphalt in terms of fuel consumption, but also work to develop tools that allow for the quantification of concrete's hazard resistance in the evaluation of competing designs.

We also worked to raise awareness amongst city planners and managers on the environmental and long-term economic value of concrete compared to other construction materials.



Infrastructure in 15 countries		
Country	Area m <sup>2</sup>	# Projects 2013
Mexico	6,365,878	257
Guatemala	21,700	4
Nicaragua	183,700	9
Costa Rica	51,100	8
Panama	65,300	9
Colombia	93,000	12
Dominican Republic	146,000	22
Haiti	4,300	1
Puerto Rico	35,000	12
Croatia	18,890	8
Egypt	125,506	5
Spain	223,394	5
UK	55,000	9
Poland	14,647	4
USA	15,430	3
<b>Total 2013</b>	<b>7,418,845</b>	<b>368</b>

In 2013, CEMEX was responsible for almost 7.5 million square meters of concrete pavement in 15 countries.

Our calculations indicate that for more than 30 years – a relatively low estimate for the lifetime of these pavements – they can be expected to reduce GHG emissions from traffic by more than 500,000 CO<sub>2</sub> tons equivalent compared to traditional asphalt pavements.

Two recently published brochures for our clients and other stakeholders describe our concrete pavement solutions: “The Leading Concrete Pavement Provider in the World” and “Concrete Pavements – The Smart Infrastructure Choice” are both available on our [website](#).

### Promoting Resource Efficiency through Pavement Recycling

Full-depth reclamation is a measure to improve recyclability and reusability of our construction materials. It rebuilds worn out asphalt pavements by pulverizing the old asphalt and base materials and mixing them with cement and water to produce a strong, durable base for a new concrete surface. In 2013, this type of concrete pavement became an important solution for CEMEX with more than 145,000 m<sup>2</sup> installed in Spain and more than 1.1 million m<sup>2</sup> in Mexico.

Environmental benefits of asphalt recycling include:

- Reduced need for virgin materials
- Reduced transportation of aggregate and waste material
- Reduced waste-to-landfill
- Low-maintenance road surface with longer life

BRT Puebla II, helping commuters to save between 35 and 45 minutes of their time as well as reducing air emissions.



CEMEX BRTs Projects	Year	Location	km
Metrobus Line 1	2006-2008	Mexico City, Mexico	20
Metrobus Vallejo	2010-2011	Mexico City, Mexico	16
Metrobus Line 2	2010-2011	Mexico City, Mexico	16
Mexibus Chimalhuacan	2011	Chimalhuacan, Mexico	15
Metrobus Line 4	2011-2012	Mexico City, Mexico	28
Ecovia Monterrey Phase I	2011-2012	Monterrey, Mexico	19
BRT Acabus	2012-2013	Acapulco, Mexico	18
BRT Puebla I	2012	Puebla, Mexico	19
Mexicali	2012	Mexicali, Mexico	20
BRT Puebla II	2013	Puebla, Mexico	12
Ecovia Monterrey Phase II	2013	Monterrey, Mexico	11

### Cost-Effective, Efficient Mass Public Transport System

CEMEX is building high-occupancy, affordable, low-emissions concrete Bus Rapid Transit (BRT) systems to help reduce the amount of resources associated with transportation infrastructure.

In 2013, CEMEX implemented two new BRT lines in the cities of Puebla and Monterrey, bringing the total number of lines served by CEMEX up to eleven. The Puebla line is expected to reduce air emissions by approximately 26,000 tons of CO<sub>2</sub> annually and to significantly reduce noise and visual pollution. Additionally, commuters will save between 35 and 45 minutes of their time while improving their comfort and quality of life.

Many of these benefits are shared by Ecovia Monterrey, which is expected to benefit more than 180,000 users and decrease commuting time by up to 50 percent. The line will reduce nearly 17 thousand tons of CO<sub>2</sub> per year and reduce private car use between 15 and 20 percent in the middle-run.

### Building Sustainable Airport Infrastructure

As a leading supplier of concrete for the building and improvement of airport infrastructure, CEMEX strives to increase the efficiency and sustainability of construction.

For example, CEMEX in Latvia began supplying building solutions for major improvements to Riga International Airport, the largest in the Baltic States, in 2013. Providing more than 80,000 m<sup>3</sup> of specialty ready-mix concrete, CEMEX placed two dedicated ready-mix concrete plants at the job site. This not only allows CEMEX to guarantee timely delivery of materials, keeping the project on time and on budget, but also reduces the transportation footprint of the project which is slated to be completed in 2014.

Additionally, the concrete mix uses cement from the local CEMEX Broceni plant, one of the most modern in Europe. Among the various technological innovations of the plant is its dry kiln, which requires approximately half

For further information regarding CEMEX and infrastructure please read our position paper available in our [website](#).



## Challenges Ahead

- Building climate resilient infrastructure to support a low-carbon society.
- Persuading decision-makers to invest in resiliency.
- Creating efficient connections between people and their destinations.
- Pushing forward resource-efficient solutions such as full-depth reclamation and retrofitting as a key part of our portfolio.

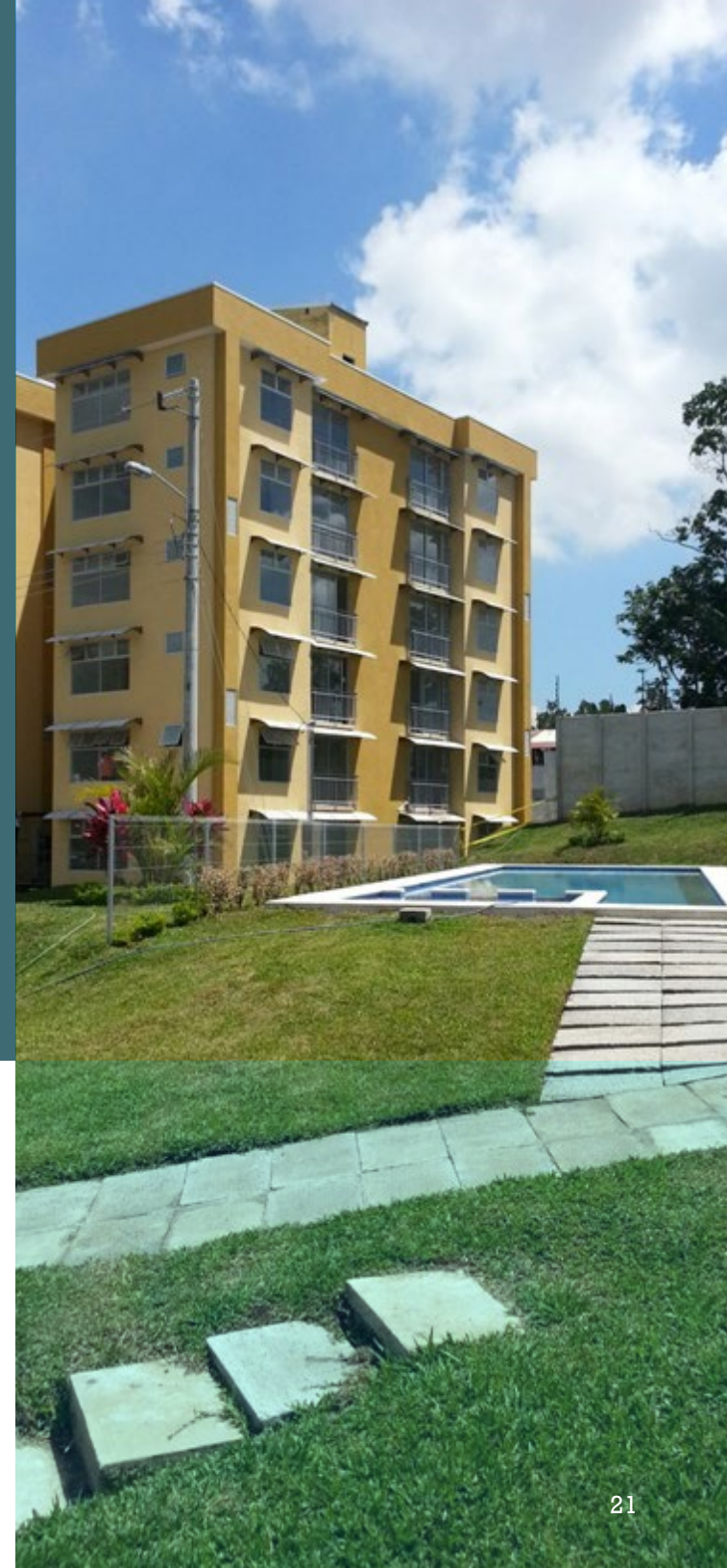
of the thermal energy to produce clinker compared to the previous technology. It is also able to substitute more than 70 percent of fossil fuels with alternative fuels, reducing its environmental footprint.

We also participated in the construction of the Victor Peace Airbase in Egypt. This 50,000 m<sup>2</sup> job is not only notable due to the climatic conditions 30 km west of Cairo, but also because it satisfies the challenging standards of the U.S. Army Corps of Engineers.

**80,000+ m<sup>3</sup>**  
of specialty ready-mix concrete  
provided by CEMEX in Latvia to  
make major improvements to Riga  
International Airport.

delivering  
**affordable**  
and energy-efficient housing

**10** new countries in our housing solutions portfolio. Expanding our presence to a total of 19 countries.



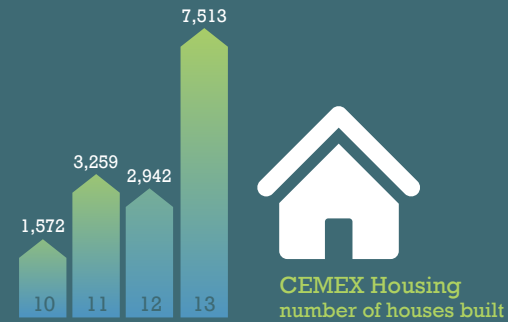
An abundance of job opportunities and the promise of greater prosperity are key reasons people choose to relocate to cities. Today, more than half the world's population inhabits cities and it is expected that by mid-century that share will increase to 70 percent. With burgeoning populations and limited land area, housing costs and environmental degradation are common concerns for urban planners.

CEMEX recognizes that resilient and sustainable housing is an important solution to the growing social, economic and environmental challenges associated with urbanization.

While CEMEX continues to provide affordable housing for those at the base of the socio-economic pyramid, we have expanded our focus. With unmatched expertise in tailor-made systems that are easily adapted and lead to efficient construction of homes, we are delivering

## Highlights

- Built 7,513 affordable and/or energy efficient houses in 19 countries.



housing for all markets in 19 different countries. Our offer now includes industrialized, disaster relief, energy efficient, vertical and affordable housing solutions.

Integrating our expertise and state-of-the-art products, we are delivering value to all participants in the construction value chain.

In 2013, we contributed to the construction of 7,513 homes, representing more than 400,000 m<sup>2</sup>. This brings the total for the first four years of our housing initiatives to more than 15,000 units with a surface of more than 650,000 m<sup>2</sup>.

### Energy-Efficient Wall Solutions

Central to this effort are first-in-class wall systems – cast-in-place, wired EPS panels, Insulated Concrete Forms (ICF) and precast systems – that provide multiple benefits that improve the sustainability, speed and economics of housing construction.

## Our Systems & Solutions Attributes



### Flexible design

Easily adapted to construction and design requirements



### Resilient

Resilient to natural disaster



### Thermal insulation

High thermal mass & insulation



### Minimum waste

Less waste at construction site



### Fast building

Significantly reduces construction time

### Housing Program in Colombia Includes Buildings and Services

An example of our integrated approach is the “Vivienda” project. We are collaborating with the Colombian government to provide affordable housing to the neediest people. Beginning in 2013, the project involves the construction of approximately 5,745 homes in six different provinces consisting of houses and apartment buildings as well as public services such as water, sewage and electricity.

### Certifying Social Housing as Sustainable

Given the lack of a certification program that promotes and assesses sustainable practices in the construction sector for social housing, CEMEX in collaboration with Tecnológico de Monterrey created a Certification Model to encourage a new social housing model characterized by sustainability and a balance between economic, ecological and social aspects.

### Habitat Partnership Targets Affordable Housing & Disaster Relief

CEMEX began partnering with Habitat for Humanity International in 2013 to carry out microfinance pilots in Mexico, Nicaragua, Colombia and the Philippines. The intent is to ally in every country where CEMEX and Habitat have a presence to increase the building of affordable and disaster relief housing.

## Challenges Ahead

- Gradually extending our housing solutions to all markets where CEMEX operates, both in developing and developed countries.

This assessment model was developed to evaluate the entire cycle of a social housing project from design concept to project operation to demolition—based on sustainable design techniques, flexibility, constructability, construction management and overall project management.

The program objectives are:

- Encourage sustainable practices in the construction sector through a certification model that promotes and assesses them.
- Minimize negative contributions of building construction to global warming and the energy crisis through efficient use of natural resources and sustainable techniques.
- Produce dignified social housing with economic, ecological and social value.
- Develop an assessment model through an extensive literature review and analysis of sustainability models and projects.

promoting  
**self-construction**  
through social and inclusive businesses



**2.3+**

million individuals have benefited from our Patrimonio Hoy, ConstruApoyo and Productive Centers of Self-Employment initiatives since 1998.

**8**

new Productive Centers of Self-Employment, bringing the total number of centers to 84 and welcoming Costa Rica to the initiative.



CEMEX's commitment to sustainability extends beyond our impact on the environment, embodying a strong desire to expand access to goods, services and livelihood opportunities for low-income communities. We support the social and economic development of communities in emerging areas through programs that foster self-reliance and empowerment. This inclusive business approach enables us to use our core business strengths to help at-risk families gain access to products and services that meet their needs in an affordable way.

### Empowering Families

Patrimonio Hoy is our flagship inclusive business that helps low-income families to improve their quality of life through better and dignified housing, realizing their dream of home ownership through a well-planned savings program.

Combining the global presence of CEMEX distribution with the power of microcredit, the program offers

## Highlights

- Assisted 29,734 Latin American families with Patrimonio Hoy in 2013.
- Expanded Patrimonio Hoy's coverage to 11 new cities, gaining 1,167 new clients through a new innovative scheme in collaboration with CEMEX's Construrama distribution centers.
- Joined the Business Call to Action (BCtA) with a commitment to ensure more than 150,000 low-income families have access to safe and affordable housing by 2016.

### Patrimonio Hoy 2.0

In 2013, Patrimonio Hoy (PH) went through an innovative product and service evolution aligned with a new identity and office concept.

PH Mexico began providing more customized housing projects according to customers' construction needs and financial capacity. The new offer enables PH to attend to even poorer families, offering flexible weekly payments from USD \$11.5. Additionally, technical assistance is now done in-situ, involves the whole family and assesses the most effective way to meet their constructive needs. Supervision is also offered during the construction to ensure high-quality housing projects.

Knowing the complexity of the construction process, PH also provides additional services with the aim to deliver an integral solution to each family's housing needs. Families can choose from multiple locations to make payments, including Patrimonio Hoy offices, convenience stores and banks.

Additionally, PH developed an innovative strategy to enter new markets by collaborating closely with CEMEX's Construrama distribution centers, incorporating 11 new cities. PH is now present in 53 cities in 29 states in Mexico.



Patrimonio Hoy's new identity and new offices.

integral solutions to families by providing financial and technical assistance in the construction of their homes. With more than 100 offices in Latin America, Patrimonio Hoy enables families to build or improve their homes quicker, more efficiently and with more durable and insulating materials – concrete, cement blocks and steel – that would otherwise be beyond their means.

Patrimonio Hoy	Dom. Rep.	Mexico	Colombia	Nicaragua	Costa Rica	Total
New families 2013	384	25,762	1,826	1,696	66	29,734
Total families (# accumulated since 1998)	867	399,726	16,971	8,130	875	426,569
New individuals 2013	1,536	123,658	7,121	9,498	264	142,077
Total individuals (# accumulated since 1998)	3,468	1,955,379	66,187	35,234	3,500	2,063,767
Total square meters built (# accumulated since 1998)	18,086	3,165,690	103,122	26,821	2,144	3,315,863

Since 2011, the program has also worked together with the Inter-American Development Bank (IDB) and the Kellogg School of Management to expand and update its offer. Patrimonio Hoy operates in five countries. In 2013, it reached 29,734 new families and built 270,509 m<sup>2</sup> of livable space.

#### Productive Centers of Self-Employment (PCS)

Productive Centers of Self-Employment allow participants to produce concrete blocks and other precast products, half of which they can use to build, repair, or expand their homes. Municipal or state governments purchase the other half for infrastructure development. The resulting proceeds are reinvested in the centers to make them self-sustaining.

In 2013, we added 8 new PCS. Our initiative is now present in Mexico, Colombia and Costa Rica, with the

Productive Centers of Self-Employment (PCS) enable individuals to manufacture building materials to improve the quality of their housing.



**143,000+**  
individuals have benefited from  
the PCS initiative since its inception.

latter opening its first two centers. There are now a total of 84 PCS serving these countries and almost 35,500 families have benefited from them since its inception.

#### ConstruApoyo

Through our ConstruApoyo program, CEMEX facilitates the distribution of funds for the construction, repair or extension of homes with a prepaid debit card system, creating a transparent process through which aid recipients are able to purchase the building materials they need.

In 2013, more than 1,000 families in Mexico and Colombia benefited from this program. To date, 31,716 families corresponding to 156,895 individuals have been served by ConstruApoyo.

#### Assisted Self-Construction Integral Program

CEMEX integrates PCS, ConstruApoyo and social assistance under the umbrella initiative Assisted Self-

## Challenges Ahead

- Finding new financing mechanisms that allow a larger number of people to improve or build their own home.
- Expanding our self-construction schemes to reach more people, more cities and more countries.
- Collaborating with governments to increase their support of initiatives that empower people to build or improve their own homes.
- Ensuring that at least 150,000 families in extreme poverty improve their access to affordable housing by 2016.

### Building the Link to Home Ownership, CEMEX Commitment to Millennium Development Goals

As part of our efforts to contribute to Millennium Development Goals, CEMEX has joined the Business Call to Action (BCtA) with a commitment to ensure that more than 150,000 low-income families have access to safe and affordable housing by 2016. CEMEX is the first company to join the BCtA with two separate initiatives – to expand our innovative Assisted Self-Construction Integral Program and involve our award-winning, inclusive business Patrimonio Hoy.

Construction Integral Program in order to provide people all the necessary tools to build their own homes, including financing, materials and expertise.

In 2013, the program benefited 242 families in Mexico and was implemented for the first time in Colombia, benefiting 294 families. Since their creation in 2011, PIACs have benefited a total of 23,039 individuals.



# addressing the global climate

# CHALLENGE

Global Climate Change is one of the most pressing challenges of our time. A large number of studies have analyzed the potential damages due to rising sea levels, changes in precipitation patterns and wider distribution of vector-borne diseases. Climate change poses a great threat particularly to urban areas where concentrated populations and corresponding infrastructure can suffer extensively from extreme weather, natural disasters and resource shortages.

Increasing urbanization is projected to be the major driver of global energy consumption and greenhouse gas emissions over the next two decades. It is estimated that at present, buildings contribute as much as one third of total global greenhouse gas emissions, primarily through the use of fossil fuels during their operational phase (United Nations Environmental Program).

Unpredictable extreme weather events are becoming more frequent and present numerous

challenges. Amidst heat waves, drought, floods and snowstorms, weather and climate extremes continue to intensify, as do the impact they have. Between 2000 and 2012, natural disasters caused USD \$1.7 trillion in damages globally. This figure includes direct impacts on infrastructure, communities and the environment, together with reductions in business profitability and economic growth in affected regions. Increasing urbanization and dense populations make cities particularly vulnerable to natural hazards.

At CEMEX, we interpret our responsibility for climate change in a very comprehensive way. Beyond our efforts to reduce the direct and indirect contribution of greenhouse gases by our operations and our industry, we are committed to providing products and services that enable a low-carbon economy and improve our built environment's resilience to climate change.



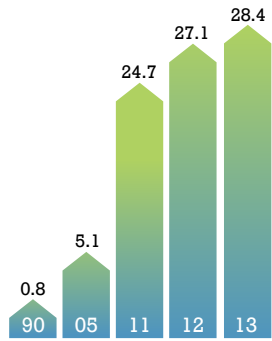
from waste to

value

**28.4%**

CEMEX's use of alternative fuels increased to 28.4 percent of the total fuel mix from 24.7 percent in 2011 and 27.1 percent in 2012.





Alternative Fuel Substitution Rate in cement operations

Investing nearly USD \$200 million since 2005, CEMEX has significantly increased its use of alternative fuels.

One of the more difficult challenges of urbanization is management of the waste generated by a concentrated population. Fortunately, many types of waste contain valuable energy that can be recovered, which reduces reliance on fossil fuels. CEMEX is harnessing these alternative fuels to fuel cement facilities and reduce our overall carbon footprint. Waste diverted from landfill disposal for energy recovery include:

- Used tires
- Spent solvents and waste oils
- Processed municipal solid waste
- Household waste
- Sewage sludge

In addition, animal meals and agricultural waste such as rice, peanut shells and coffee husks are also used to substitute fossil fuel consumption.

In 2013, 94 percent of our cement plants burned alternative fuels, avoiding the use of 2.37 million tons of coal

## Highlights

- Surpassed alternative fuel rate of 50 percent at 10 plants and 70 percent at four.
- Increased the alternative fuel rate at our Clinchfield Plant in Georgia, U.S., from 49.4 percent to 78.3 percent in 2013.
- Reduced clinker content in our cement to 76.9 percent, down from 84.3 percent in 1990.

### Automotive Industry Waste Drives Energy Efforts

CEMEX recently signed an agreement with General Motors (GM) of Mexico to manage industrial waste at its three main plants in San Luis Potosi, Silao and Toluca. For the next three years, non-recyclable waste from the carmaker's manufacturing plant in San Luis Potosi will be transferred to a subsidiary of CEMEX, Pro Ambiente. Pro Ambiente will treat, separate and compact each type of waste before taking them to the kiln. This helps both CEMEX and GM reduce their environmental footprint while converting waste to energy. Pro Ambiente processes approximately 600,000 tons of waste through similar agreements with 100 other companies and governments like those of Mexico City and Nuevo Leon.

and eliminating the equivalent of 1.77 million tons of CO<sub>2</sub> from entering the atmosphere.

Of the 45 plants burning alternative fuels, 10 surpassed a 50 percent alternative fuel rate, with four achieving a rate above 70 percent.

To read CEMEX's position paper on the use of alternative fuels in the cement manufacturing process visit our [website](#).

For the second consecutive year, CEMEX was recognized with a Global Cemfuels Award for Alternative Fuels Using Company of the Year. The award, which was voted for by industry participants, celebrates organizations in the cement and lime industries that make it a priority to use alternative fuels in their operations.

### Replacing Energy-Intensive Clinker

Waste is not just a potential source of energy. Some industrial waste streams such as fly ash from power plants or blast furnace slag from pig iron production have cement-like properties and are used as substitutes for



clinker, the most energy and CO<sub>2</sub> intensive ingredient of cement. This practice is an extremely efficient way to minimize our environmental footprint, reducing the consumption of fossil fuels and the use of natural minerals required by the production of clinker.

However, the global availability of these waste streams is limited. Our supply chain management and constant efforts to expand the list of those waste streams from slags and non-ferrous metals industries have resulted in a reduction of the average clinker content in our cements from 84.3 percent in 1990 to 76.9 percent in 2013.

### **Recycling, Reusing and Reducing Primary Aggregates in Concrete**

Depending on regulatory frameworks and material availability, CEMEX replaces primary aggregates with other discarded materials such as glass and demolished concrete. We also reuse and recycle fresh concrete returned from construction sites whenever possible. In 2013, 0.21 percent of secondary and recycled aggregates were

### **Recycling Concrete from Building Demolition**

CEMEX France is actively participating in Recybeton, an innovative project aimed at improving concrete recycling from building demolitions. Recybeton has two ambitious objectives: to reuse recycled concrete to produce new concrete and as a raw material for hydraulic binder. This collaborative research and development project, supported by the Ministry of Ecology, Sustainable Development and Energy, and The French National Research Agency's ECOREB project, marks an important step toward the reduction of building waste and use of recycled aggregates in construction applications.

used as a direct replacement of primary aggregates. Additionally, the volume of returned concrete material was 1.00 percent of the total volume delivered, compared to 0.95 in 2012.

To read CEMEX's position paper on the use of recycled aggregates in the construction sector please visit our [website](#).

### **Clinchfield Cement Plant Increases Alternative Fuel Rate By Nearly 30 Percentage Points**

Our cement plant located in Clinchfield, Georgia, United States, is in an area well known for agriculture and the manufacturing of wood-derived products like furniture and paper. Given its location, our Clinchfield plant looked to local biomass to help increase its alternative fuel use rate.

With moisture content less than 10 percent, peanut shells sourced from one of the largest peanut producers in the U.S. proved to be a viable alternative fuel. After pilot tests in 2010 and 2011, a new feeder system with the capacity to significantly increase the fuel substitution rate at the plant was built and brought online in 2013.

Early in 2013, the Clinchfield cement plant achieved a record fuel substitution rate of 78.3 percent by burning nearly 90,000 tons of biomass, including peanut shells, wood sawdust, pecan shells, tire fibers and whole tires. By September, the system averaged a monthly substitution of 93.3 percent and the plant operated on 100 percent alternative fuels for periods of 24 hours on several occasions. While achieving 100 percent is possible, the challenge remains in securing materials that would boost up the annual substitution rate above 80 percent once the plant is operating at full capacity.

Throughout the world, CEMEX takes significant strides to find innovative solutions that allow us to recover and reuse waste resources and drive out costs. Some examples are:

#### **Turning Waste Heat to Energy**

In 2013, construction of a six megawatt waste heat-to-energy (WHTE) facility began at our Solid Cement plant in Antipolo City in the Philippines. The approximately USD \$18.6 million facility will capture the plant's excess heat to produce electricity. The project is expected to come online at the beginning of 2015.

#### **Diverting Waste from Landfills**

Also in 2013, CEMEX UK completed the three-part Southam Landfill capping and restoration project. During this two-year project, we removed waste from the Parkfield Road Landfill and took it to Southam. The USD \$9.2 million project completed the existing landfill at Southam while allowing for the renovation of Parkfield. The land restoration, agricultural practices and CEMEX recovery options used during 2013 diverted 32,000 tons

of waste from landfills. Sending dust off site for recovery on dry basis also reduced both transportation costs and water consumption.

#### Maximizing Waste Water Usage

Waste water is immensely valuable to CEMEX and can offset our need to tap municipal or natural water supplies. In 2013, all CEMEX operations worldwide began applying a methodology to use waste water more efficiently.

At Los Pinos, a concrete plant in Santo Domingo in the Dominican Republic, CEMEX saved 40 percent of the water needed through the recovery, treatment and utilization of wastewater and the runoff process. Through the use of recycled water in the plant, CEMEX prevents alkali effluent discharges from entering the sub-soil and reduces the use of water from wells. This contributes to the conservation of water sources and an overall reduction in operating costs of production. This USD \$110,000 investment saves approximately 23,760 m<sup>3</sup> of water per year.

## Challenges Ahead

- Identifying new sources of lower cost, alternative fuels to compete with stable primary fuel prices.
- Reducing the high costs associated with the transportation of alternative fuels and raw materials.
- Spotting opportunities for resource optimization, reutilization and waste reduction.

### Recycling Refractory Bricks Benefits Environment and Bottom Line

Each year, the refractory lining (material that retains its strength at extremely high temperatures) of the kiln has to be replaced at the CEMEX Germany Kollenbach plant, resulting in about 500 metric tons of refractory brick waste and approximately 200–300 metric tons of other refractory waste. In recent years, this refractory waste has been taken to special waste disposal grounds at a significant cost. To reduce costs and find a more sustainable alternative for this annual maintenance, CEMEX partnered with Mineralmahlwerk Westerwald Horn GmbH & Co. KG (Horn), which was able to recycle the waste and use the resulting material in their own refractory materials. In 2013, the total refractory brick waste from the CEMEX WestZement Beckum plant – totaling about 450 metric tons – was taken and used by Horn without any extra cost to CEMEX. This partnership reduced our waste disposal costs, prevented possible disruptions at the kiln and had a positive impact on the environment through the use of secondary raw materials in refractory products.



At Los Pinos, a concrete plant in Santo Domingo in the Dominican Republic, CEMEX saved 40 percent of the water needed through the recovery, treatment and utilization of wastewater and the runoff process.



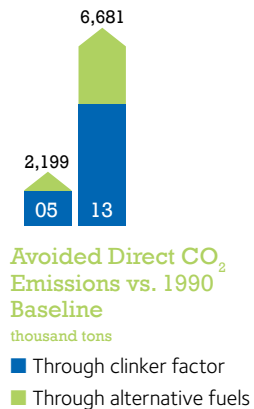


optimizing our  
**carbon** footprint

**7+** million tons of CO<sub>2</sub> avoided in 2013, equivalent to the average annual CO<sub>2</sub> emissions of 1.35 million passenger vehicles.

## Highlights

- Registered six new initiatives as Clean Development Mechanisms (CDM) and one new Verified Carbon Standard (VCS) project in the U.S. Our overall portfolio now includes 21 registered initiatives, with the combined potential to reduce CO<sub>2</sub> emissions by more than 2.8 million tons annually.
- Earned ENERGY STAR® certification at five CEMEX USA cement plants.



CEMEX is aggressively pursuing carbon emission reduction strategies to help reduce the environmental impact of our operations and innovate with new sustainable solutions. In 2013, as a result of our initiatives to reduce our clinker factor and increase the use of alternative fuels, we avoided 6.7 million tons of CO<sub>2</sub> direct emissions when compared to our 1990 baseline. Our combined efforts to reduce direct and indirect emissions through the use of renewable electricity represent more than 7 million tons of avoided CO<sub>2</sub> emissions compared with our 1990 baseline, including emissions avoided through the Eurus wind farm in Mexico. That is equivalent to offsetting the average annual emissions of 1.35 million passenger vehicles.

Carbon Strategy Progress	1990	2005	2013
Clinker factor (%)	84.3	81.4	76.9
Alternative fuels rate (%)	0.8	5.1	28.4
<b>Avoided direct CO<sub>2</sub> emissions vs 1990 baseline (tons)</b>			
From clinker factor	-	1,943,054	4,176,846
From alternative fuels	-	256,468	2,503,981
Total CO <sub>2</sub> avoided emissions	-	2,199,522	6,680,828
<b>Avoided indirect CO<sub>2</sub> emissions (tons)</b>			
From Eurus Project	-	-	465,011



### Expanding our Use of Renewable Energy

In 2013, CEMEX installed two wind projects at our Victorville cement plant in California with a total capacity of 6.2 megawatts (MW). The electricity generated by the turbines is equivalent to the energy necessary for powering approximately 550 American homes and prevents 4,300 tons of CO<sub>2</sub> emissions each year. In total, CEMEX has three wind power plants in California with a total generating capacity of 7.2 MW.

The Eurus wind farm in Oaxaca, Mexico, generates 250 MW of electricity, providing 25 percent of the energy needed to run our Mexican cement operations. In 2013, 465,011 tons of total CO<sub>2</sub> were avoided by this project. The Eurus farm has reduced indirect CO<sub>2</sub> emissions by more than 2.1 million tons since its inception.

We also started the construction of a new 1.5 MW solar farm in the Dominican Republic in 2013. This will be the first solar project for CEMEX and is expected to come online on 2Q 2014.

### Ventika wind farm – renewable energy beyond the CEMEX frontier

As industry pioneers in the use of clean energy and alternative fuels in Mexico, we are leveraging our experience and technical skills to develop projects for third-party investors. In 2014, together with Fistera

In 2013, CEMEX installed two wind projects at our Victorville cement plant in California with a total capacity of 6.2 MW.



### Five U.S. Cement Plants Earn ENERGY STAR® Efficiency Certification

The ENERGY STAR® program is an EPA initiative that focuses on strategic energy management and emphasizes the importance of demonstrating environmental leadership for future generations.

CEMEX cement plants in Florida (2), Georgia, Ohio and California were recognized in 2013 with the U.S. Environmental Protection Agency (EPA) ENERGY STAR® certification, bringing the percentage of CEMEX U.S. plants with this certification to 45 percent. The ENERGY STAR® certification is the distinguishing mark of energy efficiency for cement plants in the U.S. and places these plants among the most energy-efficient based on their performance on the EPA's ENERGY STAR® energy performance scale.

This recognition demonstrates that these facilities perform among the top 25 percent of similar U.S. facilities for energy conservation. This marked the seventh consecutive year of certification for the Clinchfield plant, an achievement realized by only one other cement plant in the U.S., the third consecutive certification for the Miami plant and the second for the Brooksville, Victorville and Fairborn plants.

Throughout the year, all of the recognized plants followed the energy efficiency principles established by the ENERGY STAR® Guidelines for Energy Management developed by the EPA, implementing energy conservation and monitoring technologies, promoting energy efficiency awareness among employees and completing energy reduction projects.

Energy, a company majority owned by funds managed by Blackstone and Blackstone Energy Partners, and private investors, we completed the financing of Ventika, one of the largest wind farm projects in Latin America. Located in the northeast state of Nuevo Leon, Mexico, the wind farm will comprise the construction of two 126 megawatt (MW) installations for a total nominal capacity of 252 MW. The investment for the project will be approximately USD \$650 million, which will help the Mexican Government reduce CO<sub>2</sub> emissions and meet its goal of 35 percent renewable energy by 2025. Ventika is also expected to generate approximately 1,000 direct jobs and more than 2,000 additional jobs in related industries, furthering CEMEX's commitment to help improve the livelihood of local communities.

### Increasing Energy Efficiency of our Operations

In our energy efficiency and climate protection efforts, CEMEX is focused on the areas of our business where we can make the most positive impact. For example, CEMEX UK Cement operations gained 12 consecutive months of improvement and a 10 percent year-over-year overall reduction in electricity use, while ready-mix and aggregates both achieved a three percent reduction.

### Expanding CDM & VCS Projects

For a number of years, CEMEX has been active in programs such as the United Nations' Clean Development Mechanism (CDM) or the Verified Carbon Standard (VCS) that recognize projects that reduce GHG emissions below normal levels.

Six new initiatives were registered as CDM in 2013 including four alternative fuel initiatives in Mexico and Panama and two wind farms located in Mexico. Our full CDM portfolio now includes 19 projects officially registered with a total potential to mitigate around 2.44 million tons of CO<sub>2</sub> per year.

CEMEX also registered another carbon reduction project under the Verified Carbon Standard (VCS), the world's leading voluntary greenhouse gas program. The project consisted of the partial substitution of fossil fuels by biomass fuels such as textiles, organic sludge, wood residues, paper, cardboard and other biomass residues in



Project	Start Year	Emissions Reduction tCO <sub>2</sub> /Year
Eurus Wind Farm	2007	599,571
Costa Rica Alternative Fuels	2008	39,972
Ibague Alternative Fuels	2008	146,798
Zapotiltic Alternative Fuels	2010	47,043
Egypt Alternative Fuels	2011	416,528
Panama K1 Alternative Fuels	2011	29,212
Tepeaca Alternative Fuels	2011	103,359
Merida Alternative Fuels	2011	41,513
Dominican Republic Alternative Fuels	2012	99,797
Tamuin Biomass	2012	47,853
Huichapan Biomass	2012	51,357
Cucuta Biomass	2012	42,307
Atotonilco Alternative Fuels	2012	68,579
Louisville Alternative Fuels	2012	294,605
Valles Alternative Fuels	2013	45,926
Yaqui Alternative Fuels	2013	65,470
Guadalajara Biomass	2013	40,325
Ventika Wind Farm	2013	244,110
Ventika II Wind Farm	2013	244,110
Panama K2 Alternative Fuels	2013	70,883
Miami Biomass	2013	73,035
<b>Total Reduction Potential (tCO<sub>2</sub>/Year)</b>		<b>2,812,353</b>

the kilns at the CEMEX cement plant in Miami. Together, CEMEX's two VCS projects have the potential to reduce more than 360,000 tons of CO<sub>2</sub> per year.

Our full portfolio has a potential to generate credits for 2.8 million tons of CO<sub>2</sub> reductions per year.

#### **Promoting the Use of our Carbon Footprint Tool**

Central to our CO<sub>2</sub> reduction efforts is our Carbon Footprint Tool (CFT). It helps us to quantify the direct and indirect amount of CO<sub>2</sub> emitted during the production process, including embedded CO<sub>2</sub> in raw materials. The CEMEX CFT is being used in all cement, aggregate and ready-mix sites under our operational control.

### **Creating Market Awareness and Measuring Impact**

Although market awareness of the importance of minimizing the construction industry's impact on the environment is not widespread in Croatia, regulations and requirements to measure and report CO<sub>2</sub> emissions are on the horizon. CEMEX Croatia recognized the opportunity to leverage our Carbon Footprint Tool (CFT) to provide added value to customers and, in turn, educate the market.

CEMEX Croatia uses the CFT primarily for their bids on pavement projects. The carbon footprint gives customers valuable information to determine ways to reduce their footprint and compare the carbon savings associated with concrete versus alternative materials such as asphalt.

We are also using the CFT in our work with the Green Building Council Croatia and independently to emphasize the benefits of concrete solutions among architects, investors and key decision makers.

#### **Reducing the Impact on Transportation**

Everyday CEMEX operations across the world work hard to continue developing a sustainable transportation strategy that helps us burn our fuel more efficiently and minimize our emissions to the atmosphere by updating our equipment configurations and maximizing our assets' utilization.

We operate a fleet of more than 16,000 mobile equipment units around the world that use diesel. CEMEX strives to minimize the potential impacts that our transportation

## **Challenges Ahead**

- Decreasing the carbon intensity of our production process, fuel uses and products' end use.
- Finding innovative solutions to diminish our carbon emissions through clean and efficient energy alternatives.
- Understanding more accurately, accounting for, and mitigating the impact of our transportation activities.

activities may have on the environment. For this reason, we conduct tests and demos with different fuels and technologies that allow us to significantly reduce our mobile equipment emissions and fuel consumption.

In 2013, we worked on expanding the scope of our seven pilot tests on additives by incorporating a larger amount of equipment; results have consistently shown a potential reduction of fuel consumption of approximately three to four percent. Our pilot tests are strategically located in seven countries across three continents to accurately represent our markets.

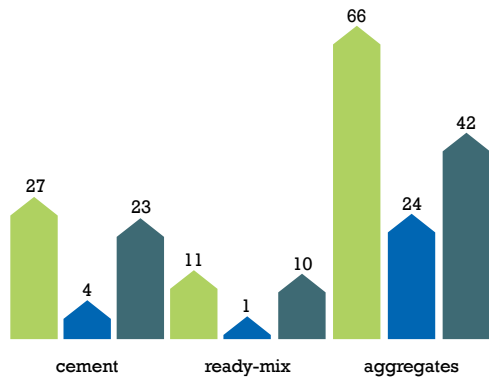
CEMEX has also developed a program to extend mobile equipment life time and optimize utilization. We have invested more than USD \$50 million in renewing our heavy equipment units and have added new trucks to our fleet in the United States and Mexico. Our truck fleets also exceed environmental norms in South American and Caribbean countries, setting the standard in the local context.

CEMEX looks to ultimately reduce transportation-associated CO<sub>2</sub> emissions by around 35,000 tons per year through our sustainable transportation strategy.



preserving land,  
**biodiversity,**  
and water

Published our new  
Corporate Water Policy  
and rolled-out our CEMEX  
Water Management  
Methodology throughout  
our operations.



### 2013 water consumption

376 l/t cement  
 194 l/m<sup>3</sup> ready-mix  
 317 l/t aggregates

**Water Footprint**  
 million cubic meters

- Total withdrawals
- Total discharges
- Total consumption

Conserving the natural environment can represent the crossroads of urbanization and climate change. The built environment can threaten biodiversity and environmental quality, yet the services of the natural environment have never been so critical to sequestering carbon, reducing flooding and providing the fresh water needed for a burgeoning global population.

## Highlights

- Externally pre-verified our water withdrawals KPI for the first time.
- Received Special Award for Biodiversity from The European Aggregates Association (UEPG) for our Soto Pajares Quarry's outstanding performance on biodiversity management.

### CEMEX, Founding Member of the Monterrey Metropolitan Water Fund

In September 2013, CEMEX participated as a founding member of the Monterrey Metropolitan Water Fund (FAMM), a public-private initiative of approximately USD \$5 million to protect water resources and contribute to the welfare of more than 4 million people in Monterrey and its metropolitan area. The four strategic objectives of the Fund are to prevent flooding, improve water infiltration to aquifers, raise awareness of the importance of water and promote best practices for the management and conservation of this natural resource. The FAMM has four committees: Institutional Practices, Funding, Technical and Conservation. Its partners include 23 companies, 16 government institutions, 16 civil society organizations and four universities.

This Fund is part of the Latin American Water Funds Partnership, created in June 2011 by The Nature Conservancy (TNC), FEMSA Foundation, The Inter-American Development Bank (IDB) and the Global Environment Facility (GEF), to create and strengthen Water Funds in Latin America. The Partnership has 14 Funds in different stages of operation and 18 under evaluation and design. They are located in Brazil, Colombia, Mexico, Panama, Venezuela and other countries in the region. The initiative is also supported by the Latin American Conservation Council (LACC).

### Managing Water to Minimize Use

Experts rank water issues among society's most urgent challenges. According to the United Nations World

Water Development Report, demand for water will be 40 percent higher in 2030 than it is today. CEMEX has embraced the challenge of managing our water resources responsibly and efficiently and is actively working to reduce our water use and minimize our water-related risks.

Currently, nine percent of CEMEX production facilities are located in officially designated water stressed zones, based on data processed by the World Business Council for Sustainable Development (WBCSD) Global Water Tool. More information is available on our [website](#).

In 2013, we continued working with the International Union for Conservation of Nature (IUCN) and implemented the methodology we jointly developed the previous year in order to improve our water management and better address water risks facing our business. The methodology was rolled out to all businesses and countries in which CEMEX operates. It contains a set of key performance indicators (KPIs) and their definitions, which are consistent with those being currently agreed upon in the Cement Sustainability Initiative (CSI). It also defines operational boundaries, four levels of accuracy for water measurement, guidance on how to report, the information and recommendations for meter calibration and

maintenance. We also externally pre-verified our water KPIs for total water withdrawals by source. Our aim is to ensure that our data collection and reporting system is robust enough before we start setting targets to minimize the company's water use and increase our water efficiency.

In 2013, we also launched our [Corporate Water Policy](#) which defines our global strategy for responsible water management and acts as a framework for the development of local water conservation and efficiency strategies across our operations worldwide. The comprehensive approach detailed in CEMEX's water policy includes our compliance with relevant regulations and commitment to protect ecosystems and biodiversity in our sites through sustainable water management. It also pledges to maximize water efficiency by managing water consumption



and utilizing sustainable water sources such as rainwater. In addition to preventing water pollution, CEMEX will monitor, review, assess and disclose water efficiency performance against measurable targets to drive continuous improvement.

## Aichi Biodiversity Strategic Goals

### Strategic Goal A:

Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

### Strategic Goal B:

Reduce the direct pressures on biodiversity and promote sustainable use

### Strategic Goal C:

Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

### Strategic Goal D:

Enhance the benefits to all from biodiversity and ecosystem services

### Strategic Goal E:

Enhance implementation through participatory planning, knowledge management and capacity building

## Implementing Biodiversity Action Plans (BAPs) in our Quarries

Biodiversity Action Plans (BAPs) are CEMEX's principal tool for achieving net positive impact on biodiversity and ecosystems. CEMEX and BirdLife International have created a standard for the development of BAPs to ensure individual operations are able to thoroughly and systematically produce their own BAPs tailored to the particular biodiversity values they possess and challenges they face. This work is guided by our [Corporate Biodiversity Policy](#) which is fully integrated into our business model in all countries and operations.

The CEMEX Biodiversity Policy and BAP Standard embrace the Convention on Biological Diversity (CBD) and its Aichi Biodiversity targets. With support from CEMEX's global partnership with BirdLife International, the company complies with Strategic Goal A by mainstreaming biodiversity throughout the organization, specifically by raising awareness of biodiversity through training in collaboration with BirdLife International and generally through biodiversity communications within the company and with external stakeholders through a variety of media.

Furthermore, we contribute to Strategic Goal B, reducing pressures on biodiversity, by restoring quarries and





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degraded ecosystems adjacent to CEMEX land through our BAPs. Strategic Goals C and D are met through ecosystem-level restoration, a specific aim of our BAP Pilot. For example, in our BAP for our Cerrito Blanco project in Mexico, we seek to restore Sonoran desert habitats, home to many endemic and threatened species such as the threatened Sprague's Pipit. In the Dominican Republic, our BAP pilot aims to safeguard the vulnerable and possibly endangered Rhinoceros Iguana populations close to the quarry.

Lastly, by working closely with BirdLife Partners and other local stakeholders all around the world, CEMEX is delivering on Strategic Goal E by helping to mobilize resources and capacity building for much-needed conservation action worldwide.

In 2013, we continued our work to develop quarry rehabilitation plans for our active cement and aggregates quarries. We also continued taking action to enhance the biodiversity in and around our quarries located in or close to high biodiversity value areas and started new BAP projects at these key quarries. To date, 92 percent of our active quarries have rehabilitation plan in place and 51

percent of our 91 active quarries identified within or adjacent to high biodiversity value areas have a BAP in place.

Additionally, we continued developing benefits on the ground with the BAPs that we started in 2012. For instance, our partnership project in the Dominican Republic has enabled country operations to reach out to a significant number of people in four different local communities. In Malaysia, the BAP took a landscape-level assessment of risks and opportunities in the context of quarry operations. This CEMEX BAP is helping to raise awareness about the importance of one of BirdLife International's designated Important Bird and Biodiversity Areas (IBAs) with key stakeholders. At the same time, the national partnership with the Malaysian Nature Society (the BirdLife Partner in Malaysia) is helping create opportunities to raise awareness about biodiversity with CEMEX employees.

For other countries with high priority CEMEX sites such as Colombia and the Czech Republic, we started examining biodiversity issues as an important step toward achieving our target of having BAPs in place at 100 percent of our active sites in areas of high biodiversity value.

Finally, together with BirdLife International, we published "The CEMEX Approach to Biodiversity Conservation", a communications tool designed to give an introduction to biodiversity and an overview of the CEMEX-BirdLife BAP Standard in an easily accessible way. Launched at a special side event in conjunction with the 2013 BirdLife World Congress, the publication increases understanding of how enhancing biodiversity in and around a CEMEX site can ultimately benefit people and wildlife over an extended period of time. The document is available on our [website](#).

### **El Carmen Conservation Initiative**

CEMEX has a long history of preserving nature and sharing its wonder through El Carmen, a private trans-boundary conservation area in Mexico owned and managed by CEMEX and other private landowners.

For more information on our previous work with BirdLife International please visit our [website](#).

The 200,000 hectares wilderness reserve continues to safeguard and enhance rare, threatened and endemic biodiversity, while taking into consideration the flora and fauna of the area. For every hectare of land dedicated to operations, CEMEX has 8.4 hectares of land in conservation in El Carmen.

In 2013, El Carmen:

- Successfully reintroduced Desert Bighorn Sheep, Pronghorn antelope and Mule Deer.
- Welcomed the Texas Bighorn Society (TBS) for their annual work project, in which two conventional wildlife water guzzlers and two rock gabions (free draining walls) were constructed.
- Continued to support postgraduate students on their thesis projects.

#### **Sublime Nature: Photographs that Awe and Inspire**

CEMEX dedicates the first edition of the new Nature Series, "Sublime Nature: Photographs That Awe and Inspire", to the celebration of the human connection to our natural world.

### **CEMEX Recognized for Positive Contribution to Biodiversity & Local Communities**

The European Aggregates Association (UEPG) Sustainable Development Awards annually recognize companies that have successfully integrated the social, economic and/or environmental dimensions of sustainable development into their operations. The awards promote the dissemination of best practices and encourage projects which go beyond what is required by planners and regulators.

In 2013, CEMEX was recognized for our positive contribution to biodiversity and local communities in three locations. Our Soto Pajares Quarry in Spain won the Special Award for Biodiversity for its outstanding actions related to the protection, enhancement and creation of key habitats for important species within a Natura 2000 site. Our Rugeley Quarry in the United Kingdom received a Recognition of Achievement for Biodiversity for its significant restoration work and excellent habitat management activities. Both projects are developed by CEMEX in close collaboration with SEO/BirdLife and the Royal Society for the Protection of Birds (RSPB), BirdLife International's Partners in Spain and the United Kingdom, respectively. In addition, CEMEX *Granulats Sud Ovest* was recognized for excellence in the category of Economic Contribution/ Added Value to Society.

These awards emphasize our commitment to conduct our operations in a sustainable manner.

## **Challenges Ahead**

- Implementing and measuring the impact of our new Corporate Water Policy to drive continuous improvement on water management.
- Taking action to further the implementation of BAPs in areas with significant natural value.
- Measuring outcomes of biodiversity efforts and estimate the value of the ecosystem services provided by El Carmen.



Edited by Cristina Mittermeier, photographer, conservationist and founder of the International League of Conservation Photographers, this book presents a compendium of spectacular views from award-winning photojournalists, interlaced with profound quotations from the world's leading poets, naturalists and scientists.

For the publication of this book, we had the privilege of embarking on a publishing partnership with the National Geographic Society, a leader in the sphere of scientific research, exploration and educational programming. Joining forces, we can engage a wider audience in a global dialogue about the future of our planet's natural wonders.

continuous improvement of

# air emissions

and environmental management



Reduced specific emissions  
(g/ton of clinker) vs. our 2005 baseline by:

**59.1% dust**

**21.2% NO<sub>x</sub>**

**58.6% SO<sub>x</sub>**

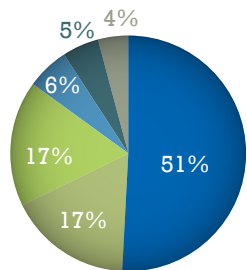
Measurement is critical to understanding, managing and improving any system. In CEMEX, we recognize that to manage our impact on the environment requires a thorough understanding of what risks our operations pose. That's why it is our goal to have all our sites operating either under an external environmental management system such as ISO 14000 or our internal EMS.

### Implementing our EMS

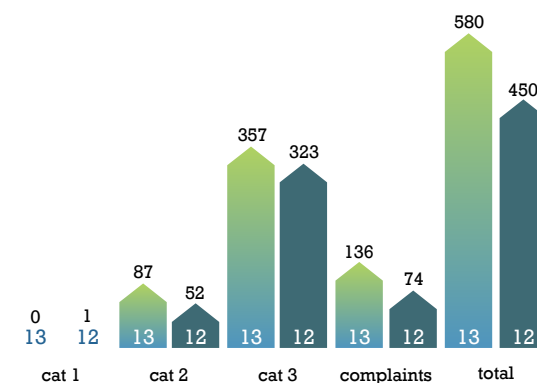
As of the end of 2013, 98 percent of our cement plants, 63 percent of our ready-mix operations and 67 percent of our aggregates quarries have implemented our CEMEX Environmental Management System. For more detailed information about our CEMEX EMS please visit our [website](#).

A critical component of the CEMEX EMS is the Global Incident Reporting System. This web-based reporting tool has created a culture of reporting where people feel more comfortable sharing information about all incidents, big or small. Information regarding 580 total incidents was collected in 2013. While this represents an increase from 450 in 2012, the overall awareness of EMS operating procedures and training has grown. For the first time, in 2013 we verified with an external third-party our category 2 incidents KPI.

**Environmental Incidents by Type**



- Dust
- Site operating conditions and disturbance
- Fuel and chemical
- Process waste and material
- Water
- Other



**Environmental Incidents Trend**

- 2013
- 2012

## Highlights

- Implemented our CEMEX Environmental Management System in 98 percent of our cement operations.
- Recorded zero category 1 environmental incidents.
- Externally verified our category 2 environmental incidents KPI for the first time.
- Invested USD \$95 million in sustainability-related projects at our operations worldwide.

### Monitoring Emissions

CEMEX designed a reporting platform that allows us to track emissions and help plant operators identify and remove, reduce or mitigate environmental risks from a wide range of gases and particulates including nitrous oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), carbon dioxide (CO<sub>2</sub>), dust, metals, dioxins, furans and mercury. We now have a broad database containing up to six years of data, providing access to information from all countries to more effectively monitor all kilns and the percent of alternative fuels used. We are planning to expand the scope and reporting parameters for each kiln over time.

### Keeping our Air Emissions Below our Targets

The cement-manufacturing process involves the release of atmospheric pollutants, including nitrogen oxides (NO<sub>x</sub>), sulfur compounds (SO<sub>x</sub>), and dust. Other related pollutants released in very small quantities include dioxins, furans, volatile organic compounds, poly-aromatic hydrocarbons (PAH) and heavy metals (including mercury).

An update of our measurement methodology in some countries impacted our emission figures for 2013, which show a slight increase in dust and NO<sub>x</sub> when compared to 2012.

Emissions	2011	2012	2013	2015 Target*	2013 reduction vs. 2005 baseline (%)
<b>Emissions targets for 2015</b>					
Dust specific emissions (g/ton of clinker)	101	78	127	120	59.1
NO <sub>x</sub> specific emissions (g/ton of clinker)	1,094	1,025	1,261	1,600	21.2
SO <sub>x</sub> specific emissions (g/ton of clinker)	335	257	215	520	58.6

\* New targets under revision and to be published by the end of 2014.

There are currently 27 projects underway in 11 plants to improve emission monitoring, clinker handling/storage, hydrogen chloride emissions, mercury emissions, particulate matter emissions and total hydrocarbon emissions. At the end of 2013, CEMEX invested more than USD \$30 million in the U.S. to improve air emissions performance. More than USD \$40 million is expected to be invested in 2014.

#### Reducing the Release of Mercury

Mercury brings with it the potential for significant health and environmental risks due to its toxic and bio-accumulative properties. CEMEX has varying levels of mercury emission rates across our plants, primarily driven by the mercury concentration of various raw materials utilized in our facilities. Limestone is particularly challenging because it may have high mercury concentration and is proportionately the largest raw material in use. In light of this, CEMEX has been actively working to reduce mercury release into the atmosphere for several years.

**USD \$95 million**  
**In 2013, we invested USD \$95 million in sustainability-related projects at our operations worldwide.**

We have made good strides in the reduction of mercury emissions, identifying three control technologies that can make a positive impact. We have tested and successfully demonstrated how shuttling cement kiln dust from kiln system to finish grinding and injecting activated carbon into kiln exhaust gases can help reduce mercury emissions and assist in compliance with new regulations. Working in cooperation with the German Cement Association (VDZ), we also completed intense sampling and estimation of volatile cycles to determine how reducing secondary raw materials containing mercury impacts the level of mercury released. In 2014, we will release a report regarding our mercury-reduction efforts, including the effect of activated carbon injection on mercury release.

#### Continuous Sampling of Dioxins in Cement Kilns

CEMEX is currently working on a project to test the dioxin levels in cement kilns with the University of Alicante in Spain and the Superior Council for Scientific Research (CSIC), the largest public institution dedicated to research in Spain. We have been continuously sampling flue gas in the kilns using equipment supplied and installed by the Superior Council. The University then analyzes the samples and monitors the measurement of emissions to determine if the dioxin levels remain steady. The final results will be available in 2014. They will be used to benchmark future sampling of dioxin levels in the kilns and assess the possibility of substituting it for fingerprint measurements that are not representative in the kilns.

## Challenges Ahead

- Implementing either an external Management System such as ISO 14000 or our internal CEMEX Environmental Management System in all of our sites.
- Fostering a culture of reporting all environmental incidents and striving to reduce their severity.
- Expanding the scope and reporting of air emissions to further reduce them.
- Understanding the best methods for reducing mercury release in our operations.

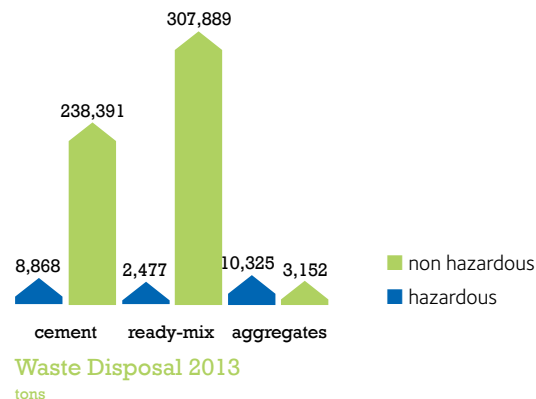
Our process generates waste that is classified and disposed of according to our own standards and the requirements of local regulation.

Developed in 2012, our KPIs for cement-kiln dust and ready-mix waste clearly distinguish between waste reused, waste recovered, waste recycled and waste that remains as is. From here, these waste streams are classified as hazardous or non-hazardous, disposed externally or internally, as defined by country regulations. We spent 2013 ensuring CEMEX managers across the globe understood this detailed, multi-layered reporting system and will use our 2013 findings as a comparative base to report them for the first time in our 2014 report.

### CEMEX Contributes to Cleaning Sulfur Acid Tar Lake

Not only is CEMEX committed to waste management within our own sites, we also work to make a positive impact on areas overwhelmed with environmental issues.

In the Inčukalns area in Latvia, the Devonian sandstone aquifer is heavily polluted by emissions of sulfur sludge pools. We worked to clean the sulfur acid tar lake near Riga in an effort to decontaminate the hazardous waste site. In 2013, we received and burned more than 15,000 tons of processed sulfur acid tar waste from this project. This represents a significant step toward cleaning up this environmentally challenged area.



To read CEMEX's Corporate Environmental Policy please visit our [website](#).

strong  
commitment  
to our

# STAKEHOLDERS

In all our relationships, we strive to have respectful and honest interactions that allow us to contribute to the development of our employees and communities, maintain a good reputation with all of our stakeholders, and develop infrastructure projects and social initiatives that contribute to the growth and prosperity of our company and society.





placing health and  
**safety**  
first

**15%**

decrease in employee Lost Time Injury (LTI) frequency rate and the number of contractor LTI's reduced by 13% compared to 2012.



Safety is paramount to CEMEX's business and operations. We have an unwavering commitment requiring daily attention to ensure our products are manufactured, transported and used safely. We also go above and beyond to safeguard our employees, contractors, customers and neighbors as we strive for our ultimate goal of zero incidents.

In 2013, CEMEX continued to implement our new global Health and Safety Management System (HSMS). Improving communication about incidents including key learning points and good practices is central to the prevention of future incidents. To date, more than 400 examples of good health and safety practices from our operations have been shared globally.

Four regions and 14 countries reduced their TRI Rates, with eight countries maintaining a rate of zero.

#### **Incidents: Lost-time Injuries and Fatalities**

In 2013, we saw a 15 percent decrease in the CEMEX global Employee LTI frequency rate. While the number of

## Highlights

- **Decreased global Employee Sickness Absence Rate by 12 percent compared to 2012.**
- **Driving-related fatalities declined by 46 percent and, for the first time, did not account for the majority of our incidents.**
- **Externally verified our contractors' safety KPIs for the first time.**



incidents continues to go in the right direction, we have set a goal to reduce the Employee LTI frequency rate to 0.5 or less by 2015 to drive even greater focus on minimizing these events. We are encouraged to see that CEMEX sites in three entire regions have already achieved this goal. In fact, 22 individual countries currently have rates lower than the 0.5 target, with 20 of these having achieved zero. In addition, Contractor LTIs were also down 13 percent.

The 2013 CEMEX Total Recordable Injury (TRI) Frequency Rate remained the same as 2012, with a rate of 5.9. Four regions and 14 countries reduced their TRI Rates, with eight countries maintaining a rate of zero. However, contractor TRIs increased by 21 percent.

The global Employee Sickness Absence Rate for CEMEX decreased by 12 percent.

The loss of any employee, contractor or third-party associated with our operations is extremely saddening and something we are continuing to work to avoid every day. Driving-related fatalities declined by 46 percent and, for the first time, did not account for the majority of our incidents.

Regrettably, there were 21 fatalities in 2013 – 3 employees, 11 contractors and 7 third-parties. We will not be satisfied until we have no fatalities to report and have set up task forces to address the issues related to cement operations and road transportation safety.

### Zeroing in on Safety Issues

While a focused safety mindset is critical throughout CEMEX's worldwide operations, we recognize certain areas require extra emphasis where injuries are more common.

We created the Global Cement Operations Safety Taskforce in 2013 to mitigate a noticeable increase in incidents in our cement operations, particularly related to maintenance activities. The taskforce meets monthly to discuss issues of critical importance. Key deliverables in 2013 included launching a new bucket elevator safety standard, kicking off a global hand injuries campaign, developing guidance documents, analyzing initiative gaps, reviewing existing global

The Global Road Transportation Safety Taskforce was established with the aim of eliminating fatalities within road transport activities.



standard operating procedures and developing plant-specific action plans for 2014.

The Global Road Transportation Safety Taskforce was established with the aim of eliminating fatalities within road transport activities involving company and contractor vehicles and their drivers. Following the launch of



guidance for the Management of Contractors and Visible Felt Leadership safety engagement with drivers the previous year, the taskforce worked to implement several additional global initiatives in 2013:

- The Breakdown Procedures initiative was developed, consisting of training materials and a checklist for countries to use with their drivers.
- The Safe Sites initiative was created, performing gap analyses throughout the company's regions and providing drivers a checklist when they arrive onsite.
- The Vulnerable Road Users initiative established global guidelines for the use of vehicle safety features to help protect cyclists and other vulnerable road users.
- A gap analysis form was designed to evaluate the level of activity for National Road Transportation Safety Taskforces.
- Information was discussed and shared regarding the increase in rollover risks for tipper vehicles, and global guidance materials are in development.

Both of these efforts are designed to enhance communication about workplace hazards and risk management approaches to bring us closer to our goal of zero injuries.

### Leadership Drives Commitment

CEMEX leaders are committed to creating a positive safety culture within the organization and have created numerous initiatives to reduce the number of incidents experienced among our sites and workforce. These leadership-driven initiatives have had a significant impact on our Health & Safety (H&S) performance with most countries seeing vast improvements in their KPIs.

Our H&S leadership training course, LEGACY, is the foundation of our safety practices. All leaders from executives to front-line supervisors are required to complete the course, which is based on seven behaviors of effective safety leadership and covers themes such as

### LEGACY Seven Behaviors of Safety Leadership

- Personally manage safety every day
- Know your processes and your people
- Communicate with your employees
- Hold yourself and your employees accountable
- Train and motivate your employees to work safely
- Apply discipline equitably and consistently
- Lead by example and actively care

leading by example, understanding processes and people, communication, motivation and accountability. LEGACY has proven to be a positive way to provide leaders the tools, skills and behaviors they need to lead safer, more efficient operations.

We have also continued to run a Visible Felt Leadership (VFL) training course to provide leaders with strategies they can use to communicate their commitment to H&S and influence employee behavior within our operations. We expanded the program in 2013 to include South America, the Caribbean and Mexico, and have now established the VFL program in approximately 90 percent of countries with CEMEX operations.

### Taking LEGACY to Everyone

In 2013, CEMEX took the LEGACY training program to the next level with the development of our first E-LEGACY course. This course is designed to enhance the safety training of CEMEX's global front-line workforce

with messages about following rules and procedures, thinking before acting, protecting one another and not tolerating unsafe behaviors. The course was piloted in the UK in 2013 and will be launched globally in 2014. The 'E' in E-LEGACY stands for 'Everyone' and is a one-day facilitator led course.

CEMEX also continues to offer additional safety training for our general workforce at a local level to ensure it is correctly tailored to employees' job types and work tasks. Through a combination of e-learning, formal training sessions and toolbox talk programs, operational leaders work directly with employees to enhance their skills and reinforce safety behaviors.

Additionally, 67 percent of our employees are represented in formal joint management-worker H&S committees. As a part of these committees, workers, line supervisors, managers and union representatives meet on a regular basis to listen to employee concerns and review and enforce health and safety procedures and performance, formulation and implementation of programs.

### Promoting a Safe and Healthy Work Environment



### Improving Contractor Health & Safety

Contractors are critical to CEMEX operations and their safety is just as important as that of our own employees. CEMEX continually strives to instill our safety culture into contractors across our worldwide operations.

In 2013, CEMEX reviewed the contractor management portions of our HSMS to identify opportunities to enhance and strengthen requirements. Managing approved contractor lists, pre-task risk assessments and consequences of unsafe behavior were among the topics revised to provide more robust requirements. In addition, new global standards were developed for topics such as personal protective equipment and working at heights to bring an increased safety focus to these crucial areas.

For the first time, in 2013 we verified with an external third-party our contractors' safety KPIs.

### CEMEX 2013 Global Health and Safety Awards

There is nothing more important than the health and safety of our employees, contractors and the members of the public that we interact with during our daily activities. As we continue to work towards our common goal of zero injuries, an important part of our progress is to continue sharing good practices from our operations worldwide and to recognize our best and most improved operations each year. We are pleased to announce the winners of the CEMEX 2013 Global Health and Safety Awards.

Country Award	Award Type	1 <sup>st</sup> Place	2 <sup>nd</sup> Place	3 <sup>rd</sup> Place
1-500 Employees	Best Performance	Croatia	Costa Rica	Austria
	Most Improved	Nicaragua	Bangladesh	Ireland
500+ Employees	Best Performance	UK	Spain	Germany
	Most Improved	Spain	Philippines	Germany
Sector Award	Award Type	1 <sup>st</sup> Place	2 <sup>nd</sup> Place	3 <sup>rd</sup> Place
Cement	Best Performance	Broceni, Latvia	Brooksville South, USA	Tilbury UK
	Most Improved	APO, Philippines	Rugby, UK	Morata, Spain
Aggregates	Best Performance	UK Aggregates	East Texas Aggregates, USA	Northern Region, Poland
	Most Improved	Val de Seine, France	Dove Holes, UK	Panama Aggregates, Panama
Concrete	Best Performance	UK Ready-mix, UK	Poludniowy Region, Poland	Cluster Otrokovice, Czech Republic
	Most Improved	Northern Region, UK	Supermix, UAE	Latvia Concrete, Latvia
Road Transportation	Best Performance	Levante, Spain	Logistics, Costa Rica	Logistics, Croatia
	Most Improved	Commercial & Logistics, Egypt	Logistics, Philippines	Logistics, UAE
Others	Best Performance	Concrete Products, UK	Pipe Northeast Region, USA	Lime Operations, Jamaica
	Most Improved	Chantiers de la Haute Seine, France	Construrama Promexma, Mexico	Western Rail Road Co, USA

**New global standards were developed in 2013 for topics such as personal protective equipment.**

### Product Safety

CEMEX strives to consistently ensure that our products are safe to transport, store, handle, use and dispose of. All of our products comply with applicable local legislations and disclose all relevant information.

To read our Health and Safety Corporate Policy, please visit our [website](#).

The REACH regulation came into force on 1 June 2007. REACH stands for – Registration, Evaluation, Authorization (and restriction) of Chemicals– and it implements a uniform legal system, effective for all

### Safe Driving School Reduces Accidents

According to the World Health Organization, Egypt has one of the highest rates of road traffic deaths in the world. With more 10,000 drivers from subcontracted haulage agencies transporting cement for CEMEX Egypt, we felt it was imperative to provide safe driving training to help keep drivers safer on the road.

CEMEX Egypt operates the Schools for Safe Driving program to provide comprehensive training on driver risks, road risks, vehicle risks and weather risks. Since 2010, more than 2,300 drivers have undergone training at the CEMEX Assiut cement plant and another 34,500 have acquired safe driving practices at the Assiut Traffic Authority. More importantly, the number of fatal traffic incidents in CEMEX Egypt has decreased from five in 2010 to zero in 2013 – a result we hope to replicate in 2014 and beyond.



## Challenges Ahead

- **Achieving our ultimate goal – zero fatalities – and continuing to reduce all types of injuries to zero as well.**
- **Developing a positive, safety-minded culture everywhere through ongoing training and effective leadership.**
- **Ensuring all employees and contractors understand and embrace their role in creating a safer work environment across our worldwide operations.**
- **Staying abreast of high risk issues and creating immediate awareness of control measures our employees can take to stay safe.**

chemicals inside the European Union (EU). The only substance CEMEX has to register under REACH is flue dust, a by-product from the production of Portland cement clinker. Portland cement clinker as such, however, is exempt from the registration requirement. Cements are like all mixtures exempt from registration. All CEMEX legal entities in Europe have submitted their registration dossiers for flue dust to the European Chemicals Agency (ECHA) and comply.

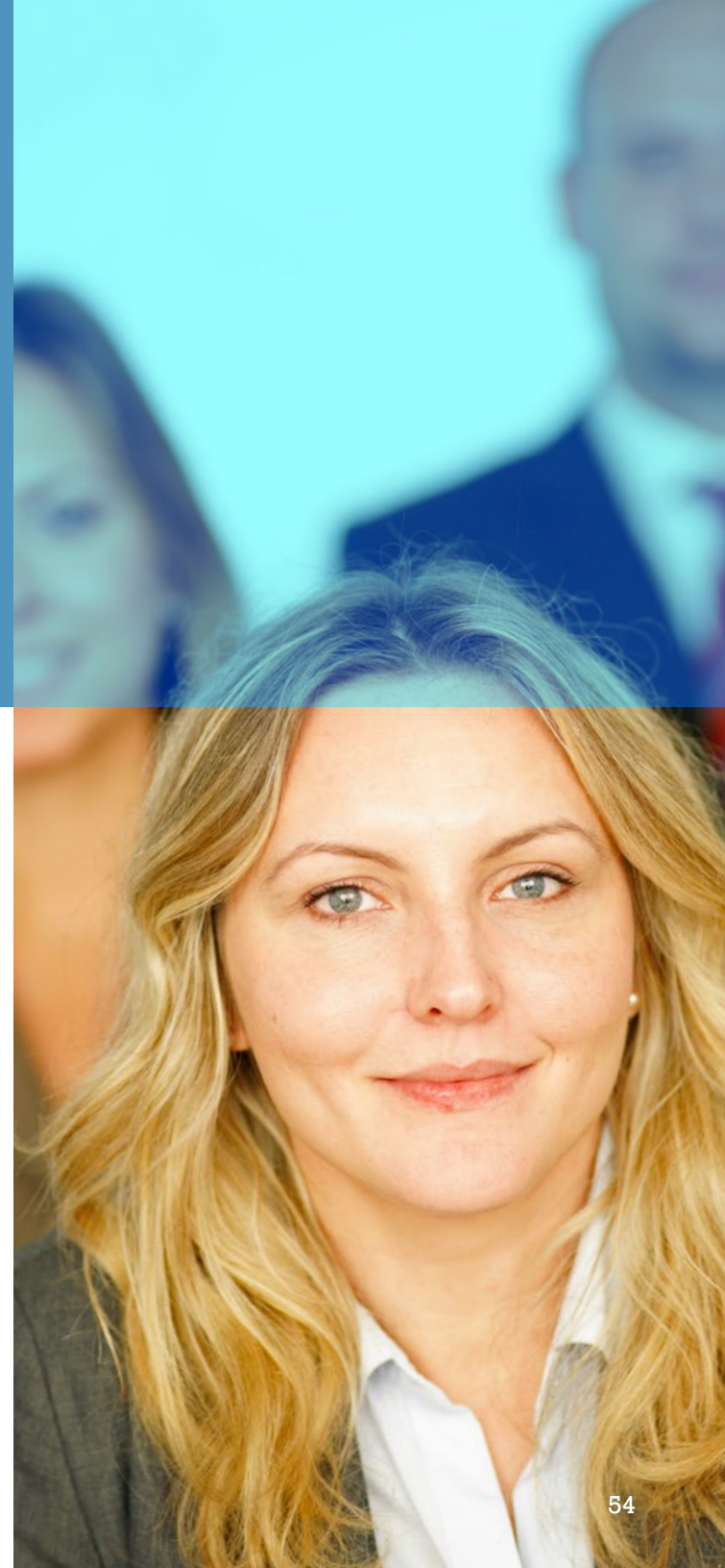
In 75 percent of the countries in which CEMEX operates, a formal policy is in place to ensure that H&S aspects of products are considered in product design. Additionally, 90 percent of our products are assessed for improvements in H&S in the different life cycle stages.

# engaging

and retaining our talent

**402** employee engagement initiatives delivered, reaching more than 35,000 employees worldwide.

**USD \$1.5** million invested worldwide to benefit 591 employees with scholarships to advance their academic studies.



Collaboration, Leadership and Integrity are the core values that drive our workforce to help make a positive difference in the world. We live these values by creating an environment that helps employees build a career where they continually increase their knowledge and skills while being rewarded fairly for their contributions to our success.

#### **Building a Better Workplace Together**

With more than 43,000 employees around the world, it is important to understand what programs, benefits and initiatives that matter the most to them. Based on past input, we implemented 402 employee engagement initiatives that reached more than 35,000 employees worldwide in 2013.

11,201 employees answered our 2013 Engagement Survey, sharing their opinion on a number of areas including development, compensation, leadership



communication and work-life balance, among others. In 2013, we structured our survey around two main themes – engagement and enablement. These themes allow us to monitor the percentage of our employee population with a deep commitment to our company while also estimating the percentage that feel enabled to perform their job effectively.

## **Highlights**

- Invested approximately USD \$2.9 million in employee training on topics related to health and safety, human rights, ethics, compliance and environmental awareness.
- Continued to raise awareness about the relevant benefits our employees have so that they can take full advantage of what our company offers.

As in previous years, part of our process involves sharing the results with our leaders and local HR professionals. By allowing managers and employees to analyze their data, we are empowering them to take action now and help us identify and define future actions at a global, regional and local level.

Maintaining a highly-skilled, motivated workforce is critical to the success of our worldwide operations. We provide continuous training and development opportunities so employees can enhance their skills and work smarter and safer on the job.

#### **Our Development Offer**

The framework for our employee development efforts continues to be focused on three strategic priorities:

- Building organizational capabilities that contribute to the execution of our strategy.
- Establishing a “value mindset” among employees on how to better contribute to the company and create value.
- Continued adherence to high ethical standards and compliance.

### Enabling Continuing Education

In 2013, CEMEX invested approximately USD \$2.9 million in employee training on topics related to health and safety, human rights, ethics, compliance and environmental awareness. Furthermore, our Learning Management System offers an array of 832 courses and is accessible to over 18,000 employees.

Over the course of the year, approximately 31,000 employees spent an average of 21 hours in instructor-led programs, more than 7,000 spent an average of 2.5 hours on online courses and roughly 2,400 employees put an average of three hours into training programs that combined classroom and online learning. The well-attended training sessions were those related to health and safety, leadership training and building commercial capabilities.

CEMEX supported 591 employees with various scholarship opportunities to support their academic studies. For example, 39 employees in Colombia were able to pursue undergraduate, postgraduate and MBA programs in some of the most prestigious universities in the country and 79 employees in Mexico were selected to participate in a local scholarship to complete their Master's Degree studies. Seven employees participated in the CEMEX USA Educational Assistance Program in which we reimburse up to 90 percent of the cost for registration fees, tuition, lab and course-required textbooks. In total, we invested nearly USD \$1.5 million worldwide to help our employees continue their education and enhance their skills.

**591 employees**  
supported with various scholarship opportunities to support their academic studies during 2013.



### Developing Effective Leaders

To reinforce a culture of leadership, we have well-structured and connected programs – ACHIEVE and Leader to Leader – supported by projects or initiatives that create value to the company and help employees develop their leadership skills. ACHIEVE is designed to help ease the transition from manager to a director role, minimizing the learning curve. Last year, 61 managers participated in the program and were coached by 36 leaders at the senior management level via the Leader-to-Leader program. Moving forward, we aim to develop two more programs for different managerial levels.

Two years after being launched, our Manager Training Program continues providing managers in the organization with a solid platform for building skills to effectively lead and develop their teams. The program is available in all CEMEX geographies and has reached almost 1,400 executives.

In 2013, we introduced institutional training for our sales force through our Commercial Academy. Out of 16 business units, 1,400 participated in last year's Common Commercial Language Training. The second phase of the Academy is under design and will be ready for delivery in 2014.



Succession planning is also critical to leadership development and consistent business operations. We constantly identify key talent based on their performance and learning agility. Special professional development plans are designed for identified individuals to ensure a solid talent pipeline and thus business continuity.

### Promoting Productive Interactions

The relationship between manager and employee is essential to fostering a positive work environment. CEMEX recognizes the importance of these relationships and embarked on an initiative named Career Building. This effort aims to increase communication between managers and employees throughout the year regarding employee career progress, performance and results through a clear framework that includes four one-on-one meetings between supervisors and each of their direct reports. Opening the lines of communication helps align individual objectives to the company strategy, ensure expectations are clear and improve job satisfaction. The four conversations

Almost 1,300 employees were evaluated through our Talent Review processes worldwide.



## Creating a More Flexible, Agile, Efficient CEMEX

As part of our ongoing effort to ensure our continued strength and competitive advantage in the global building materials industry, CEMEX completed our transition to the Accelerated Support Services Transformation (ASSET) program in 2013.

The result of a 10-year strategic agreement with IBM, the ASSET program brings IBM's world-class business process and information technology (IT) services to CEMEX. Finance, accounting and human resources back-offices services, IT infrastructure services and IT applications development and maintenance are all included in ASSET.

With more than 70 service delivery centers spread across five continents and the ability to provide service in more than 40 languages, ASSET gives us access to IBM's worldwide expertise to accelerate and replicate innovative practices in our business units. It also enables us to deliver better customer service, increase process quality, sustain cost improvements and enhance business agility and scalability.

ASSET impacted around 3,100 CEMEX employees. Formal consultation with Workers Councils/Union representatives and authorities was held where applicable. Numerous individuals remained CEMEX employees, but experienced a shift in their role from managing people to managing services. Others were presented with competitive offers to become employees of IBM or their subcontractors, which the majority voluntarily accepted. Unfortunately, several employees no longer had a role within the organization. In these cases they were provided an extensive notice period, given opportunities to apply for open positions within the company and paid an appropriate severance if leaving the company as required by law. Nearly 150 people were able to secure new jobs or maintain their employment with CEMEX. Ultimately, we were able to retain and transfer significantly more employees than originally expected.

CEMEX expects to generate close to USD \$1 billion in savings during the life of the agreement.

are aligned to specific business cycles and our global HR process (e.g. Objectives Definition and Evaluation, Talent Review, Succession Planning, etc.) and are supported by our interconnected Human Capital Management system.

From a professional development perspective, all employees at CEMEX are evaluated and expected to receive feedback regarding their performance and goals. In 2013, 18,891 performance evaluations were documented with our Performance Assessment tool. For employees and operators not registered in the global tool, managers provide career development and performance reviews. Almost 1,300 employees were evaluated through our Talent Review processes worldwide.

## CEMEX Invests Responsibly

Responsible investment aims to acknowledge the relevance to the investor of environmental, social and governance (ESG) factors alongside financial objectives. It recognizes that effective research, analysis and evaluation of ESG issues is a fundamental part of assessing the value and performance of an investment considering a mid and long-term approach. CEMEX is the first Mexican Company to invest a fraction of its employee pension fund on the CI Bank Sustainable Fund, which is the first fund linked to the Mexican Stock Exchange Sustainability Index. Furthermore, CEMEX is evaluating the possibility of carrying out similar investments in other countries in which it operates.

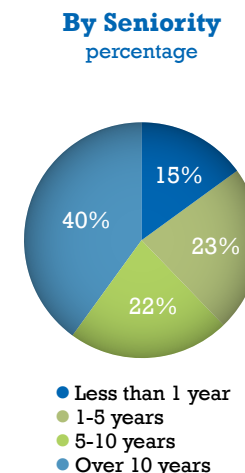
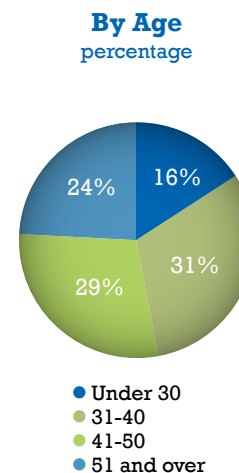
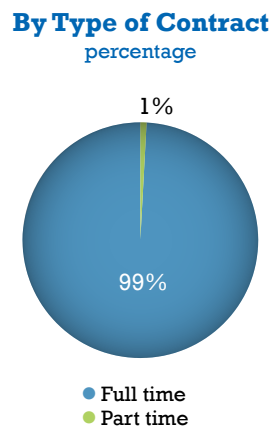
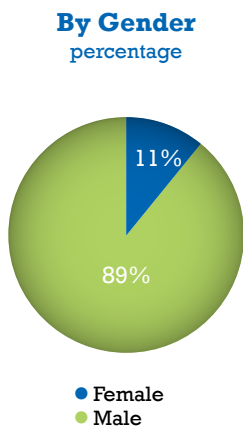
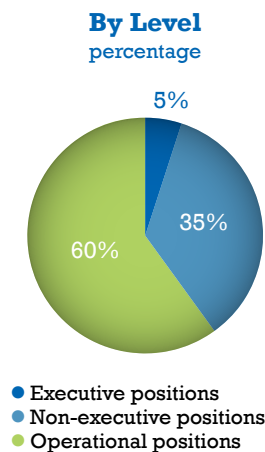
## Embedding Sustainability in our Trainings

CEMEX has developed a user-friendly online learning tool to help top and middle management gain a solid understanding of sustainability. The Leadership in Sustainability Training Program covers key issues impacting executives' lives and the sector in which CEMEX operates, as well as the implications for how we manage and run our operations and provide value to customers. In 2012, 319 executives completed the certification in Egypt, Poland, Switzerland and UK, and in 2013, 376 more were certified in Mexico.

## Competitive Compensation Schemes

CEMEX offers competitive compensation designed to support the present and future well-being of our employees. Employees in all geographies receive all benefits stipulated by local legislations and nearly 90 percent of our global workforce has health and insurance benefits beyond those required by local law, including those in the Philippines, Bangladesh, Thailand, the Dominican Republic, Guatemala, Haiti, Nicaragua, Peru and Mexico, among others. Additional benefits offered in these countries include varying types of bonuses and allowances. For example, in Haiti and the Philippines we offer food allowance and in Bangladesh we provide transport allowance. In addition, approximately 50 percent of our global workforce has pension scheme benefits above local requirements. We strive to raise awareness of relevant benefits so employees can take full advantage of all our company has to offer.

## Our Global Workforce



## Challenges Ahead

- Continuing to improve employee engagement.
- Ensuring we have talented employees with the right capabilities to face the challenges of today and tomorrow.

**70%**  
of senior management positions are filled by local staff.



satisfied customers  
and responsible

# suppliers



2,000

suppliers involved in 16  
countries in our Supplier  
Sustainability Program.

We understand our responsibility extends throughout the entire value chain for our products and that, if we are to develop sustainable products and services, create a low-carbon economy and contribute positively to society, we must have responsible suppliers and satisfied customers.

We strive to create value for our customers and to create more sustainable systems by focusing on vertically integrated building solutions rather than separate products, and we constantly adapt to our customers' needs through innovative products and financing arrangements, ensuring that sustainable choices make sound business sense.

In addition to our many in-person touch-points with customers, 79 percent of our countries conducted customer satisfaction surveys in 2013. Additionally, we implemented more than 170 initiatives to identify needs and concerns. Such initiatives include newsletters, loyalty programs, sales force skills development, improvement of customer service

## Highlights

- 79 percent of our countries conduct customer satisfaction surveys.
- Invited 80 percent of our global suppliers to evaluate their corporate social responsibility (CSR) performance with a third-party evaluator.
- Aided the economic development of communities by establishing 95 percent of CEMEX suppliers as locally based.



standards and service centers, among others. In Ireland for example, CEMEX developed an iPhone application for customers including product calculators, sales locations, product documents and best practices.

We continue to focus on improving the satisfaction of customers in our industry through the following:

- Making construction easier for customers to plan for, execute and manage.
- Providing knowledge that gives customers and trades people the confidence to build.
- Enabling an open and transparent platform for matching skilled help with construction projects.

### Promoting Supplier Sustainability

In order to maintain a focus on sustainability, CEMEX needs to ensure that our supply chain partners share our commitment and belief in sustainability. In its fourth year, the Supplier Sustainability Program continued to help us to promote and recognize the importance of sustainable practices across our supply chain. It also gave us valuable local perspectives and unique industry expertise to help us improve the sustainability of our sourcing and procurement practices.

# 202 suppliers

from Czech Republic and Panama reached with the Sustainability Survey in 2013.

Since the Supplier Sustainability Program was created in 2010, 2,000 suppliers in 16 countries have participated. In 2013, we reached 202 suppliers from Czech Republic and Panama and invited them to participate in the survey. Additionally, 68 percent of countries where CEMEX operates,

## The program consists of four key phases:

- **Surveying suppliers** regarding social, environmental, supplier policies and financial topics.
- **Enacting a communication campaign** based on the survey results.
- **Reinforcing awareness** of specific policies that incorporate aspects of sustainability including human rights, labor and antitrust, as well as the [Code of Conduct when Doing Business with us](#), based on our CEMEX Code of Ethics and the UN Global Compact 10 principles.
- **Preparing a scorecard** to track and reward sustainable suppliers.

representing approximately 65 percent of CEMEX spend, have a formal program in place to train suppliers and contractors on social, environmental and health and safety issues.

We have also included Human Rights, Labor, Antitrust and Sustainability clauses into our contracts and purchase orders. Currently, 78 percent of countries where CEMEX operates use formally recognized social, environmental, health and safety criteria in the selection of suppliers and contractors and 91 percent ask for minimum environmental requirements.

Additionally from the countries where CEMEX operates:

- **87 percent** check for compliance of key subcontractors with the company's health and safety standards.
- **52 percent** support suppliers in implementing health and safety management systems.
- **61 percent** have a formal policy or common practice to preferring locally based suppliers.

## Providing Third-Party Validation

In 2013, we worked with a sustainability supply management firm that operates a collaborative platform for monitoring the sustainability performance of suppliers. CEMEX invited 80 percent of our global suppliers to participate in order to evaluate their Corporate Social Responsibility (CSR) performance. More than 50 percent were confirmed to have a structured and proactive CSR approach and four received an Advanced score, signifying a higher level of engagement and reporting. Those that scored as Advanced were:

- Daimler AG
- Hewlett Packard Company
- Mondi Group
- Volvo Truck Corporation

We would also like to recognize ABB Group, Fives Group, MAN Group, Smurfit Kappa Nervion SA, Kao Chemicals Europe SL, FLSmidth MAAG Gear AG, Smurfit Kappa Carton de Colombia, Tolko SA and Total SA for their distinguished performance.



Germany and France successfully concluded their pilots, and in 2014 we will continue to work with a third-party company to expand the number of evaluated suppliers across the globe. We are currently working on defining a target group of suppliers in all the countries in which CEMEX operates to evaluate their environmental, social and governance performance now and down the road.

#### **Sourcing Products and Services Locally**

CEMEX embraces local sourcing as a catalyst for enhancing the lifecycle impact of our products and improving the economic wellbeing of communities. By sourcing locally, we help create jobs and promote the development of new skills among local workers, stimulating economic activity and making the community more attractive to other companies in need of skilled labor. In 2013, 95 percent of CEMEX suppliers were locally based.



## **Challenges Ahead**

- Surpassing our customer's needs and expectations.
- Defining a target group of suppliers in all the countries in which CEMEX operates to be evaluated on environmental, social, economic and governance performance.
- Identifying our suppliers' opportunity areas to improve their sustainability performance and help them carry out corrective actions when necessary.

#### **Supporting Small and Medium Enterprises (SMEs)**

In partnership with the Monterrey Institute of Technology and Higher Education (ITESM), CEMEX has developed [Empresarse.com](http://Empresarse.com), a web based platform that helps raise awareness and provides training to our suppliers, clients and the community in general on sustainability-related topics and best practices. It also offers documents, background information and auto diagnostics in a number of business areas including accounting and finance, marketing, sales and corporate governance, among others. In 2013, nearly 13,000 users benefited from our courses, tools and materials.

#### **Listening to our Suppliers' Ideas**

In 2013, we invited approximately 400 main suppliers serving Mexico, the Czech Republic and the Philippines to share innovative ideas that we can implement into our operations and use to improve our business performance. The best idea of each category will be selected, implemented and rewarded. The winning ideas will be widely communicated within CEMEX and recognized in external media.

delivering a high-impact  
**social approach**  
to empowering communities



**97%** of our operations developed community engagement plans.

CEMEX is more than just a leading global manufacturer of building products. We have a deep commitment to addressing the social needs of our local communities and strive to be perceived as a proactive and good neighbor.

Wherever we operate, we work hard to build mutually beneficial relationships based on ongoing dialogue, transparency and trust. We also build strategic alliances with key stakeholders such as academia, non-governmental organizations and other corporations to enhance our ability to empower our communities through new models of social business, promoting social entrepreneurship, providing education and supporting people in becoming more self-sufficient.

#### **Developing Sustainable Communities**

CEMEX actively participates in the development of communities by carrying out project proposals that are relevant to the unique concerns of each one of them.

### **Open Communication with Stakeholders**

In the U.S., our cement operations' community engagement plan is managed at the plant level by the Stakeholder Outreach Teams which develop strategies to enhance CEMEX's reputation among key stakeholders in our local communities. The plants work closely with the Communications Department to develop brochures and plant-specific fact sheets and to plan activities that engage community members. A performance summary of each cement plant's involvement in stakeholder outreach activities, called the Stakeholder Outreach Report, is developed on a quarterly basis for cross sharing community outreach events and monitoring, reviewing and assessing our stakeholder outreach performance.

All projects included in this quarterly report must align with one of the following key categories: biodiversity programs, community outreach, hosting tours and education for employees, retirees, customers and vendors.

To learn more about CEMEX's community and stakeholders relations organizational structure please visit our [website](#).

## **Highlights**

- **89 percent of our operations have mechanisms in place to address community complaints.**
- **Established volunteering programs in 67 percent of the countries in which we operate, implementing approximately 114 initiatives.**

Across the countries in which we operate, we promote different initiatives that encourage teamwork, environmental awareness, infrastructure development, education and diversity, among others.

Of our operations, 97 percent have community engagement plans in place and 89 percent of them have a mechanism in place to address community complaints.

At CEMEX, we regularly carry out open doors days in our operations across the world. This practice allows our neighbor communities, authorities, business partners and friends to visit our facilities and better understand the way we operate. It also provides them with a space to be aware of our environmental protection projects, our social initiatives and to raise questions. Additionally, it serves as an important mechanism for CEMEX to learn about our communities' concerns and develop a proactive approach to address them.



### Social Entrepreneurship

In addition to our inclusive businesses designed to help promote self-construction, CEMEX strives to encourage social entrepreneurship through alliances.

In 2013, CEMEX received the Corporate Citizen of Americas Award for our Assisted Self-Construction Integral Program in the public safety category. The Foundation for the Americas is a nonprofit organization established in 1997, affiliated with the Organization of American States (OAS). They created the Awards for Best Corporate Citizen of the Americas to recognize companies that have started innovative social businesses that provide benefits to the community in which they operate and can serve as a model of socially responsible practices and actions for other companies.



### Creating a Platform for Dialogue

CEMEX Poland conducted a series of 19 meetings at its two cement plants throughout 2013, engaging with 1,100 stakeholders including employees, community members, NGOs and more.

Representatives from local communities, authorities, NGOs, customers and suppliers were invited to share their opinions about CEMEX and other issues relevant to the local community. External independent consultants from PwC conducted the sessions, which followed the AA1000 Stakeholder Engagement Standard as outlined by corporate responsibility and sustainable development organization AccountAbility.

CEMEX is the first building products company in Poland to organize stakeholder dialogues according to the AA1000 standard. Plants in other countries including the Dominican Republic are taking a similar approach to help better understand local community needs and foster stronger relationships as a good neighbor.

To encourage the growth of social and inclusive businesses within other companies, CEMEX signed an agreement with ASHOKA, the largest network of social entrepreneurs worldwide. In addition, we teamed with Tecnológico de Monterrey to create an award for the best business plan submitted by social entrepreneurs. Winners will receive coaching from ASHOKA to materialize their project.

CEMEX also recognizes the immense value education plays in creating opportunities in low income communities. We are actively involved in several programs to bring education and skills training to the people living around our facilities.

In 2013, we continued our partnership with BANAMEX, a subsidiary of Citigroup and one of Mexico's largest banks, to bring curriculum regarding finances and money management to the communities surrounding our cement plants in Mexico. Among the courses offered in 2013 were planning, basic account budgeting, saving and investing, personal finance and alternatives for managing credit. More than 500 people benefited from the curriculum in 2013 with 30 workshops delivered in 14 locations nationwide.

## Empowering Diverse Groups

### Empowering Women

ANSPAC, a non-profit organization led by women associated to CEMEX, provides technical training and self-help guidance to empower other women living near our cement plants to their communities. In 2013, more than 1,750 women in four countries successfully completed the eight-month training program, enhancing their craft, cooking, health, safety, family values and self-worth skills. The alliance seeks to promote the comprehensive improvement of the individual, based on the conviction that only those who continually develop their human potential can build up their family and communities for a new and better world. We are looking to expand the initiative to more countries in the future.

**1,750**  
women in  
four countries  
completed a  
training program  
to develop human  
potential in their  
communities.

In 2013, CEMEX joined the United Nations Foundation's Global Alliance for Clean Cookstoves, a public-private partnership working to foster the adoption of clean cookstoves and fuels in 100 million households globally by 2020. Nearly three billion people in the developing world cook food and heat their homes with traditional cookstoves or open fires, contributing to millions of premature deaths, a myriad of health risks and environmental concerns including deforestation and air quality. By joining the Alliance, we are working to bring more clean cookstoves to Latin America and Asia, creating better living conditions for vulnerable families, preventing toxic smoke emissions from polluting the environment and contributing to the overall wellbeing of their communities.

In Mexico, with the aid of HELPS International, Stove Team International and the Mexican government, CEMEX will support the production and adoption of clean cookstoves for more than 100,000 people. We are also working to bring these safer, more efficient stoves to households in Guatemala through the Maya Relief Foundation and are exploring opportunities to provide this resource to other Latin American countries.



### Empowering Youth

CEMEX continued working with the New Employment Opportunities (NEO) Initiative. The NEO Initiative brings together public, private and civil society leaders in Latin America and the Caribbean to provide youth with high-impact, market-relevant job training and placement services. The funding for the plan was approved late in 2013 with implementation slated for 2014. In Nuevo Leon, Mexico, 32,000 youth, at least 50 percent being women, will benefit from this partnership.

Also as part of our commitment to improve the lives of those at the bottom of the pyramid, CEMEX has been partnering with USAID, the lead U.S. government agency working to end extreme global poverty and enable resilient, democratic societies to realize their potential.

In 2013, CEMEX joined forces with USAID to train youth in construction and business management to provide critical skills training and enable entrepreneurship to meet the demand caused by housing backlog while improving their living situations. We conducted our first pilot project with 316 young people in situations of risk, high vulnerability and high crime rates in Monterrey and Nuevo Leon in Mexico and Camino Verde in Tijuana, Baja California.

### Empowering Indigenous People

CEMEX, in collaboration with Tecnológico de Monterrey, created a model for the sustainable development of communities. The model consists of three main phases: a participative diagnostic, where information gathering, observation and opportunity analysis takes place; validation of needs and priorities, where project objectives structures are outlined; and finally, communication and implementation, where the proposed actions and funding are discussed with local authorities and community leaders and monitoring and evaluation takes place. In 2013, CEMEX tested this model in the Mexican indigenous community of Magdalena Peñasco in the State of Oaxaca with 56 projects identified to benefit approximately 3,700 people. We aim to replicate this model throughout numerous CEMEX countries with at-risk communities.

### Volunteering

CEMEX places significant value on supporting volunteer activities that benefit the community or environment.



Of the countries in which we operate, 67 percent have volunteering programs in place, together implementing approximately 114 initiatives. For example, in 2013, a program to promote health awareness in schools, an earthquake awareness program, a community medical camp and a health day were all held in Bangladesh, and in Israel our employees renovated an aging synagogue, refurbished a school and its surroundings and participated in the globally recognized Good Deeds Day. In addition, in Mexico, almost 9,000 employees completed more than 45,000 hours in a variety of volunteering programs. Furthermore, in 2013, CEMEX established a worldwide fund to receive voluntary employee donations for hu-

## Challenges Ahead

- Encouraging communities' sustainable development through high-impact initiatives that result from collective interdisciplinary work from governments, businesses and communities.
- Leveraging our strengths and partnerships to generate initiatives that help diverse groups develop skills to build new growth opportunities.
- Increasing volunteer programs available to employees as well as standardizing a global platform to promote these programs across the company.

manitarian relief efforts in the Philippines after Typhoon Haiyan. CEMEX matched every employee donation two for one and raised USD \$500,000 combined. CEMEX is now making sure that its contribution helps the families who need it most. Initiatives underway include a housing project with Gawad Kalinga, a rebuilding effort for Kawit National High School, the construction of a Community Livelihood Training Center and the creation of cement sculptures to attract marine life back to the coast of Northern Cebu, among others.

The Tarahumara Foundation, a nonprofit that has promoted the development of indigenous communities in the Tarahumara Mountain Range in Northern Mexico for 20 years, is yet another example of an initiative that received contributions from CEMEX employees in 2013. Through its programs focused on child nutrition, education, food and water security, the Foundation seeks to reverse structural problems that have kept the indigenous communities in poverty and social exclusion. Four Tarahumara communities received aid from CEMEX.

CEMEX published a position paper on our efforts to empower communities in 2013. It is available in the Media Center on our [website](#).

# GLOBAL

## and local alliances

Through relationships with global and local organizations including NGOs, trade associations, educational institutions and intergovernmental organizations, we leverage our knowledge and resources and promote our sustainability priorities and vision. These include:

Partner	Objective	Activities in 2013
BirdLife International	Address biodiversity challenges in CEMEX sites worldwide.	Created a standard for the development of Biodiversity Action Plans (BAPs). Published "The CEMEX Approach to Biodiversity Conservation", a comprehensive publication that provides guidance on the integration of biodiversity conservation into daily operations.
Cement Sustainability Initiative (CSI) – World Business Council for Sustainable Development (WBCSD)	Exchange best practices and develop sustainability-related management and policy tools among leading cement companies.	Continued to work on the development of a Biodiversity Management Plan and ESIA Guidelines. Continued to work on the development of water accounting protocol, the definition of relevant water KPIs and on the Water Footprint Tool for the cement industry. CEMEX is contributing to both CSI documents by sharing its internal guidelines on biodiversity actions plans and water management and reporting, developed with BirdLife International and IUCN respectively.
Clinton Global Initiative	Bring together businesses, governments, civil society and NGOs to equip Latin American and Caribbean vulnerable youth with marketable skills that will help them make a successful transition from under or un-employment to profitable, dignified work with growth opportunities.	Through this commitment we will offer opportunities to 1 million vulnerable youth by providing them with high-quality training and job placement services that address the needs of local labor markets.
Earth Engineering Center (EEC) of Columbia University and The City College of New York	Enhance understanding of the role alternative fuels play in society and the environment.	Established collaboration agreement with the EEC for a year-long study of the life cycle effects of alternative fuels in cement manufacturing, focused on waste combustion technologies implemented in CEMEX kilns in the United States and Mexico.
European Parliament Intergroup on Climate Change, Biodiversity and Sustainable Development	Join members of the European Parliament from all political groups and Parliamentary Committees to find sustainable solutions to environmental, social and economic issues.	Participated as a speaker and panel member in a European Parliament session to discuss raw materials and resource efficiency, showcasing the industrial ecology work CEMEX and the cement industry is doing.

Partner	Objective	Activities in 2013
International Union for Conservation of Nature	Identify CEMEX's water-related material issues in order to define a corporate strategy, work to close identified gaps, mitigate risks and share water-related best practices. Also, conclude phase one of the water footprint project in order to better assess and understand CEMEX's water-related challenges and opportunities.	<p>Implemented the methodology we jointly developed to improve our water management and better address water risks facing our business.</p> <p>Launched our corporate water policy which defines our global strategy for responsible water management and acts as a framework for the development of local water conservation and efficiency strategies.</p> <p>Drafted a new corporate water approach that will help our operations worldwide better address the risks associated with water in the local environment.</p>
MIT Concrete Sustainability Hub <sup>1</sup>	Analyze and improve sustainability of concrete.	<p>Continued to work on improved models to understand and quantify the advantages of rigid concrete pavements over asphalt in terms of fuel consumption.</p> <p>Worked to develop tools that allow for the quantification of concrete's hazard resistance in the evaluation of competing designs.</p>
National Geographic and Earth in Focus	Develop Publishing Partnership for the Conservation Book Program.	Launched the first edition of the new Nature Series, "Sublime Nature: Photographs That Awe and Inspire", to celebrate human connections to our natural world.
Shift	Implement the UN Guiding Principles on Business and Human Rights.	We engaged shift to help us implement the UN Guiding Principles on Human Rights. In addition, we began developing a comprehensive Human Rights Policy that will expand on our existing programs and reporting mechanisms to provide a more robust approach. This policy will be implemented in 2014.
Transparency Register Europa	Provide citizens with direct and single access to information about who is engaged in activities aimed at influencing the EU decision making process, which interests are being pursued and what level of resources are invested in these activities.	Officially registered with the Transparency Register, demonstrating our commitment to maintain full transparency in our operations and allowing us to receive alerts each time the Commission publishes a new roadmap or launches a public consultation in our field of interest.
United Nations Foundation	Develop and provide sustainable solutions for the bottom of the economic pyramid in alliance with governments, social entrepreneurs, universities and NGOs.	Joined the UN Foundation's Global Alliance for Clean Cookstoves, a public-private partnership that seeks to save lives, protect the environment and improve the quality of life of local communities by creating a thriving global market for clean and efficient household cooking solutions.
United Nations Global Compact	Shape global business practices, particularly in the field of climate change, beyond the scope of our own organization and sector.	<p>Our CEO and Chairman Lorenzo Zambrano renewed our commitment to <a href="#">UNGC and its principles</a>.</p> <p>Maintained active membership of the Caring for Climate Steering Committee initiative and the Advisory Group on Supply Chain Sustainability.</p> <p>Members of the UN Global Compact's Steering Committee develop a responsible business best practice toolkit for the land, real estate and construction sectors.</p>
Urban Infrastructure Initiative (UII) of the WBCSD	Develop and employ new models of public-private partnership in order to make the world's cities more sustainable.	Worked in the city of Merida, Mexico to help the city identify key issues they face in realizing their sustainability visions and developed plans which will translate this vision into reality.

<sup>[1]</sup> Through the Portland Cement Association and The Ready Mixed Concrete Research and Education Foundation.

embedding  
**sustainability**  
in our governance  
and corporate

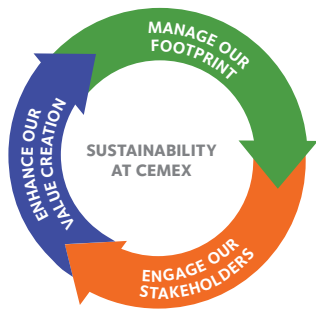
# CULTURE

## A Solid Sustainability Vision

We recognize that as the world's largest concrete producer and leading supplier of building solutions CEMEX plays an important role in supporting the development needs of society in a resource-constrained world. We also embrace our responsibility to optimize our environmental footprint and improve the quality of life of the communities in which we operate.

Our sustainability efforts provide growth opportunities, reduce our costs, strengthen our license to operate and enhance the value we deliver to stakeholders. We continue to evaluate our approach and priorities to assure we are fully aligned with the material issues that have the greatest impact and deliver the most value.





## CEMEX's Sustainability Model

We have three main sustainability objectives:

**Enhance our Value Creation:** CEMEX aims to deliver the innovative, high-performing products, services and solutions that our resource-constrained society requires in order to create a growing and profitable low-carbon economy. By fulfilling the needs of the construction sector in its efforts to adopt more sustainable operating practices, we aim to create long-lasting competitive advantages.

**Manage our Footprint:** CEMEX strives to minimize the ecological impacts of our operations in the communities in which we operate. Such impacts are carefully identified and measured so that we can continuously reduce our footprint to the lowest level that is both technically and economically feasible. We also have a robust pipeline of projects that provide carbon offsets to further reduce our net impact.

**Engage our Stakeholders:** CEMEX fosters positive, long-term relationships with key stakeholders to address the pressing needs and concerns of society. With highly committed and empowered employees, CEMEX closely collaborates with a broad variety of institutions that allow us to complement our core competencies and enable us to generate social benefits that contribute to the strengthening of local communities.

### Our Seven Priorities

The definition of these priorities has followed a structured process of both internal and external consultation where we have measured the impact that the main sustainability issues have on our stakeholders and on CEMEX operations. Our priorities are aligned to each of our three objectives and with our stakeholders' concerns which were identified through materiality analysis exercises.

#### Enhance our Value Creation:

- 1 Lead in Sustainable Construction
- 2 Affordable Housing & Infrastructure

#### Manage our Footprint:

- 3 Enhance our Carbon Strategy
- 4 Excellence in Environmental & Biodiversity Management

#### Engage our Stakeholders:

- 5 High Priority to Health & Safety
- 6 Strengthen Local Communities
- 7 Partnership with Key Stakeholders

This stakeholder-centric approach is critical because when our stakeholders prosper, our company prospers. This philosophy forms the basis for our vision to be the company of choice for:

- **Our People:** *We aim to be the employer of choice in our markets.* We seek to provide the most attractive opportunities for employees' personal and professional development.
- **Our Neighbors:** *We are a good neighbor.* We participate with communities openly and directly in order to build trust and address their concerns.
- **Our Business Partners:** *We work to be the business partner of choice.* We seek to help our suppliers and customers build their businesses and to create enduring value for our shareholders.
- **Our World:** *We are a good global citizen.* As a global company, we work to contribute to international efforts to address some of the world's most complex challenges, including climate change, access to housing and community infrastructure, and the conservation of biodiversity.

By building strong long-term relationships with our key stakeholders, we increase our responsiveness to their needs and concerns, find new ways to reduce our impacts, contribute to sustainable development worldwide and, ultimately, make CEMEX a more competitive and profitable enterprise.

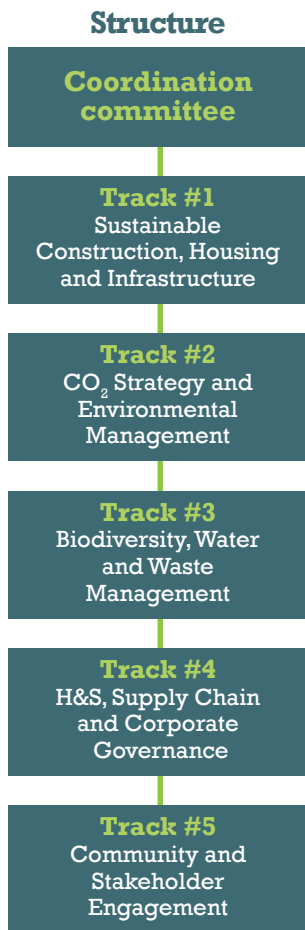
### Evolving to a New Model

In the first quarter of 2013, CEMEX sent surveys to more than 11,000 stakeholders across all six CEMEX Regions, including employees, customers, analysts, suppliers, investors, community leaders, government officials and NGO representatives. The survey was translated into seven languages and we received more than 1,500 responses, out of which we defined a new Materiality Matrix that more accurately reflects the current issues and concerns of our stakeholders.

In the beginning of 2014, with the support of our Executive Committee, we initiated a review and revision of the CEMEX Sustainability Model and Priorities. This exercise was conducted through the Sustainability Functional Network. The effort was organized around a Coordination Committee, supported by five topical tracks that brought together more than 80 CEMEX experts representing all regions and related areas to provide ongoing input into the development of a new Sustainability Model, updated priorities, core KPIs and 2020 Targets that are in line with the global sustainability trends impacting our company and with our Materiality Analysis.

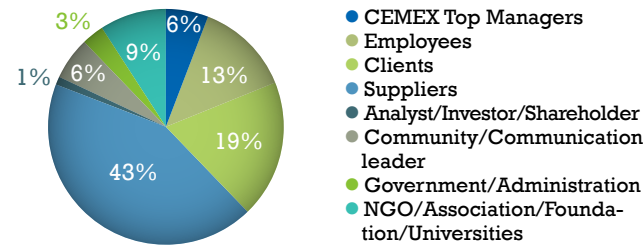
The new model will update our sustainability objectives, priorities and KPIs:

- Addressing the most relevant challenges facing the world and CEMEX as a global company.
- Focusing on the most relevant issues at hand.
- Placing a special emphasis on all of our social programs given the high impact we have on developing countries.
- Giving specific priority to governance and ethical standards on how we manage the company.
- Introducing supply chain as a relevant element in our sustainability strategy, in line with global trends and expectations.



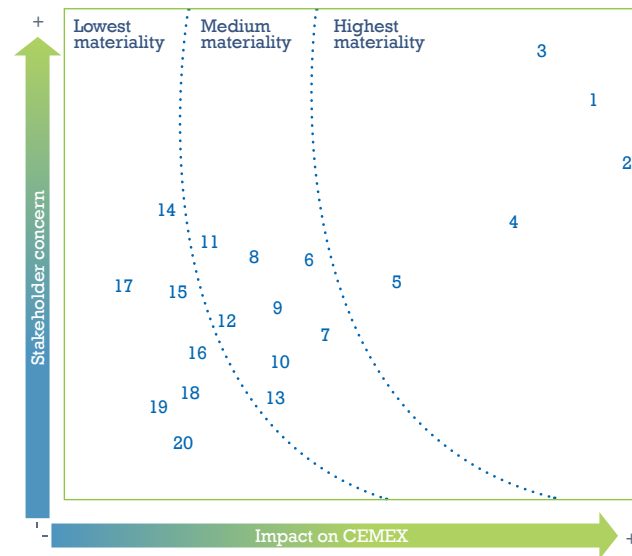
### Stakeholders' Representation (%)

1500 completed interviews



Results weighted according to four main stakeholders categories (25% each one): clients, suppliers, employees and community & others.

### Materiality Matrix



1. Economic value creation
2. Customer engagement & satisfaction
3. Health and safety for our employees, contractors & clients
4. Climate change & CO<sub>2</sub> emissions management
5. Renewable & alternative energy sourcing
6. Corporate governance & transparency
7. Employees relations & engagement
8. Products, services and solutions for high energy efficiency
12. Community engagement and development
13. Risk management
14. Quarry rehabilitation, biodiversity preservation and ecosystems management
15. Responsible and sustainable management of the supply chain
16. Products, services and solutions for low income families
17. Water use and recycling
18. Waste generation, disposal and recycling
19. Transport and logistic optimization
20. Environmental incidents management

The new model, updated priorities, core KPIs and 2020 targets will be released in the second half of 2014. We expect this exercise to serve as a strong guidance to sharpen our sustainability efforts and as a robust basis for our future reporting exercises in which CEMEX expects to report under the GRI 4 framework.





strengthening business

# ethics,

compliance and transparency

**250** campaigns launched throughout the company to foster expected behaviors and promote our reporting mechanism – ETHOSline – as well as our Policy Center.

Our CEMEX Code of Ethics and Business Conduct (Code of Ethics) outlines the values and principles all CEMEX employees are expected to uphold. Collaboration, Integrity and Leadership are the values that provide the foundation for all of our actions. Available at our [website](#) and Intranet, new employees are required to read and sign our Code of Ethics as part of our on-boarding program.

In 2013, we amended our Code to incorporate specific guidance regarding money laundering. We also launched more than 250 global communication campaigns to provide information and raise awareness on important ethics and human rights topics including conflicts of interest, giving/receiving gifts, harassment and theft, among others, and to promote our reporting mechanism, ETHOSline, as well as our Policy Center.

**CEMEX Reporting Line- ETHOSline**

When questions arise or a possible violation occurs related to ethics, governance and compliance, all CEMEX employees

**Setting the Tone for Ethical Behavior**

In 2013, CEMEX Country Managers in 28 countries hosted various events in which they and their direct reports renewed their commitment to high ethical standards by once again signing our Code of Ethics. Approximately 1,750 employees attended the events, demonstrating CEMEX leaders’ strong commitment to high ethical standards and helping set the tone for continued enforcement and compliance throughout the organization. Related communication campaigns followed, expanding these efforts to reach more than 25,000 employees. Countries that did not participate in 2013 will host similar events during 2014.

have a safe place to turn. ETHOSline provides a confidential way to ask questions or raise concerns to ensure our Code of Ethics is being upheld throughout the company. Available 24 hours a day, seven days a week, employees can send comments, request advice and submit complaints through our ETHOSline website, by telephone or email. The service is managed by a third-party that gathers the incident information, documents concerns, and relays the information to CEMEX.

In 2013, there were 324 incidents reported by employees related to a violation to our Code of Ethics, the law or other policies. Of these incidences, 300 have already been closed, 178 of which were found true and actions

**Highlights**

- **Conducted more than 21,000 employee trainings related to different topics covered in our Code of Ethics and Business Conduct.**
- **Engaged the assistance of Shift, an independent non-profit center, to advise and support us throughout the formal implementation of the UN Guiding Principles on Human Rights.**

**Our CEMEX Code of Ethics Addresses:**

Relations with Stakeholders

- Employee and Human Rights
- Fair Dealing with Customers and Suppliers
- Government Relations
- Community Relations

Operations and Activities

- Antitrust Compliance
- Anti-Bribery
- Money-Laundering Prevention
- Conflicts of Interest
- Gifts, Services and Other Courtesies
- Environmental Responsibility
- Political Contributions and Activities

Safety & Security

- Workplace Safety and Health
- Handling Confidential Information
- Financial Controls and Records
- Preservation of Assets

For more about our ethics and compliance policies, please visit our Ethics and Compliance page.

were taken and 24 are still in progress. These incidences included 5 reports involving discrimination, 4 were found false and 1 is still in progress; 42 involving harassment, 22 true and four in progress; and 60 regarding employee relations, 19 of which were determined true and 6 are still in progress. Disciplinary or remedial action was taken for all incidents found to have occurred.

### Ongoing Training & Communication

CEMEX provides regular training and communication about our policies and human rights issues to help ensure our employees have a firm understanding of the values and expectations outlined in the Code of Ethics and Business Conduct.

In 2013, more than 21,000 training sessions were delivered to employees in proper ethical behaviors relevant to their position within the company.

Courses in 2013	Total
CEMEX's Code of Ethics and Business Conduct Refresher	11,003
Safety	2,982
Information Security	2,001
Antitrust	1,956
Anti-bribery	1,637
Workplace Harassment <sup>[1]</sup>	631
Drug & Alcohol Policy	470
ETHOSline	228
Insider Trading	202
Others <sup>[2]</sup>	223
<b>Total</b>	<b>21,333</b>

<sup>[1]</sup> The course covers harassment based on gender, race, ethnicity, age, disability, and other characteristics

<sup>[2]</sup> Values (67), Conflicts of Interest (47), Anti-Money Laundering (30), Other (79)

## Preventing Money Laundering

CEMEX amended the Code of Ethics and Business Conduct in 2013 to incorporate specific guidance regarding money laundering, which is strictly prohibited within the company. CEMEX is committed to never facilitate or support any transaction or activity to conceal the true origin of illicit funds or make it look as though they have been obtained from legitimate activities.

Payments that are prohibited and must be reported via ETHOSline and/or Legal Department include those that are:

- Made or requested in currencies other than those specified in the relevant agreement or invoices.
- Made to or from countries with no business relation.
- Made in cash for large amounts of money or involving third parties or intermediaries with no apparent or clear role in the transaction.

### Anti-Corruption & Anti-Bribery

CEMEX abides by principles of fair trade and competition and we do not tolerate price-fixing, market allocation, predatory pricing or other illegal market practices. We also have zero tolerance for bribery in any form. In addition to our Code of Ethics, we further communicate our expectations and set global standards through the following company-wide policies, which can be found on the CEMEX website: [Anti-Bribery/Anti-Corruption Policy](#), [Antitrust Compliance Policy](#) and [Insider Trading Policy](#).

In 2013, there were no reported incidents of corruption or bribery to government officials. More than 1,600 training courses were conducted with employees to ensure they understand and identify behavior that does not comply with our principles. ETHOSline is offered as a safe and confidential tool for employees to ask questions and report potential violations related to market practices.

To further ensure employees are acting in a manner consistent with our values, CEMEX Compliance Legal Department conducted 125 internal legal audits (dawn raids) directed to executives of sensitive business areas in numerous countries in 2013. The audits addressed compliance matters including corruption and antitrust, among other topics. Our annual compliance program is mainly directed to countries classified by Transparency

International as medium or high-risk countries for perceived corruption in which CEMEX is considered a strong market participant.

We annually execute the following compliance mechanisms:

- Online compliance training through ETHOS.
- Online consulting of policies through ETHOS.
- On-site compliance legal trainings directed by the Chief Compliance Officer and/or in-house, local or external legal counsel.
- Legal audits (dawn raids) performed by Chief Compliance Officer and/or in-house, local or external legal counsel.
- Third party certification
  - > Anti-bribery Letter
  - > Anti-bribery Clause in our agreements
- Support review of countries and individuals in black list and due diligence to third parties from external systems.
  - > World Compliance website
  - > "Securitame" due diligence



## Human Rights

The International Bill of Human Rights and ILO Core Conventions identify a set of internationally-recognized human rights encompassing a wide range of issues including health, labor relationships, equality, compensation and association. CEMEX is committed to supporting and respecting these human rights. We proactively work to ensure our own practices, as well as those of our suppliers, partners and others within the value chain, respect the rights of individuals and the communities in which we operate.

CEMEX is a signatory member of the United Nations Global Compact, a strategic policy initiative for businesses that are committed to aligning their operations and strategies with 10 universally accepted principles in the areas of human rights, labor, environment and anti-corruption. We are also members of Foro Soria 21, an international organization focused on social ethics and values, and we embrace the UN Guiding Principles on Business and Human Rights, also referred to as the "Ruggie Framework".

To help us formally implement the UN Guiding Principles on Business and Human Rights we sought assistance from Shift, an independent, non-profit center for business and human rights practice whose team of experts was directly involved in shaping and writing the UN Guiding Principles. We have started developing a framework that maps out all of the key areas involved, defines responsibility and identified potential next steps. We also began developing a comprehensive Human Rights Policy using the three pillars that form the foundation of the UN Guiding Principles – Protect, Respect and Remedy. The new policy will expand on existing programs and reporting mechanisms to provide a more robust approach and will be rolled out in 2014.

## CEMEX

**is a signatory member of the United Nations Global Compact; we are also members of Foro Soria 21 and we embrace the "Ruggie Framework" on Human Rights.**

## CEMEX Operations in Palestinian Occupied Territories

CEMEX was highlighted for our business in the Occupied Territories by U.N. Special Reporter Richard Falk in his 2012 “Report of the Special Rapporteur” on the situation of human rights in the Palestinian territories.

CEMEX Israel ready-mix operations located in Occupied Territories (Mishor Adumim, Mevoh Horon and Atarot, in particular) operate in accordance with these relevant permits and licenses. Much of the facility’s concrete production is delivered to Jerusalem where it is used for residential and infrastructure projects, meeting the demands of all local communities, regardless of race or religious practice. Additional projects in these areas supplied materials to the United Nations Relief and Works Agency (UNRWA) for Palestinian refugees in the Near East and provided ready-mix concrete to schools, residential and water infrastructure projects for the Arab residents of East Jerusalem.

Through Lime & Stone Co., CEMEX partners with Kfar Giladi Quarries which exclusively operates the Yatir quarry. CEMEX is not involved in the operation or management of the quarry where production, operations, logistics, sales, etc. are managed exclusively by the local partner. The quarry operates under the permits issued by the Civil Administration in Judea and Samaria and royalties on the quarrying activities are paid to these authorities. Much of the quarry’s production is sold to Palestinian building contractors and to customers living in the Judea and Samaria area.

CEMEX strictly applies a policy of compliance with all human rights, international and local laws, regulations, standards and other legal provisions in every country in which we operate.

CEMEX Israel is a clear example of this, following all relevant international laws and provisions as well as the contents of the existing local agreements between Israel and the Palestinian Liberation Organization (PLO) regarding the Occupied Territory, namely the treaty signed in Oslo in 1993.

CEMEX, as a global leader in building solutions, has the utmost concern for sustainability, environmental protection and respect for human rights. In 2004, CEMEX joined the “UN Global Compact Group” and has been a signatory member ever since then, indicating our strong support and compliance of the UN Global Compact’s 10 principles and values included therein.



### Diversity

We forbid all forms of discrimination including, but not limited to, race, creed, sex, marital status, political opinion and age and enforce a strict Diversity and Equality Policy.

We continue to look for ways to promote diversity of gender within our population and recognize the importance of supporting women in the workforce. To date, we have initiatives and programs for women in place in approximately 50 percent of our operating countries. The support offered varies from country to county and ranges from special development opportunities and flex time to private breastfeeding facilities.

We are also committed to creating opportunities for people with disabilities. More than 50 percent of our operations have specific programs for disabled people. Personnel with physical or mental disabilities are matched with jobs they can perform with dignity and that serve as an opportunity for learning and development. For example, CEMEX Mexico’s inclusive program Congruencia, or “Coherence,” offers job opportunities for employees with disabilities. Throughout Mexico, 87 people with varying disabilities work in telephone services, computer/IT-related jobs and manual positions such as printing and

designing t-shirts, among others. CEMEX France has made similar efforts to employ those with disabilities through jobs in catering and laundry services, printing works and more, and has also started paying special attention to those subcontractors who employ people with disabilities (and has decided) deciding to establish long-term partnerships with them.

We respect the social and cultural right to human dignity and expression of identity. For example, in countries like Israel, Egypt, Malaysia and the UAE where CEMEX employs workers from diverse religious backgrounds and sectors of the population, we respect their right to practice their beliefs through religious holidays, dress code and language.

### **Freedom to Associate**

CEMEX recognizes, supports and respects the right of its employees to exercise freedom of association in our operations. More than 19,000 employees representing around 75 percent of our operative workforce are represented by a union or covered under a collective bargaining agreement. Collective agreement clauses vary from country to country depending on the negotiation reached. Basic contracts include labor conditions, compensation and benefits. Other contracts also include notice period, sick pay, maternity leave, retirement, travel expenses and development, among others. Employees are also encouraged to participate in employee councils and representation, which is manifested through transparency in the communication of meetings as well as projects initiated by the groups.

## **Taking Diversity to a Higher Level**

In each country we operate, CEMEX has established programs to promote the respect for human rights and quality of life for employees. CEMEX Poland has demonstrated its commitment to equality through its participation in Diversity Charter Poland.

The Diversity Charter is a written obligation signed by various companies declaring their promise to eliminate discrimination in the workplace and undertake measures to create and promote diversity. A founding member of Diversity Charter Poland, CEMEX Poland is one of 96 corporations, small businesses, NGOs and others demonstrating their commitment to providing a diverse workplace for all.

CEMEX Poland defined five key areas of focus for diversity management efforts in 2013:

1. Equal career opportunities for employees who are parents.
2. Equal job opportunities for disabled people.
3. Generation management (age diversity) opportunities.
4. Enhanced career opportunities for women.
5. Equal compensation management for men and women.

In 2013, we concentrated on our YOUR FAMILY program geared toward employees who are parents and the new ACTIVE at 50+ program dedicated to employees over the age of 50. Both initiatives aligned with the focus areas identified.

### **Encouraging Employee Communication**

We also engage employees to share their opinions and participate in decision-making that affects the company through a variety of forums. For example, CEMEX Hungary hosts a National Conference twice a year where employees from all facilities are invited to hear the status and results of current projects and are invited to ask questions directly to leaders.

In the Dominican Republic, we have a president's mailbox and host president meetings with employees to open the lines of communication between managers and employees. We also have an open HR office where all employees are welcome to speak to our HR Director at any time.

In Mexico, we launched a communication mechanism, "Al que habla se le escucha", that enables employees to propose improvements and provide suggestions to build a better workplace. We also host an Innovation Day where employees vote for the best innovative projects in the Business Unit.

### Equal Opportunity and Fair Compensation

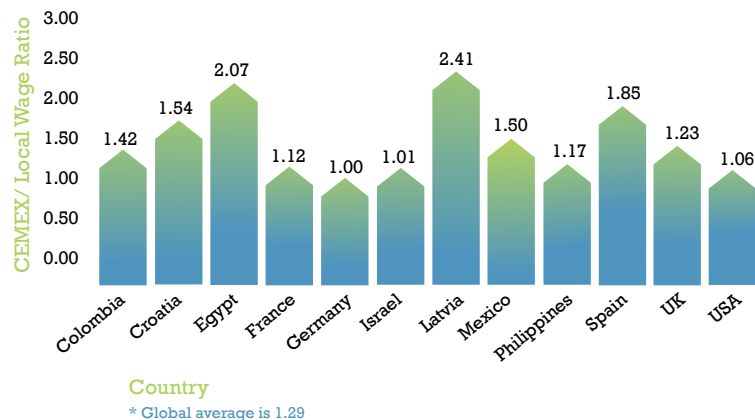
CEMEX offers a Job Posting Program to give our employees opportunities to apply for open positions before or concurrent with the consideration of external candidates for employment. Hiring decisions are made without regard to race, color, age, religion, mental or physical disability, sex or national origin of any employee. CEMEX values its employee's talent, and encourages all employees to seek advancement opportunities and to obtain promotion and career guidance from their supervisor, department head and the Human Resources Department. CEMEX also actively promotes the professional development of its employees, providing the necessary tools to achieve their professional goals, which in turn allow them to contribute to the company's profitability and growth targets.

In addition, CEMEX offers a competitive compensation packages based on the responsibility level of each position. Employee compensation packages are designed to consider:

- The representation of the labor markets in which a given CEMEX Business Unit competes for talent.
- Data from independent, professional, third-party surveys.
- Market base pay and total cash compensation of comparable companies.

### Comparative Wage Rate\*

CEMEX minimum offered level wage vs minimum wage



### Child Labor

We are strongly committed to protecting the rules regarding child labor in every country we operate. We do not tolerate the use of child labor by anyone associated with our business, and require official government-issued identification as part of our hiring and selection process. In most countries where we operate, the minimum age is 18 and it is strictly adhered to in accordance to local laws. We extend this condition to our suppliers.

### Forced Labor & Safe Work Environment

We do not require anyone to perform tasks against their will or that are detrimental to their health or wellbeing. We continually monitor our safety progress to ensure that our programs are working as effectively as possible. Our health management system enables us to monitor our global health performance indicators, develop a set of initiatives to improve our health conditions and integrate best health practices.

In countries like Hungary we are taking active efforts like our flexible working time. This gives employees the right to leave the workplace during working hours, after agreed upon by management, and make up the missed time at a later date if they have health and personal related issues.

Our operations in every country comply with local laws and we take measures to prevent workers from falling into debt bondage through company loans. For example, in Brazil loans cannot exceed 30 percent of salary and in the Philippines we ensure a 40 percent net take home pay is still available for employees taking out loans. In Colombia, we only offer loans through the employee fund after conducting an analysis of the worker's borrowing capacity and guaranteeing a minimum wage, and when an employee in Egypt applies for a bank loan, we are required to provide a letter setting the loan amount and verifying that they do not have any other loans.

All employees are free to leave the company at any time and we don't offer any benefit as leverage to force labor. In Israel we pay compensation for dismissal even in cases where the employee leaves the company by his or her own free will, even though we are not required to do so by law.

## Work-Life Balance

CEMEX abides by the labor laws of each country in which it operates regarding weekly hours worked by employees. Working hours exceeding legally stated norms are seen as overtime and paid according to local law. In all the countries where we operate we have time attendance systems and a policy regarding working overtime. We comply with local laws governing the maximum amount of overtime allowed and have processes in place in each country to monitor and control overtime hours.

In 75 percent of the countries in which we operate, CEMEX has work-life balance initiatives in place that encourage a positive relationship between an employee's work and personal life. For example, in the Philippines we implemented several programs in 2013 to encourage work-life balance including annual sports activities, a company outing, a wellness program and half-time opportunities. In total, 127 work-life balance initiatives were offered benefiting more than 25,000 employees.

In 2013, more than **85 percent** of the countries in which we operate had an initiative in at least one of the categories listed below.

- **39 percent** had initiatives supporting dependent care
- **39 percent** had initiatives supporting child care
- **24 percent** had initiatives supporting elderly care
- **33 percent** had initiatives supporting sabbaticals
- **70 percent** had initiatives in parental leave
- **76 percent** had initiatives in other flexible benefits

In Colombia, CEMEX offers 11 initiatives promoting a healthy balance between work and family life for employees through its MAS PARA TI, "MORE FOR YOU", program. Highlights of the program include temporal flexibility benefits, family activities in recreational centers, prepaid medicine for the household, time off for special occasions, flexible dress codes, discounts at local stores, flexible hours for mothers with children under the age of four, sponsorship of sports and more.

In Egypt, we increased the amount of vacation to provide employees with more opportunities to take time off. In addition, we changed the start and end times at the staff's request to avoid frequent traffic jams in certain times.

## Public Policy

CEMEX promotes fair and well-designed environmental regulations that address key stakeholders' considerations, leveraging the best regulation and policy practices across all the countries in which we operate. We also provide independent research and experienced guidance to inform the creation of public-private partnerships for the development of efficient and cost-effective infrastructure projects.

In the European Union, CEMEX is actively involved in discussions regarding the best way to evolve The European Union Emissions Trading Scheme (EU ETS) and the Clean Development Mechanism (CDM) platforms for emissions trading to ensure these market-based programs allow companies to meet standards through projects that make economic sense. CEMEX is also providing members of the European parliament with a vital industry perspective on climate change and other environmental issues through participation with GLOBE EU and the European Parliament Intergroup on Climate Change, Biodiversity and Sustainable Development.

In addition, CEMEX is sharing information gathered from studies by the Cement Sustainability Initiative and MIT Concrete Sustainability HUB with governments in North America to guide decisions about infrastructure improvement. In the U.S. and Mexico, in particular, CEMEX is working to increase the understanding of long-term cost savings and environmental benefits of concrete to better inform discussions about fiscal, social and environmental responsibility around infrastructure projects. CEMEX is also working with the Earth Engineering Center from Columbia University and City College New York to better understand the environmental benefits of using waste derived fuels to provide energy for our cement facilities. The findings will be used to support legislation and regulations to foster the practices across our markets.

CEMEX Mexico actively participated in more than 60 Chambers and Associations events, providing innovative ideas and solutions for sustainable urban development, education and democratic processes.

Our company's performance and license to operate are increasingly shaped by our stakeholder system; the corporate Public Affairs team has developed a Stakeholder



Management Model and a set of management practices that align our management and business strategy with our stakeholders through proactive engagement. Stakeholder Management is a core aspect of our business practices. The Stakeholder Management Model is planned to be rolled-out throughout CEMEX in 2014.

### **Risk Management**

Proactive risk management is important to protect our operations and stockholders' value. We use tools and methodologies to gather information from a range of sources, analyze data, identify, assess and prioritize potential risks, develop mitigation strategies and follow up on potential risks. We classify identified internal and external risks into five main categories: Strategic, economic-political-social, operational, compliance and financial/reporting risks.

The Enterprise Risk Management department, which is structured into local, regional and global levels, works closely with the Executive Committee and the CEO. The department is developing a combination of bottom-up and top-down approaches. Each business unit is responsible for identifying all potential risks and creating a risk agenda. Global risk agendas are developed based on the most important risks from these regional agendas in addition to any corporate level concerns.

The Enterprise Risk Management department is also responsible for following up on risks and mitigation measures and facilitating and/or coordinating risk mitigation strategies when necessary. Each risk that generates information from multiple internal and external sources is monitored through a Search Plan which reports the information to decision makers on a regular basis. The Executive Committee decides which risks are the most relevant based on the probability of occurrence and the impact to our company.

For the most significant risks at country, regional and global levels, a mitigation strategy is defined and a risk owner is assigned. We have several processes that test the robustness of our methodology and systems, evaluate compliance across all business units and encourage continuous improvements. These processes include periodic reviews of our policies and procedures, compliance training for employees and regular internal audits.

To standardize efforts and share best practices for emergency response, CEMEX has created a Business Resilience and Crisis Management Program (BR&CM) to prepare operations to rapidly respond in the occurrence of a crisis. The BR&CM requires business units to create and train Rapid Response Teams (RRT), integrate a communication and response system, develop specific response protocols, perform risk assessments and, in general, improve their unit's overall level of risk management.

In the last year, 16 contingency management and crisis care workshops were conducted and RRTs were formalized in South America, Northern Europe and Asia. In most countries that underwent training, email contingency accounts were made available.

### **Governance**

Led by our Chairman and CEO, Lorenzo H. Zambrano, the CEMEX Board of Directors is responsible for supervising the overall direction and operation of the company.

Our financial culture and management style are open and transparent. Through regular meetings, reports, guidance, conference calls, events and personal interactions, we vigorously work to keep our investors fully and fairly informed of our activities and to ensure our financial disclosures meet the highest ethical standards.

As of December 31, 2013 the board was comprised of 10 directors, seven of whom qualify as independent directors according to criteria specified under Mexican Securities Law. The board is responsible for determining and overseeing our efforts to advance the performance of our seven sustainability priorities. At these periodic meetings, directors inform the report on a wide range of relevant issues, including sustainability-related concerns. In 2013, six board meetings took place. In all six, the majority of directors were present. In these meetings, the directors discussed the update of the financial strategy, financial and operational indicators and the review of committee reports, among other topics. We also held four Audit Committee meetings, two Corporate Practices Committee meetings and four Finance Committee meetings in 2013.

For more information about CEMEX Risk Factors please refer to our [20F](#).



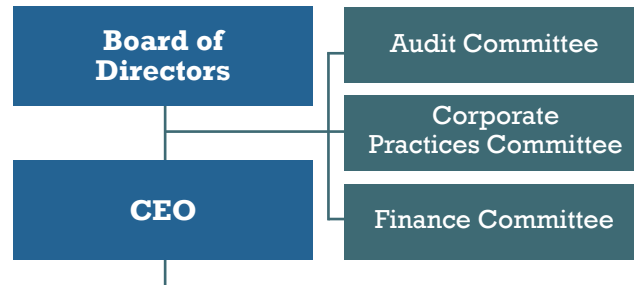
On May 15, 2014 CEMEX announced the appointment of a new Chairman of the Board of Directors, a new CEO and a new member of the Board. To read the full press release, please [click here](#).

We also hold an annual event, CEMEX Day, where our senior management updates the financial community about our operations, vision and strategy. At our most recent event, more than 130 analysts, investors and bankers attended and more than 600 people followed via a live webcast for which we created #CEMEXDay so that anyone interested in CEMEX could join in the dialogue via Twitter. For a replay of each presentation, visit us on our [website](#).

### Sustainability Committee

The Sustainability Committee is comprised of 12 members: nine members of our management team that report to the chairman and CEO, the Senior Vice President of Energy and Sustainability, the Senior Vice President of Global Technology and the Corporate Director of Sustainability. This committee meets quarterly to assess and guide CEMEX in its sustainability efforts. Through their work, sustainability priorities are defined and resources allocated to initiatives that have the highest impact and provide the most significant improvement opportunities.

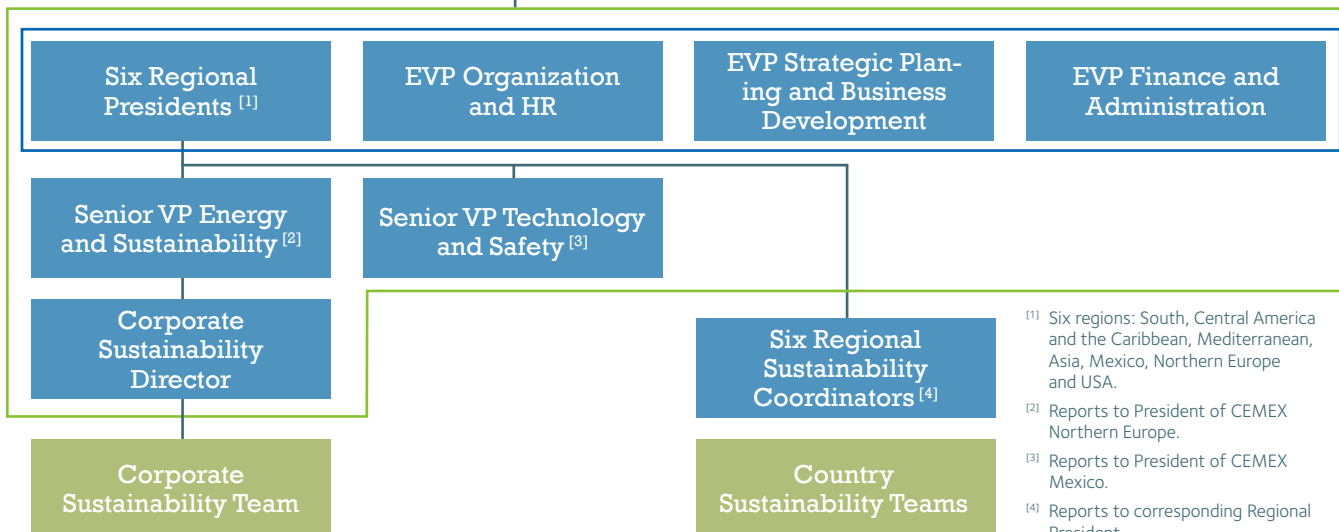
- Define sustainability guidelines and priorities
- Suggests and defines global sustainability initiatives through Sustainability Committee
- Executes global sustainability initiatives
- Management Team
- Sustainability Committee



## Challenges Ahead

- Continuing to reinforce the principles and values set in our Code of Ethics.
- Implementing a comprehensive human rights policy.
- Expanding diversity programs to ensure stimulating growth opportunities to all employees.

Decisions made by the Sustainability Committee and validated by the CEO, the management team and the Board of Directors are swiftly executed by the Senior VP of Energy and Sustainability in coordination with the different regional/country presidents and leaders of other relevant corporate functions.



<sup>(1)</sup> Six regions: South, Central America and the Caribbean, Mediterranean, Asia, Mexico, Northern Europe and USA.

<sup>(2)</sup> Reports to President of CEMEX Northern Europe.

<sup>(3)</sup> Reports to President of CEMEX Mexico.

<sup>(4)</sup> Reports to corresponding Regional President.

# OUR PERFORMANCE

## in detail

Lead in sustainable construction	2011	2012	2013 <sup>[1]</sup>
Production covered with CEMEX CO <sub>2</sub> Footprint Tool (%)	87	100	100
Cement	100	100	100
Aggregates	83	100	100
Ready-mix	83	100	100
Sites covered with CEMEX CO <sub>2</sub> Footprint Tool (%)	88	100	100
Cement	100	100	100
Aggregates	84	100	100
Ready-mix	89	100	100
CO <sub>2</sub> Footprint - Annual Average			
Cement (kg CO <sub>2</sub> e per ton cement)	798	770	770
Aggregates (kg CO <sub>2</sub> e per ton aggregates products)	4.9	5.0	5.0
Ready-mix (kg CO <sub>2</sub> e per m <sup>3</sup> )	275	277	277
Affordable housing and infrastructure	2011	2012	2013
Number of houses built under CEMEX affordable housing program	3,259	2,942	7,513
Thousands of square meters of concrete paving completed	8,045,350	8,338,258	7,418,845
Carbon strategy	2011	2012	2013
Absolute gross CO <sub>2</sub> emissions (million metric tons)	43.1	42.6	40.3
Absolute net CO <sub>2</sub> emissions (million metric tons)	40.0	39.4	37.6
Specific gross CO <sub>2</sub> emissions (kg CO <sub>2</sub> /metric ton of cementitious product)	660	661	648
Specific net CO <sub>2</sub> emissions (kg CO <sub>2</sub> /metric ton of cementitious product)	612	612	607
Reduction in CO <sub>2</sub> emissions per ton of cementitious product from 1990 baseline (%)	22.7	22.7	23.4
Thermal energy efficiency of clinker production (MJ/ton clinker)	3,757	3,876	3,812
Fuel mix (%)	2011	2012	2013
Total Alternative Fuels	24.7	27.1	28.4
Coal	26.9	22.3	21.8
Petroleum Coke	38.5	37.2	37.6
Fuel oil	9.4	8.9	9.1
Natural gas	0.5	4.5	3.1

<b>Alternative fuels rate (%) <sup>[2]</sup></b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Alternative fossil fuels rate	20.1	20.7	16.1
Biomass fuels rate	4.6	6.4	12.3
<b>Waste types used as alternative fuels (%) <sup>[2]</sup></b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Industrial and Household Waste	65.3	66.2	46.7
Tires	16.2	14.2	10.1
Animal Meal	3.6	3.1	3.0
Agricultural Organic Waste	10.0	9.7	8.5
Other Biomass	4.9	6.7	31.7
<b>Other carbon strategy indicators</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Alternative raw material rate	12.0	12.5	11.6
Clinker/Cement factor (%)	75.1	76.5	76.9
Indirect energy consumption (GWh)	7,164	7,460	7,266
Specific energy consumption, cement (kWh/ton)	118	117	118
Specific energy consumption, ready-mix concrete (kWh/cubic meter)	3.3	3.1	3.4
Specific energy consumption, aggregates (kWh/ton) <sup>[3]</sup>	6.9	5.1	4.8
Direct energy consumption (TJ)	191,323	195,505	185,261
<b>Air quality</b>	<b>2011</b>	<b>2012</b>	<b>2013 <sup>[4]</sup></b>
Clinker Produced with continuous monitoring of major emissions (Dust, NO <sub>x</sub> and SO <sub>x</sub> ) (%)	80	80	81
Clinker Produced with monitoring of major and minor emissions (Dust, NO <sub>x</sub> , SO <sub>x</sub> , Hg, Cd, TI, VOC, PCDD/F) (%)	82	81	81
Absolute Dust emissions (tons/year)	4,978	3,759	5,866
Specific Dust emissions (g/ton clinker)	101	78	127
Absolute NO <sub>x</sub> emissions (tons/year)	54,182	49,396	59,391
Specific NO <sub>x</sub> emissions (g/ton clinker)	1,094	1,025	1,261
Absolute SO <sub>x</sub> emissions (tons/year)	16,601	12,385	10,127
Specific SO <sub>x</sub> emissions (g/ton clinker)	335	257	215
<b>Water management <sup>[5]</sup></b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Total water withdrawals by source (Millions cubic meters)		100.9	103.8
Surface Water		27.5	27.6
Ground Water		63.3	62.4
Municipal Water		8.6	10.6
Rain Water		0.8	0.8
Sea Water		0.0	0.5
Other		0.7	1.8

Water management <sup>[5]</sup>	2011	2012	2013
Cement (Millions cubic meters)		27.0	26.9
Surface Water		10.8	11.6
Ground Water		14.6	13.1
Municipal Water		0.8	1.2
Rain Water		0.2	0.3
Sea Water		0.0	0.3
Other		0.6	0.3
Ready-mix (Millions cubic meters)		10.4	11.1
Surface Water		0.6	0.2
Ground Water		2.8	2.2
Municipal Water		6.9	7.1
Rain Water		0.0	0.1
Sea Water		0.0	0.0
Other		0.1	1.5
Aggregates (Millions cubic meters)		63.4	65.8
Surface Water		16.1	15.8
Ground Water		45.8	47.0
Municipal Water		0.9	2.3
Rain Water		0.6	0.5
Sea Water		0.0	0.2
Other		0.0	0.0
Total water discharge by destination (Millions cubic meters)		24.3	29.0
Surface Water		19.6	17.5
Ground Water		3.6	9.7
Municipal Water		0.7	0.8
Sea Water		0.1	0.2
Other		0.3	0.8
Cement (Millions cubic meters)		3.7	4.2
Surface Water		3.2	3.3
Ground Water		0.0	0.1
Municipal Water		0.2	0.2
Sea Water		0.1	0.2
Other		0.2	0.4
Ready-mix (Millions cubic meters)		0.6	0.7
Surface Water		0.0	0.0
Ground Water		0.0	0.2
Municipal Water		0.5	0.5
Sea Water		0.0	0.0
Other		0.1	0.0

<b>Water management <sup>[5]</sup></b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Aggregates (Millions cubic meters)		19.9	24.0
Surface Water		16.3	14.2
Ground Water		3.6	9.4
Municipal Water		0.0	0.0
Sea Water		0.0	0.0
Other		0.0	0.4
Total Consumption (Millions cubic meters)		77	75
Cement		23	23
Ready-mix		10	10
Aggregates		44	42
<b>Total water consumption per unit of product</b>			
Cement (l/ton)		382	376
Ready-mix (l /cubic meters)		182	194
Aggregates (l/ton)		328	317
<b>Operations with water recycling systems (%)</b>			
Cement		90	86
Ready-mix		78	78
Aggregates <sup>[6]</sup>		89	86
		96	91
<b>Waste management</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Hazardous Waste Disposal (tons)	39,904	27,446	21,670
Cement	15,492	14,930	8,868
Ready-mix	1,784	1,854	2,477
Aggregates	22,628	10,662	10,325
Non Hazardous Waste Disposal (tons)	414,600	609,596	549,432
Cement	96,372	122,618	238,391
Ready-mix	315,476	483,338	307,889
Aggregates	2,752	3,640	3,152
<b>Volume of returned ready-mix concrete material from total delivered</b>			
%	0.76	0.95	1.00
Cubic meters	284,910	516,846	525,733
<b>Secondary and recycled aggregates used as a direct replacement of primary aggregates</b>			
%	0.27	0.33	0.21
Tons	312,276	245,541	194,353

Biodiversity management	2011	2012	2013
Active sites with quarry rehabilitation plans (%)	89	91	92
Cement	87	89	91
Aggregates	90	92	93
Number of active quarries within or adjacent to high biodiversity value areas	103	94	91
Cement	14	11	11
Aggregates	89	83	80
Active sites with high biodiversity value where biodiversity action plans are actively implemented (%)	38	41	51
Cement	50	45	64
Aggregates	36	41	49
Environmental management	2011	2012	2013
Operations with an internal Environmental Management System implemented (%)	86	89	92
Operations with our CEMEX Environmental Management System implemented (%)			65
Cement			98
Ready-mix			63
Aggregates			67
Operations with ISO 14001 Certifications (#)	448	586	605
Operations with ISO 14001 Certifications (%)	23	30	32
Environmental Investment (US Million)	95	139	95
Major environmental incidents - Category 1 (#)	0	1	0
Moderate environmental incidents - Category 2 (#)	83	52	87
Environmental Non-Compliance Cases (#)	129	131	97
Associated fines (US million)	1.5	2.3	0.7
Health and safety	2011	2012	2013
Total fatalities	44	18	21
Employees, total	5	1	3
Cement	2	0	1
Ready-mix	3	1	2
Aggregates	0	0	0
Other businesses	0	0	0
Contractors, total	24	11	11
Cement	10	10	5
Ready-mix	4	1	1
Aggregates	8	0	1
Other businesses	2	0	4

Health and safety	2011	2012	2013
Third-parties, total	15	6	7
Cement	7	5	3
Ready-mix	7	1	4
Aggregates	1	0	0
Other businesses	0	0	0
Fatality rate, employees (per 10,000 employed)	1.21	0.22	0.7
Cement	1.75	0.00	0.81
Ready-mix	1.95	0.64	1.35
Aggregates	0	0	0
Other businesses	0	0	0
Lost time injuries (LTIs)	2011	2012	2013
Employees, total	236	214	171
Cement	44	48	29
Ready-mix	121	130	110
Aggregates	22	16	13
Other businesses	49	20	19
Contractors, total	124	103	90
Cement	50	56	39
Ready-mix	38	24	30
Aggregates	8	4	4
Other businesses	28	19	17
Lost-time injury (LTI) frequency rate, employees (per million hours worked)	2.3	2	1.7
Cement	1.7	1.6	1
Ready-mix	2.9	3.4	3.1
Aggregates	2	1.6	1.3
Other businesses	1.9	0.7	0.7
Compliance with CSI Driving Safety Recommended Practices (%)	79	85	84
Compliance with CSI Contractor Safety Recommended Practices (%)	82	90	88
Operations with a Health and Safety Management System implemented (%)	99	100	100
Cement	99	99	99
Ready-mix	100	100	100
Aggregates	99	99	99
Operations certified with OHSAS 18001:2007 (Occupational Health and Safety Management System)(%)	8	9	8
Cement	34	35	38
Ready-mix	5	7	7
Aggregates	15	12	11
Sickness Absence Rate (%)	1.8	2.5	2.2
Operations with a qualified health professional onsite or with access to an external health provider <sup>[7]</sup>	96	96	93



Corporate governance	2011	2012	2013
Reports of alleged breaches to the Code of Ethics received by local ethics committees (#)	221	325	324
Reports related to employee relations	29	53	60
Reports related to a form of harassment	40	53	42
Reports related to discrimination	9	7	5
Disciplinary actions taken as a result of reports of non-compliance with the Code of Ethics, other policies or the law (#)	119	140	178
Countries with local mechanisms to promote employee awareness of procedures to identify and report incidences of internal fraud, kick-backs, among others (%)	100	100	100
Investigated incidents reported and found to be true related to internal fraud, kick-backs among others corruption incidents to government officials (#)	0	0	0
Partnership with key stakeholders	2011	2012	2013
Workforce	44,104	43,905	43,087
Mexico	10,333	9,697	9,597
United States	8,322	9,791	9,432
Northern Europe	11,679	11,162	10,025
Mediterranean	4,404	3,946	3,826
Asia	1,319	1,199	1,178
South/Central America and Caribbean	4,501	4,977	5,793
Others (including Corporate and Neoris)	3,546	3,133	3,236
Breakdown of workforce by type of contract (%)			
Full time	99	99	99
Part time	1	1	1
Breakdown of workforce by level (%)			
Executive positions	5	5	5
Non-executive positions	37	35	35
Operational positions	58	60	60
Breakdown of workforce by age (%)			
Under 30	17	16	16
31-40	31	31	31
41-50	29	29	29
51 and Over	23	24	24
Breakdown of workforce by gender (%)			
Male	89	89	89
Female	11	11	11
Female employees by level (%)			
Executive positions	13	13	14
Non-executive positions	23	25	24
Operational positions	4	2	3

Partnership with key stakeholders	2011	2012	2013
Male to female wage ratio	1.04	1.04	1.03
Engagement level		88	77
Participation rate in engagement survey (%)		75	78
Employee turnover rate (%) <sup>[8]</sup>	5.0	6.6	5.0
Employees represented by an independent union or covered by a collective bargaining agreement (%) <sup>[9]</sup>	54	46	46
Notice to employees regarding operational changes (average days)	40	40	40
Countries with practices to promote local hiring (%)	76	76	88
Training provided by operations (average hours)			
Executive positions	20	42	26
Non-executive and operational positions	15	20	27
Online courses through CEMEX Learning (#)	1,121	1,260	832
Employees with access to CEMEX Learning (#)	18,767	18,317	18,041
Employees of executive positions trained in Sustainability Leadership Program (#)		319	376
Sites conducting social impact assessments (%)	68	68	68
Cement	75	75	75
Ready-mix	67	67	67
Aggregates	70	70	70
Sites with community engagement plans (%)	97	97	97
Cement	96	96	96
Aggregates	97	97	97
Operations with employee volunteering programs (%)	43	54	67
Countries that conduct regular customer satisfaction surveys (%) <sup>[10]</sup>	86	89	79
Purchases sourced from locally-based suppliers (%)	94	95	95
Countries with a process to screen suppliers in relation to social and environmental aspects (%) <sup>[11]</sup>	86	67	72

Strengthen local communities	2011	2012	2013
Number of families participating in Patrimonio Hoy in Latin America Initiative (# accumulated) <sup>[12]</sup>	353,856	396,845	426,569
Number of individuals benefited from Patrimonio Hoy (# accumulated) <sup>[12]</sup>		1,921,731	2,063,767
Total square meters built in Patrimonio Hoy Initiative (# accumulated) <sup>[12]</sup>	2,593,094	3,040,490	3,315,863
Total number of families participating in Inclusive Businesses (ConstruApoyo and PCS) <sup>[13]</sup>	44,013	56,693	67,211
Total number of families participating within all social initiatives <sup>[13]</sup>		453,538	493,780
Total number of individuals benefited from all social initiatives <sup>[13]</sup>		2,188,289	2,363,867

#### Footnotes:

<sup>[1]</sup> Every CEMEX country decides according to their market and customer needs to calculate the carbon footprint at a yearly basis. However, CEMEX is committed to do the complete calculation exercise for 100% of its facilities every 2 years.

<sup>[2]</sup> The percentage of Biomass of 2013 has increased in accordance with the applicable accreditation and verification regulations for those countries covered by the European Union Emissions Trading System (EU ETS).

<sup>[3]</sup> 2012 data recalculated due to an adjustment of the calculation methodology in some countries.

<sup>[4]</sup> An update of our measurement methodology in some countries impacted our emission figures for 2013, which show a slight increase in Dust and NO<sub>x</sub> when compared to 2012.

<sup>[5]</sup> Under the framework of CEMEX-IUCN Water Project, in 2012 we developed our own methodology to standardize the reporting of our water KPIs. For this reason, we have updated our water KPIs reported in 2012 in order to make them fully consistent with this methodology. In addition to this, in 2013, we have continued working on strengthening our reporting systems, which has lead to more accurate data than what we have collected before. By having a better understanding of our water KPIs, we are preparing ourselves to define actions to reduce our water consumption in the short term.

<sup>[6]</sup> Considering sites that use water for aggregates production (including wet screening and aggregate washing).

<sup>[7]</sup> Decrease in 2013 due to the number of active sites considered.

<sup>[8]</sup> Voluntary turnover.

<sup>[9]</sup> Total employees including executive and non-executive positions. Considering only operations, positions coverage is 75%.

<sup>[10]</sup> Methodology indicates the survey must be conducted at least every two years, although some countries perform it in an annual basis.

<sup>[11]</sup> 2012 recalculated due to an update of the consolidation methodology.

<sup>[12]</sup> Historical data from Dominican Republic has changed due to a better measurement with the introduction of SAP system.

<sup>[13]</sup> Accumulated years from all our social initiatives: Patrimonio Hoy since 1998, ConstruApoyo since 2005, and PCS since 2006.

# SUSTAINABILITY

## credentials and awards



### Sustainability Credentials

#### CDP Outstanding Carbon Disclosure in Latin America

For the second consecutive year the Carbon Disclosure Project named CEMEX as one of the best Latin American Companies in terms of climate change data disclosure in its second edition of the CDP Latin America Climate Change Report. CEMEX was positioned amongst the top eight of 32 major companies in five Latin American countries. The ranking recognizes CEMEX's efforts to reduce our carbon footprint in the midst of industrial development.



#### Climate Counts Report

CEMEX ranked 26 out of 100 in Climate Counts' report on the greenhouse gas (GHG) emissions of global corporations. The initiative explicitly states that we are on track to reduce carbon emissions in line with scientific targets to avert dangerous climate change. The sustainable score emphasized CEMEX's sustainable standing and commitment to avert climate change.



#### Mexican Stock Exchange Sustainability Index

For the third consecutive year, CEMEX was one of 28 companies to be part of the Mexican Stock Exchange Sustainability Index. CEMEX was evaluated on our management and use of natural resources, corporate governance standards and social responsibility with key stakeholders including employees, customers, suppliers and communities.



#### UNGC 100 Index

CEMEX was the only Mexican company selected for inclusion in the United Nations Global Compact 100, a new global stock index that combines corporate sustainability and baseline financial performance. The index selects companies based on their adherence to the UN Global Compact's ten principles and evidence of their executive leadership's commitment and baseline profitability.

## **Sustainability Awards**

### **American Chamber of Commerce Social Business Responsibility Award**

CEMEX received the American Chamber of Commerce's Social Business Responsibility award for our Patrimonio Hoy program. The program has contributed to building 13,994 square meters of houses, fences, slabs and other housing elements.

### **CCA Award**

Assisted Self-Construction Integral Program (PIAC) received a Corporate Citizen of the Americas (CCA) 2012/2013 award for Public Safety by the Foundation for the Americas, with support from the Organization of American States, the Inter-American Development Bank and AES Corporation. The award recognizes CEMEX's commitment to achieving safer communities.

### **Green Choice Award**

CEMEX in Philippines was the first and only Filipino cement company to be awarded the Green Choice Seal, a voluntary eco-labeling initiative sponsored by the Philippine government. The program awards a company a seal of approval for environmentally preferred products or services.

### **Gold Stevie Award**

CEMEX received the Gold Stevie award in the Management Issues category out of more than 3,300 applicants. The award is endorsed by the International Business Award and is the highest award in its category, representing our dedicated efforts to crisis management.

### **Gold Quill Award**

CEMEX Mexico won the Gold Quill Award in the Issues & Crisis Management category from the International Association of Business Communicators for its SIMAC crisis strategy.

### **Mundo Ejecutivo Magazine Corporate Social Responsibility Ranking**

CEMEX Mexico was ranked first in Corporate Social Responsibility by the Mundo Ejecutivo Magazine. The ranking is audited by the Anahuac University IDEARSE Center. The recognition was obtained for more than 25 years of achievements such as: Being the first one to implement ISO 26000 in Mexico, reducing 137,000 tons of CO<sub>2</sub>, enrolling 2,600 children in football academies and having 7,000 volunteers for social development activities.

### **National Award for Cleaner Production**

For the second consecutive year, CEMEX received the National Award for Cleaner Production in the Materials category from the Ministry of the Environment.

### **NSSGA's Environmental and Community Relations Excellence Awards**

Three CEMEX sites in the U.S. won Gold Awards at the National Sand, Stone & Gravel Association's (NSSGA) Safety, Environmental and Community Relations Excellence Awards. The company's operations in New Braunfels, Texas; La Luz, New Mexico; and El Paso, Texas received recognition for their environmental excellence.

### **PCA's Environment and Energy Awards**

Three of CEMEX's sites in the U.S. received recognition for their commitment to improving the environment and their communities at the Portland Cement Association's 12<sup>th</sup> Annual Cement Industry Environment and Energy Awards. CEMEX in Brooksville, Florida received the Land Stewardship Award, CEMEX in New Braunfels, Texas garnered the Innovation Award and CEMEX in Victorville, California earned the Energy Efficiency Award.

### **UEPG Biodiversity Awards**

Two CEMEX sites received recognition for their contributions to biodiversity by the European Aggregates Association (UEPG). CEMEX's Rugeley Quarry in the UK received a Recognition of Achievement for its restorative work and habitat management. The company's Soto Pajares quarry in Spain earned the Special Award for Biodiversity for its actions related to the protection, enhancement and creation of key habitats for crucial species.

# advisory panel members and STATEMENT

## Advisory Panel Members



**Irma Gomez**

Undersecretary for Management, Ministry of Environment and Natural Resources of Mexico



**Felipe Pich**

Founding Director of Pich-Aguilera Architects and President of GBCe, Spanish Chapter of the World Green Building Council



**Leon Bennun**

Director of Science, Policy and Information, BirdLife International



**Antonio Vives**

Consulting Professor, Civil and Environmental Engineering Department, Stanford University

For more information on our Advisory Panel please visit our [webpage](#).

We are pleased to note the continued progress and commitment of CEMEX to sustainability and how integral sustainability has become to its business strategy. The 2013 Sustainability Report, Addressing the Urbanization Challenge, reflects a significant number of initiatives taken during the year that enhance CEMEX's responsibility towards society and the environment.

### Scope of Our Review

As in previous years the Sustainability Reporting Advisory Panel reviewed an advanced draft of the CEMEX 2013 Sustainable Development Report. We shared with management our detailed comments and specific suggestions for improvement in reporting and by extension on their activities. Given the nature of the process, some of our comments can be immediately incorporated in the final report; others must wait for the development of the policies, processes and information systems. Given the experience of the last few years, we remain confident that CEMEX will progressively incorporate our relevant suggestions in their activities and in future editions of the report. We list here our general observations and concentrate on those aspects that will further enhance the company's reporting in the future.

### Completeness and Clarity

The panel is pleased to observe the considerable progress achieved in focusing the report on the major sustainability issues facing the company and tightening its content to increase the relevance to the major stakeholders. Its readability has also been enhanced through its conciseness and its agile design, eschewing unnecessary pictures and presenting the key indicators in highly visible boxes and tables.

We encourage CEMEX to find ways to describe in a more comprehensive fashion, their contribution to society's wellbeing beyond taxes, dividends and salaries paid. Their contribution goes well beyond that but it is scattered throughout the report. We encourage CEMEX to consider reporting on their contribution to the six capitals, along the lines of the proposed framework of the International Integrated Reporting Council, even if not preparing an integrated report. While this is a complex subject, CEMEX should consider collecting information and performing analysis on the contributions of its operations to society, to report a more integrated and comprehensive view in the medium term. We are aware that CEMEX has developed a new Sustainability Model and Priorities that will be launched during 2014, which we believe will enhance its sustainability activities and focus its reporting even better. We look forward to seeing the positive impact of the new models and priorities in 2015 and beyond.

### Sustainable Construction

We note CEMEX's efforts to develop more sustainable products and to promote sustainability labeling, to move beyond being a sustainable cement provider to being an actor in sustainable construction. We welcome its integral approach to its products, considering not only its end use, but also the potential savings to customers in wear and tear and energy savings. We encourage CEMEX to continue to work in this direction and look forward to reporting on progress.

### Human Rights

We are very pleased to observe that, in response to last year's Panel Letter, CEMEX has started reporting on their actions on Human Rights along the suggestions of the

UN's Ruggie report, alongside a process to develop policies and processes to respect all human rights, which will in turn lead to a more comprehensive actions and their corresponding reporting. We look forward to seeing these advances reflected in the 2014 report.

### **Safety**

We are encouraged that the Time Lost due to Injuries has decreased, but we are concerned about the increase in the number of fatalities, including of CEMEX's own employees. The number of fatalities, especially among contractors, is still unacceptable as the President's letter emphasizes. We note that CEMEX has taken a significant number of preventive actions, but we encourage CEMEX to further assess why some of these measures have not reduced fatalities in a consistent manner.

### **Emissions**

We would encourage CEMEX to comment on the evolution of actual emissions in recent years. Reporting should include direct and purchased emissions, not just avoided emissions, so as to cover all three of the traditional emissions scopes. While comparison to the base line of 1990 is helpful, this is a very old base and it would be more helpful if reported in comparison to the most recent three years. We note that fewer direct CO<sub>2</sub> emissions were avoided in 2013 compared to recent years, while per unit emissions for dust and NOx emissions have increased, and hope these trend will be reversed. We encourage CEMEX to review the targets for 2015, and provide additional targets for the medium term, including for CO<sub>2</sub>.

### **Energy and Water Consumption**

We were pleased to learn of the successful efforts to continue the reduction of energy consumption and net water and are encouraged by the increased use of alternative sources of energy, particularly from recycled waste, alternative fuel and renewables. In particular, we are pleased by the development of the water policy and look forward to the further reduction in consumption that its implementation and the external verification will bring.

### **Biodiversity**

While there has been significant progress during 2013, around half the active sites with high biodiversity

value do not yet have biodiversity action plans actively implemented. We reiterate the call we made last year for CEMEX to develop a biodiversity strategy with additional clear and quantifiable impact (not just process) targets, based on an overall commitment to Net Positive Impact on biodiversity across the company's operations. We also encourage CEMEX to continue efforts to increase coverage of the EMS on ready mix operations and aggregates quarries.

### **Supply Chain Monitoring**

The panel is very pleased to learn of the efforts to enhance the sustainability of the supply chain, in particular the engagement of a consulting firm to help with the efforts. We look forward to the results of the evaluation of critical suppliers, particularly those that are located in countries with relatively low social and environmental standards, and especially concerning environmental management, working conditions, health and safety and other human rights. We also look forward to seeing the actions taken by CEMEX as a result of the evaluations.

### **Working Conditions**

We are also pleased to see the progress achieved by CEMEX in working conditions for their employees. Recognizing the complexity of working in so many countries with very different cultures and standards, we nevertheless would like to see more efforts in enhancing the number of countries where programs for child, dependent and elderly care are available. We also note the relatively low percentage of women in Executive positions and encourage CEMEX to report the results of their efforts to achieve a better gender balance, especially through removing 'invisible' obstacles to women's advancement.

### **Impact of Training**

The report includes information on the extensive programs of human development particularly in training. The panel would like to see future reports present the impact of those programs. As is, CEMEX reports on inputs, i.e, hours and financial resources, but does not on the outcomes of those efforts: how they have changed the actions and attitudes of the employees. This would be especially useful in areas like the results of training and

awareness of sustainability issues, implementation of the code of ethics, health and safety, compliance of suppliers with CEMEX sustainability policies and the consequences of violations.

### **Corruption**

We are pleased to notice that there have not been any cases of corruption or bribery to government officials reported during 2013, but we encourage CEMEX to make sure that processes do not discourage internal reporting and that there is a proactive effort to have access to independent information.

### **Material Issues**

The panel notes with satisfaction the progress being made during 2013 on determining the materiality issues with the help of an outside consultant and the inclusion of more than 11,000 stakeholders. Nevertheless while the results, in general, confirm expectations there are some that give us concern that the sample, while large, may have not been appropriately weighted. For instance we note the very low importance given both by CEMEX and its stakeholders for some issues like water use and recycling and environmental incidents and the extremely high importance given by other stakeholders, besides CEMEX itself, to Economic Value Creation. The results are obviously an average of all stakeholders and depend on the relative mix of them in the sample, some of whom, with few representatives, may have very critical issues that are overwhelmed on the whole by other stakeholders. In these processes the sample itself determines materiality, so appropriate sampling design is crucial. We would like to suggest that CEMEX determine which sets of stakeholders are critical for the company (in terms of power, legitimacy and urgency) and then assess the material issues for each group and decide on the basis of CEMEX priorities. This is especially important as the reporting under the new GRI G4 guidelines is determined by the materiality assessment.

### **Sustainability Reporting**

The panel encourages CEMEX to analyze the implications for its information systems of the extensive and complex reporting changes implied by the new GRI G4 reporting guidelines, and to prepare for their eventual adoption, particularly as the main thrust is on Materiality reporting. We recognize that the changes required will be a significant challenge but would hope that during 2014 a decision is made in this respect.

**Overall we are pleased with the positive trend towards sustainability being demonstrated by CEMEX, and continued improvements in how this is reported. We encourage the company to build on and intensify its efforts so as to make still faster progress in its contribution to sustainable development.**



# PwC's LIMITED

## assurance report



### Independent Limited Assurance Report on the CO<sub>2</sub> emissions, safety, environmental incidents and other emissions Key Performance Indicators reported by CEMEX for the year 2013

#### To the Board of Directors of CEMEX

Upon request of CEMEX, we have carried out an independent limited review of CO<sub>2</sub> emissions, safety, environmental incidents and other emissions Key Performance Indicators ("the KPI's") reported by CEMEX in the 2013 Sustainable Development Report:

- CO<sub>2</sub> emissions calculated according to WBCSD-CSI "The Cement CO<sub>2</sub> and Energy Protocol" (version 3.1, December 2013):
  - Absolute gross and net CO<sub>2</sub> emissions
  - Specific gross and net CO<sub>2</sub> emissions
  - Alternative fuels indicators (alternative fossil and biomass fuels)
  - Total indirect CO<sub>2</sub> emissions
- Safety indicators for cement, ready mix and aggregates, estimated according to the guidelines of WBCSD-CSI "Safety in the cement industry: Guidelines for measuring and reporting" (version 4.0, updated May 2013):
  - Fatality rate for directly employed and contractors
  - Lost Time Injury Frequency rate (LTI FR) for directly employed and contractors
  - Lost Time Injury Severity rate (LTI SR) for directly employed and contractors
- Number of Environmental Incidents category 1 and 2, as defined by CEMEX Corporate in its operational and administrative procedure "Environmental Incident Reporting".
- Other emissions indicators (dust, NO<sub>x</sub> and SO<sub>x</sub>) estimated according to the WBCSD-CSI "Guidelines for Emissions Monitoring and Reporting in the Cement Industry" (version 2, March 2012):

- Overall coverage rate
- Rate of clinker generated with continuous monitoring of dust, NO<sub>x</sub> and SO<sub>x</sub>
- Absolute and specific emissions data of dust
- Absolute and specific emissions data of NO<sub>x</sub>
- Absolute and specific emissions data of SO<sub>x</sub>

The KPIs have been prepared by and are the responsibility of CEMEX Management. Our responsibility consists of issuing conclusions about their consistency and reliability based on our review work and scope described in the next paragraph.

#### Basis, objective and scope of the verification

Our work was performed based on verification standards established by the International Federation of Accountants, under the International Standard for Assurance Engagement ISAE 3000 pertaining to limited assurance. We planned and performed the procedures set out below to obtain limited assurance as to whether the KPIs are free of material misstatements. A higher level of assurance would have required more extensive procedures.

- We assessed CEMEX reporting procedures for The KPIs with regard to their consistency with "The Cement CO<sub>2</sub> and Energy Protocol", the "Safety in the cement industry: Guidelines for measuring and reporting", the CEMEX corporate procedure on "Environmental Incident Reporting" and the "Guidelines for Emissions Monitoring and Reporting in the Cement Industry", respectively.
- At corporate level, we conducted interviews with the individuals responsible for the preparation and execution of the reporting procedures as well as for the consolidation of data. At this level we performed analytical procedures and verified, on a sample basis, the calculations and consolidation of data;



- At regional coordination level, we conducted interviews with the individuals responsible for the KPIs reporting and performed analytical tests;
- We selected a sample of locations in order to perform site visits and executed the following :
  - We reviewed site organization and procedures, in particular those regarding KPIs reporting;
  - We assessed control procedures on key parameters, and
  - We performed reconciliation of reported data with the supporting documentation and verified on a sample basis the arithmetical accuracy of calculations.
- We analyzed the consolidated KPIs reported by CEMEX in the 2013 Sustainable Development Report to verify consistency with the results of our work.

#### Conclusions:

Based on the results of our review, nothing has come to our attention that causes us to believe that:

- The KPIs have not, in all material respects, been prepared in accordance with "The Cement CO<sub>2</sub> and Energy Protocol", the "Safety in the cement industry: Guidelines for measuring and reporting", the "Environmental Incident Reporting" procedure and the "Guidelines for Emissions Monitoring and Reporting in the Cement Industry".
- The KPIs contain material misstatements.
- The CO<sub>2</sub> emissions, safety, environmental incidents type 1 and 2, and other emissions contain material misstatements.

Mexico, April 30<sup>th</sup>, 2014

Enrique Alejandro Bertran  
Partner  
Sustainability & Climate Change  
PricewaterhouseCoopers, S.C.

# A+ STATEMENT

## GRI application level check



### Statement

## GRI Application Level Check

GRI hereby states that CEMEX has presented its report "Addressing the Urbanization Challenge" (2014) to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines. For methodology, see [www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf](http://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf)

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

Amsterdam, 22 April 2014

A handwritten signature in black ink, appearing to read "Ásthildur Hjaltadóttir".

Ásthildur Hjaltadóttir  
Director Services  
Global Reporting Initiative

The "+" has been added to this Application Level because CEMEX has submitted (part of) this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

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

**Disclaimer:** Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 25 March 2014. GRI explicitly excludes the statement being applied to any later changes to such material.



# ABOUT this Report

## Reporting History and Cycle

CEMEX began publishing annual environmental, health, and safety reports in 1996, and published its first Sustainable Development Report in 2003. The company has been engaged in annual sustainability reporting since then and published its most recent report in April 2013. This, the company's full 2013 Sustainable Development Report, is our eleventh such report and covers the broad range of our environmental, social and governance issues and performance

We applied the Global Reporting Initiative (GRI) G3 Sustainability Reporting Guidelines – Mining & Metals Sector Supplement to produce the full report, which meets an application level of **A+** for the sixth consecutive year.

## Boundary and Reporting Period

This report covers our global cement, ready-mix concrete and aggregates operations, presenting our sustainability performance, progress, achievements and challenges for the 2013 calendar year, which is also the company's fiscal year. We have emphasized those issues identified as high-priority through both our materiality analysis and our sustainable development strategic planning process, as reflected in the seven priority areas of our Sustainable Development Model. For more information as well as updates throughout the year, please visit the Sustainable Development section of our [website](#).

Unless otherwise indicated, the information provided in this report is for the company as a whole. We have included information for the operations in which we have financial and operative control. If a plant is sold, its information is no longer included in our data or considered in our targets. If we have restated certain data sets from previous years because of improvements to our data-collection systems or changes to our business, each case is clearly marked. All monetary amounts are reported in US dollars. All references to "tons" are to metric tons.

The information for this report came from several sources, including internal management systems and performance databases and our Sustainable Development Report Survey, a questionnaire sent to all countries where we have operations. Data from this survey is then aggregated. This approach has enabled us to report progress on our key performance indicators for the company as a whole.

We aim to improve the transparency and completeness of each report that we produce while streamlining our processes and the way in which we provide information. We include a statement from PricewaterhouseCoopers, which verified our data on greenhouse gas emissions, atmospheric emissions, alternative fossil and biomass fuels rates, environmental incidents and safety indicators for our cement, ready-mix and aggregates operations.

In addition, we engaged our Sustainable Development Reporting Advisory Panel, which provides feedback on our reporting.

### Data Measurement Techniques

We employ the following protocols and techniques for measuring the key performance indicator (KPI) data that we report:

- **CO<sub>2</sub> Emissions:** CEMEX reports absolute and specific CO<sub>2</sub> emissions following the latest version of the CSI Protocol, denominated: The Cement CO<sub>2</sub> and Energy Protocol, version 3.0, published in May 2011. As defined in the protocol, it considers direct emissions excluding CO<sub>2</sub> emissions from biomass fuels and purchased electricity. Historical data shall remain unchanged given that the previous protocol is closely aligned with the simple methods for reporting of the calcination CO<sub>2</sub> emissions. For countries covered by the European Union Emission Trading System (EU ETS), CO<sub>2</sub> Emissions data corresponds to the one verified by and independent verifier in accordance with the applicable Accreditation and Verification Regulation.
- **Dust, NO<sub>x</sub> and SO<sub>x</sub> emissions:** Absolute and specific figures are calculated based on kiln emission measurements taken from Continuous Emissions Monitoring Systems (in those sites where kilns are equipped with such technology) or spot analysis. These methods fully comply with the CSI Guidelines for Emissions Monitoring and Reporting. All information is reported to CEMEX databases, processed, calculated and validated to provide a final group value. The values are calculated in Standard for 0°C, 1 atmosphere and 10% Oxygen (O<sub>2</sub>) content at measuring point.
- **Energy:** Fuel consumption indicators are reported to internal CEMEX databases in which “conventional”, “alternative” and “biomass fuels” are classified according to the CSI Cement CO<sub>2</sub> protocol spreadsheet. Heat values are obtained from on-site analysis (where applicable), value provided by supplier or standards from the CSI Guidelines for the Selection and Use of Fuels and Raw Materials in the Cement Manufacturing Process.

- **Clinker factor and alternative fuels:** All material consumption is reported to internal CEMEX databases in which “alternative materials” are defined following the standards from the CSI Guidelines for the Selection and Use of Fuels and Raw Materials in the Cement Manufacturing Process. The “clinker/cement factor” is calculated using the procedures from the CSI Cement CO<sub>2</sub> protocol spreadsheet with information obtained from the databases.
- **Safety:** An internal CEMEX safety database collects all related safety information from each site and automatically provides the appropriate information to calculate the indicators. The database is configured using the WBCSD / CSI definitions.

### Deviation from Protocols

We have adhered to the GRI Protocols where applicable and feasible. As our data-collection systems are still in development, however, there are instances in which we have not applied GRI protocols. In such cases, the data we have is the best manner in which we can currently communicate our performance.

### United Nations Global Compact Communication on Progress

This report constitutes our Communication on Progress toward the commitments of the United Nations Global Compact (UNGC). As a signatory to the Global Compact, we work to align our company's operations and strategies with its ten principles. We are also committed to helping the world meet the targets of the Kyoto Protocol and Millennium Development Goals.

The GRI index is cross referenced to the UNGC principles. It can be found on our website and is available for download.

We welcome your feedback on our sustainability reporting and performance. Please send your comments and suggestions to [sd@cemex.com](mailto:sd@cemex.com), or write to us at:

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