

Buzzi Unicem is an international multiregional, "heavy-side" group, focused on cement, ready-mix concrete and aggregates.

The company's dedicated management has a long-term view of the business and commitment towards a sustainable development, supported by high quality and environmentally friendly assets.

Buzzi Unicem pursues value creation through lasting, experienced know-how and operating efficiency.



#### CONTENTS

- 4 Letter to Stakeholders
- 8 Stakeholders

#### 17 CORPORATE SUSTAINABILITY

- 18 The group at a glance
- 20 Highlights by Country
- 26 Methodology Note
- 30 Corporate Governance System

#### 35 PERFORMANCE INDICATORS

- 36 Economic Performance
- 42 Environmental Performance
- 52 Environmental Performance: Summary Table
- 54 Social Performance
- 66 Social Performance: Charts and Tables

#### 71 APPENDIXES

- 72 GRI Table of Contents
- 74 Statement of Compliance

## Letter to Stakeholders





This 2013 Sustainability Report presents the social, environmental and economic performance of Buzzi Unicem, to meet the demands of our stakeholders, according to GRI (Global Reporting Initiative) guidelines.

Over the years, we have made clear that this report is used within the company as a tool of analysis and reporting, as an accurate knowledge of our performance allows us to take the necessary corrective measures and to improve our results.

A concrete example is provided by our investments in environmental technologies, which have increased the average thermal substitution of the group from 17.6% to 19.1% over the last five years and have reduced our specific thermal consumption in Russia by more than 16%. In addition, our commitment to training has allowed us to halve the cases of injury at our cement plants.

We have voluntarily joined the Carbon Disclosure Project (CDP), an organization that collects data on the management of issues related to the climate change: Buzzi Unicem has been identified as one of the most sustainable companies in Italy.

Over the years our Report has changed and this edition appears with a new graphic look, which makes it easier to read and to find information, without affecting the quality of the content.

The data will also be published on our group Internet site, which includes a section devoted to the in-depth analysis of sustainability issues.

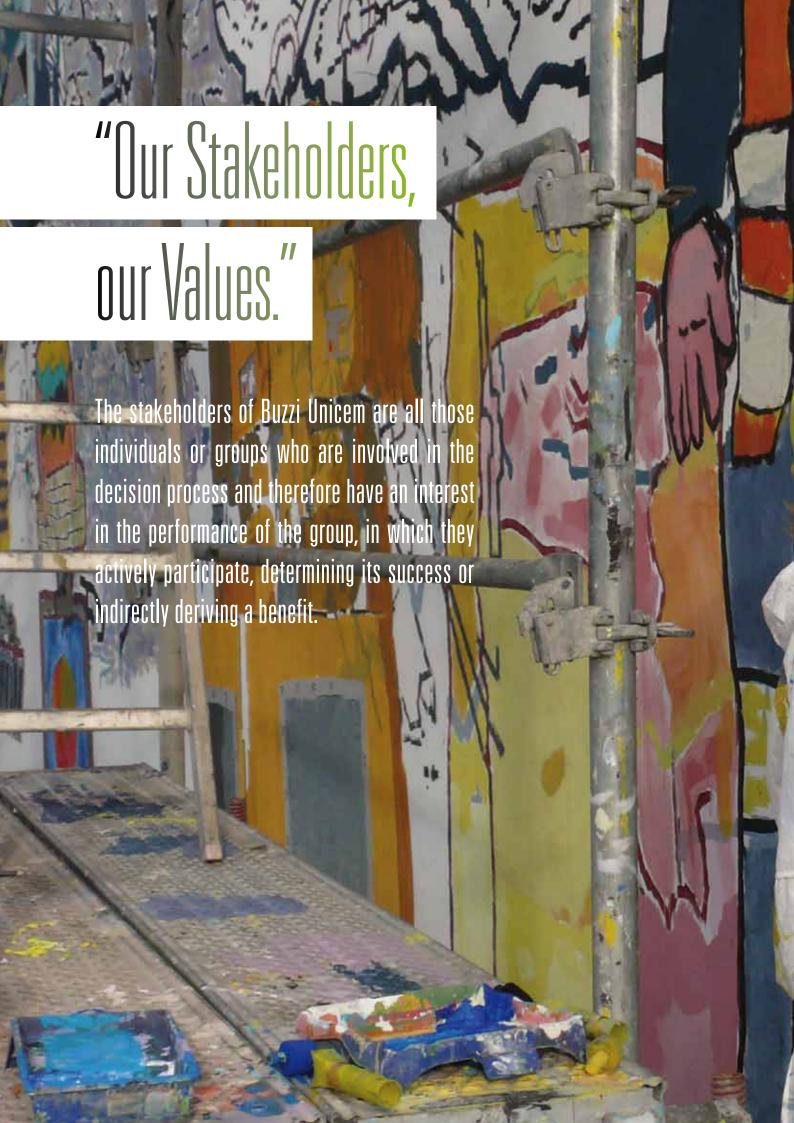
We acknowledge the value of this Sustainability Report, which provides Buzzi Unicem with a clear snapshot of our economic, social, and environmental performance and with the motivation to keep improving.

Pietro Buzzi Chief Executive

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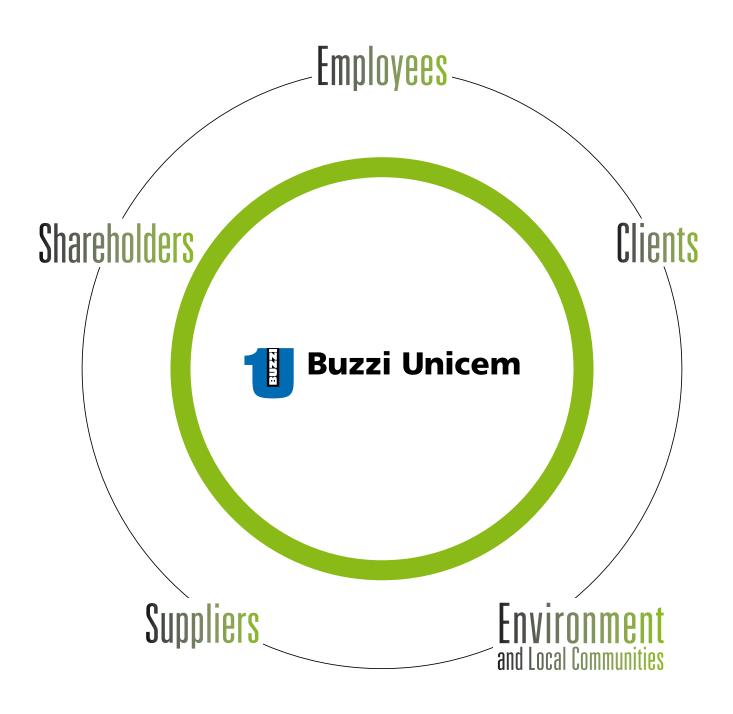
Michele Buzzi
Chief Executive

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## Stakeholders



### **Employees**

### The experience and the value of the people in a multi-regional group

The experience of its employees and the value added of their diversity are elements of strength for a group like Buzzi Unicem that operates in several different countries, with different cultures, languages, and traditions. At the global level the group operates in three macro regions corresponding to Western Europe, Eastern Europe and America: the total number of employees was 11,094 at the end of 2013, with a slight decrease from the previous year.

In 2013 the focus on and concern for the "internal stakeholders" have produced investments in several areas. First of all, we invested in preventive measures to improve safety on the workplace, which has always been given top priority at the global level, with the objective of reducing dangerous situations to a minimum. In 2013 there was an improvement in almost all "injury indicators", even if unfortunately a fatal event took place in Luxembourg. In particular we note an improvement in the injury frequency rate, the ratio of number of injuries to hours worked, for the cement sector, which fell by another 10% with respect to 2012. This rate fell also in the concrete sector due to a steady decline in the number of injuries. With regard to professional development and the welfare of the employees, it should be pointed out that compensation, incentives and training policies are managed in the different countries with the objective of enhance our employees' skillsets. Respect for human resources also means taking into account the needs of their family life, with work arrangements such as part-time contracts and flexible hours.

In 2013 training, with a focus on health, safety and professional development, became even more important. There was a strong increase in training activities, both external and internal: total training hours increased by almost 3,700 hours in 2013. The initiatives were focused especially on professional development (external training) and safety on the workplace issues (internal training).

### Clients

The satisfaction of clients and the trust of the market

To obtain and maintain the confidence of the market, Buzzi Unicem strives, first of all, to increase the satisfaction of its clients, guaranteeing that every product and service offered meets the highest standards of excellence.

Buzzi Unicem's customers may count on an extensive series of improvements undertaken to meet the highest standards of excellence. As required of quality management systems certified under the UNI EN ISO 9001:2000 standard, Buzzi Unicem provides a complete system of information and activities that goes beyond the standard after-sale assistance and support.





#### This system includes:

- data and updates
- technical assistance
- · invitations to lab or factory testing
- support in case of disputes between clients and the end users of their services.

For any need related to the use of the products – from procedures of use to performance testing, from complaints to legal disclosures – the customer can rely on our Technical Assistance Service, which provides the required support within certain time frames.

Concurrently, the R & D department strives to identify the innovative solutions best suited to the requirements and the critical issues of an ever-changing market – on the basis of the suggestions resulting from direct and constant contact between management and sales force.

### Environment and Local Communities

### Long-lasting relationships based on respect and growth

A significant proportion of resources has been invested in initiatives concerning land and communities close to our production sites, aimed at reducing their environmental impact and discovering mutual, recurring advantages.

Relationships between Buzzi Unicem and the local communities are shaped by the company's ability to engage constructively local institutions and the environment. The respect for natural resources has always been a philosophy of corporate life at Buzzi Unicem: excellence has been achieved by searching and selecting more environmentally-friendly equipment, and through strict controls on their environmental impact. We are confident that, over time, this will also give positive returns in terms of participation to social and economic life at the local level.

Thus the Buzzi Unicem group is committed:

- to encourage management at the different sites to use our wealth of global expertise and to be ready to support all socially conscious initiatives having constructive and worthwhile objectives
- to maintain a continuous dialog with all stakeholders, such as institutions, opinion groups, trade unions, and the civil community
- to support the social life at production sites with focused initiatives to allow the community to benefit from the presence of Buzzi Unicem in the area.

In-depth analysis and news on the relationships between the group, the environment and the local communities in the section "Portand" of the site www.buzziunicem.it

### **Suppliers**

### Value and reciprocal advantages through strong relationships

We build mutually supportive relationships with our suppliers, based on reciprocal respect, trust and care. This is how Buzzi Unicem defines relationships with its partners. This affinity creates value and reciprocal advantages through synergies of our excellently managed operations and a highly effective supply chain.

#### Selection

Selecting the right partners is one of the keys to growth. Buzzi Unicem looks for partners who will not only satisfy contractual requirements but also share our values. We believe in fact that a shared way of thinking means a shared standard of conduct, and a faster achievement of objectives.

Suppliers' selection takes place by sending out and monitoring application of the Code of Business Ethics, adopted by our parent company to inform all internal and external stakeholders of the need to behave in a correct and transparent manner.

The Logistics and Purchasing Division (LPD) in Italy is in charge of notifying Suppliers, with an explicit statement on each order, that the Code of Ethics is available on the corporate website and that by accepting the order, the supplier confirms to have reviewed it.

Orders are also accompanied by a letter on the Code of Business Ethics that the Supplier must return to LPD duly signed to indicate acceptance. Supplier selection takes place on the basis of the technical and economic competitiveness of bids, together with the reputation and soundness of the companies. We aim at building long-lasting and profitable relationships, but always in compliance with the law.

If prospective suppliers have not been previously screened and are not yet in the Register of Suppliers, LPD gathers all the documentation necessary for their evaluation and only later, if this is positive, suppliers are included in the Register, which is available at every Production/Concrete Unit. After receiving a request for the execution of contract work, LPD evaluates the bids and manages negotiations with suppliers. In compliance with Art.26 of Italian Leg. Decree 81 /2008, bids have to explicitly indicate the cost of safety measures.

#### Assessment and loyalty-building over time. To renew interest over time.

Our philosophy has always been to focus on businesses operating close to our plants, even after the initial definition of the partnership. Buzzi Unicem carries out an assessment of suppliers every two years, through our local operations.

This assessment aims to building loyalty over time in those suppliers who are able to provide added value. We also give priority to companies with OHSAS 18001, ISO 14001 certifications or EMAS registration; companies without these certifications must answer an extensive list of questions on environmental, safety, and quality management issue and are encouraged to comply with certification requirements.



We pay special attention to use of recyclable packaging, optimization of logistics, efforts to reduce noise pollution and to increase employees' awareness of environmental issues. Our commitment and desire to innovate are values that the group wants to share with its partners.

#### Ratio local/total spending 2013



### Shareholders

Creating value and ensuring the growth of the company

In 2013 the performance of stock prices was again characterized by a rising trend and less intense volatility, with lower trading volumes. With growth prospects for listed companies basically unchanged, the rise in stock prices was the result of a fall in the risk premium asked by investors and prices have risen further. Prices increased in all the major segments of the Italian stock exchange, except commodities, and was especially marked for the insurance and banking segments.

Conditions on European and Italian financial markets improved further and the Executive Council of the BCE made clear that official rates would remain at or below current levels for a long period of time. The recent turmoil in the financial markets of some emerging countries has increased uncertainty, although, so far, volatility has remained confined to a few regions and repercussions at the global level have been limited. In this improved context, the price of Buzzi Unicem shares has gradually strengthened.



It was a good year for our operations in the USA, with stronger employment and consumption growth boosting output growth, and the construction industry continued to grow at a good pace, especially the residential and commercial construction segments. Moving to Eastern Europe, a new record in cement consumption was achieved in Russia; there was a modest recovery in Poland, while in Czech Republic and in Ukraine the construction industry remained weak. In Italy, instead, due to protracted declines in domestic production, which tapered off in the third quarter, in domestic demand, still in decline, and in investments, capacity utilization in the cement sector fell to extremely low levels, forcing major companies to accelerate their plans to cut capacity in order to ensure levels more consistent with demand. Among Central European countries, after a first half of the year characterized by bad weather and weak production activity, there were signs of recovery led by growth of internal demand, exports, and construction, especially in Germany. In Mexico, the contraction of public investments and the unexpected deceleration of the economy caused a protracted slowdown in construction activity; the comparison with the record for cement consumption established in 2012 made the contraction even more marked.

The stock market capitalization (ordinary and savings shares) of Buzzi Unicem at December 31, 2013 was well above its level at the end of 2012 (+23.2%). Over the same period, the main index of the Milan Stock Exchange, the FTSE MIB, recorded a 12.8% increase. Traded volumes were down (by 30.6% on the previous year). The average trade value during the year was €11.76 for ordinary shares (€8.31 in 2012) and €6.14 for savings shares (€4.04 in 2012). The price of our shares remained well supported in the early months of 2014.

#### **Buzzi Unicem share price performance**

(January 2007=100)





#### **Trading in Buzzi Unicem shares**

	Ordinary shares	Savings shares	Ordinary shares	Savings shares
Year of reference	number	number	€m	€ m
2007	168,024,567	21,128,085	3,635.8	319.3
2008	217,560,057	31,688,570	3,194.2	321.5
2009	278,784,704	53,467,061	2,960.0	308.9
2010	365,608,536	31,748,299	3,277.7	171.9
2011	303,044,199	20,525,035	2,546.1	96.4
2012	254,566,236	16,188,731	2,115.5	65.5
2013	169,691,396	18,222,273	1,996.0	111.9

#### Main shareholders

as at December 31, 2013

	Ordinary shares	% of total share capital	% of ordinary share capital
Presa SpA (Buzzi Family)	79,200,000	38.44	47.90
Fimedi SpA (Buzzi Family)	17,750,000	8.61	10.73
Marketfield Asset Management LLC	8,774,694	4.26	5.31

#### Main events in 2013:

March	Roadshow – Mediobanca	Frankfurt
May	Roadshow - Deutsche Bank	London
May	Shareholders' Meeting	Casale Monferrato
June	Unicredit Conference	Milan
July	Roadshow – Natixis	Paris
October	Roadshow – Hammer Partners	Zurich
October	Pan European Building Conference – BofA Merrill Lynch	London



CONTENTS

- 18 The group at a glance
- 20 Highlights by Country
- 26 Methodology Note
- 30 Corporate Governance System



CORPORATE SUSTAINABILITY

PERFORMANCE INDICATORS

PPENDIXES

### The group at a glance

#### International presence



ITALY Buzzi Unicem, Unical, Cementi Moccia (50%), Laterlite (33%), Addiment Italia (50%)

**GERMANY** Dyckerhoff, Deuna Zement, Dyckerhoff Beton

**LUXEMBOURG** Cimalux

THE NETHERLANDS Dyckerhoff Basal Nederland

**POLAND** Dyckerhoff Polska

**CZECH REPUBLIC** 

**AND SLOVAKIA** Cement Hranice, ZAPA beton

**UKRAINE** Volyn-Cement, YUGcement, Dyckerhoff Ukraina

**RUSSIA** Sukholozhskcement

**USA**Buzzi Unicem USA, Alamo Cement, Kosmos Cement (25%)

**MEXICO** Corporación Moctezuma (50%)

ALGERIA Société des Ciments de Hadjar Soud (35%), Société des Ciments de Sour El Ghozlane (35%)

#### **Operating structure**

		ITA	GER	LUX	NLD	POL	CZE/ SVK	UKR	RUS	USA	MEX <sup>1</sup>	Total
Cement plants	no.	14	7	2	0	1	1	2	1	8	3	39
of which grinding	no.	5	2	1	0	0	0	0	0	0	0	8
Cement capacity	m tons/year	10.8	7.2	1.4	n.a.	1.6	1.1	3	3.6	9.8	6.3	44.8
Ready-mix batch plants	s no.	139	133	3	15	29	80	6	0	69	56	530
Aggregate quarries	no.	10	3	0	1	0	10	0	0	5	3	32
Terminals and deposits	no.	2	3	0	0	1	0	3	1	32	0	42

ITA/Italy, GER/Germany, LUX/Luxembourg, NLD/The Netherlands, POL/Poland, CZE/Czech Republic, SVK/Slovakia, UKR/Ukraine, RUS/Russia, USA/United States of America, MEX/Mexico

<sup>&</sup>lt;sup>1</sup> Figures at 100%

#### **Key Figures**

	I	2007	2008	2009	2010	2011	2012	2013
Cement sales	t /000	34.067	32,093	25.548	26,570	28.218	27,263	27,358
Concrete sales	m³/000	17,096	16,996	13,893	14,379	15,066	13,641	12,944
Aggregates sales	t /000	14,050	12,280	10,031	10,651	9,708	8,642	8,114
Sales revenue	€m	3,496.1	3,520.2	2,671.8	2,648.4	2,787.4	2,813.4	2,753.1
Capital expenditure	€m	527.4	853.3	389.9	268.2	156.6	234.1	231.5
Headcount at year end1	no.	11,520	11,845	11,269	11,316	10,956	10,837	10,529

<sup>&</sup>lt;sup>1</sup> Mexico at 50%

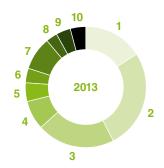
### **Sales Revenue by Line of Business** (in %)



1	Cement and clinker	64
2	Ready-mix concrete and aggregates	35
3	Related activities	1

#### Sales Revenue by Region

(in %)



1	Italy	16
2	USA	26
3	Germany	21
4	Mexico	8
5	Czech Republic and Slovakia	5
6	Poland	4
7	Russia	9
8	The Netherlands	3
9	Luxembourg	4
10	Ukraine	4

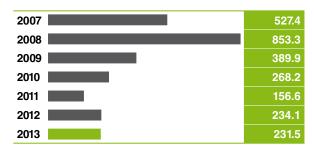
#### **Sales Revenue**

(millions of euro)



#### **Capital expenditures**

(millions of euro)



## Italy



Cement production capacity

10.8 million tons

14 plants

2 terminals/deposits

139 ready-mix concrete plants

10 aggregate quarries

2013	2012	13/12
		% ch
4,502	4,645	-3.1%
2,521	3,094	-18.5%
1,153	1,542	-25.3%
434.8	478.9	-9.2%
94.6	103.6	-8.7%
1,690	1,788	-5.5%
	4,502 2,521 1,153 434.8 94.6	4,502     4,645       2,521     3,094       1,153     1,542       434.8     478.9       94.6     103.6

<sup>\*</sup> Addiment at 50%



#### 13/12 2012 2013 % ch Cement sales t /000 4,963 -0.8% m<sup>3</sup>/000 3,947 3,985 -0.9% Concrete sales Aggregate sales t /000 1,040 1,035 0.5% -0.7% Sales revenue €m 599.7 604.0 33.4 Capital expenditures 33.5 -0.2% €m Headcount at year end 1,851 1,888 -2.0% no.

## Germany

Cement production capacity
7.2 million tons
7 plants
3 terminals/deposits
133 ready-mix concrete plants
3 aggregate quarries

## Luxembourg



Cement production capacity 1.4 million tons

- 2 plants
- 3 ready-mix concrete plants

		2013	2012	13/12
				% ch
Cement sales	t /000	1,172	1,217	-3.7%
Concrete sales	m³/000	121.7	-	-
Sales revenue	€m	109.1	104.1	4.9%
Capital expenditures	€m	6.1	2.1	189.4%
Headcount at year end	no.	185	158	17.1%



		2013	2012	13/12
				% ch
Concrete sales	m³/000	668	789	-15.3%
Aggregate sales	t /000	2,170	2,718	-20.2%
Sales revenue	€m	73.2	87.5	-16.4%
Capital expenditures	€m	1.8	6.0	-70.8%
Headcount at year end	no.	253	280	-9.6%

## Netherlands

15 ready-mix concrete plants
1 aggregate quarry

## Poland



#### Cement production capacity

- 1.6 million tons
- 1 plant
- 1 terminal
- 29 ready-mix concrete plants

		2013	2012	13/12
				% ch
Cement sales	t /000	1,368	1,334	2.5%
Concrete sales	m³/000	626	758	-17.4%
Sales revenue	€m	101.0	109.0	-7.3%
Capital expenditures	€m	5.4	3.0	80.9%
Headcount at year end	no.	374	387	-3.4%



#### 13/12 2012 2013 % ch Cement sales t /000 714 845 -15.5% m<sup>3</sup>/000 1,544 Concrete sales 1,614 -4.4% t /000 1,243 1,271 -2.2% Aggregate sales Sales revenue € m 131.8 149.6 -11.9% 5.4 3.9 Capital expenditures €m 39.6% 803 Headcount at year end 855 -6.1% no.

# Czech Republic and Slovakia

Cement production capacity

1.1 million tons

1 plant

80 ready-mix concrete plants
10 aggregate quarries

## Ukraine



#### **Cement production capacity**

- 3 million tons
- 2 plants
- 3 terminals
- 6 ready-mix concrete plants

		2013	2012	13/12
				% ch
Cement sales	t /000	1,657	1,787	-7.3%
Concrete sales	m³/000	206	171	20.7%
Sales revenue	€m	123.8	134.3	-7.8%
Capital expenditures	€m	7.8	9.0	-13.6%
Headcount at year end	no.	1,506	1,566	-3.8%



		2013	2012	13/12
				% ch
Cement sales	t /000	3,010	2,806	7.3%
Sales revenue	€m	248.6	234.6	6.0%
Capital expenditures	€m	15.3	20.0	-23.4%
Headcount at year end	no.	1,015	1,028	-1.3%

## Russia

Cement production capacity
3.6 million tons
1 plant
1 terminal/deposit

## USA



Cement production capacity

9.8 million tons

8 plants

32 terminals/deposits

69 ready-mix concrete plants

5 aggregate quarries

		2013	2012	13/12
				% ch
Cement sales	t /000	7,417	6,825	8.7%
Concrete sales	m³/000	2,366	2,252	5.0%
Aggregate sales	t /000	2,263	1,911	18.4%
Sales revenue	\$ m	969.3	874.3	10.9%
Capital expenditures	\$ m	68.6	58.0	18.3%
Headcount at year end	no.	2,274	2,282	-0.4%



		2013	2012	13/12
				% ch
Cement sales	t /000	5,388	5,923	-9.0%
Concrete sales	m³/000	1,889	1,957	-3.4%
Aggregate sales	t /000	490	329	49.2%
Sales revenue	\$ m	620.9	691.6	-10.2%
Capital expenditures	\$ m	26.5	20.1	31.9%
Headcount at year end	no.	1,156	1,209	-4.4%

## Mexico<sup>1</sup>

<sup>1</sup> Figures at 100%

Cement production capacity
6.3 million tons

3 plants

56 ready-mix concrete plants
3 aggregate quarries

#### **Cement Plants Location**

as at December 31, 2013

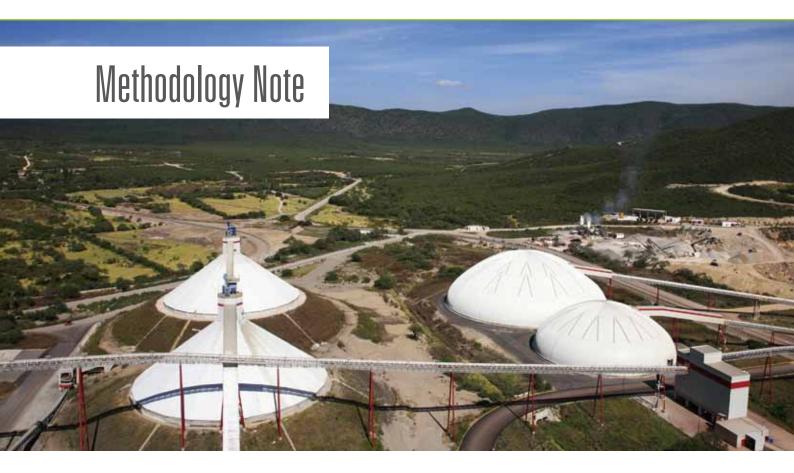






O CEMENT PLANTS

GRINDING PLANTS



The 2013 Sustainability Report of the Buzzi Unicem group presents the social, environmental and economic performance of the group's activity in the different countries where it operates. It follows the approach established during the last few years. The Report's content and publication schedule are in line with last year, to ensure continuity.

The structure of this edition of the Report is also in line with last year and focuses on the most important and significant events for the group to make comparison possible. Specifically, the Report includes two sections: the first describing the process of corporate sustainability and how this is integrated in the business and the second focusing on the economic, environmental, and social performance of the group.

In-depth analysis of sustainability performances and initiatives in each individual country were prepared, to allow creating local versions of the Report more easy to use within each individual company of the group. Therefore, the version in Italian includes an in-depth analysis on Italy while in the German version the analysis is focused on Germany; on the contrary, the English version does not provide local analysis.

Details of sustainability performances and initiatives in the different countries the group operates in will also be available on the group website. This information will be also made available on the website of each group company, translated in the local language.

#### **Relevant Guidelines**

The 2013 Sustainability Report of the Buzzi Unicem group was prepared according to the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) G3, at application level A+. For the calculation of the greenhouse gas emissions of the group's cement factories in Italy, Germany, Luxembourg, Poland and Czech Republic, which take part in the Emissions Trading System, we applied the criteria set by Regulation No. 601/2012 of the European Commission for the monitoring and notification of greenhouse gas emissions pursuant to directive 2003/87/CE of the European Parliament and Council.

#### **Reporting System**

Data collection was supported by a structured process with facts and figures gathered through a reporting package sent by each region head on the Corporate Task Force (Buzzi Unicem SpA) to their direct contacts in the different countries.

#### **Reporting Process**

Our 2013 Sustainability Report is the result of a structured process carried out by a task force set up at Corporate HQ level and including various functions representing a cross-section of all areas relevant to social, environmental, and economic reporting within the group. Back in November 2013, after the official notification by the CEO to the whole group of the draft 2013 Sustainability Report, the task force identified the information structure to be used (the Sustainability Reporting Package) and the key country contacts in charge of collecting the data. The reporting packages received by the individual heads of function in the Italian and foreign companies were then collected and consolidated by tasks force members, each for their respective area of competence.

#### **Reporting Scope**

The facts and figures in the Sustainability Report refer to all the companies included in the Consolidated Financial Statements on a line-by-line basis, which have a significant social and/or environmental impact in the production of cement and concrete.

#### Moreover:

- all data refer to the period between January 1, 2013 and December 31, 2013;
- workforce indicators for Italy do not include the companies Addiment, Premix and Elma;
- quantitative environmental and social data were consolidated fully and not proportionally to the share of ownership;
- economic data is taken from the Consolidated Financial Statements;
- the reporting scope of the Sustainability Report includes the subsidiary Corporación Montezuma which is included in the Consolidated Financial Statements with the proportional method. This company was included because believed to be significant in terms of sustainability impacts as for the GRI scope Protocol;
- any exception to the reporting boundary is reported in the individual sections.

#### **Reporting Principles**

The reporting principles applied in the preparation of the 2013 Sustainability Report comply with the GRI guidelines mentioned above and are as follows:

#### Inclusiveness, Materiality, and Sustainability Context

For each category of Stakeholder we have identified the relationships established and engagement initiatives (see Stakeholders section). The document also describes the main social and environmental impact of the group on the stakeholders in question. The information gathered has been organized by geographic region to match the group's multi-regional organization structure.

#### **Completeness**

See Reporting scope section.

#### **Balance**

Data is shown objectively and systematically, on the basis of an information structure applied for years and steadily improved. The indicators used to show the results measure performance in the period regardless of whether there has been improvement or deterioration with respect to previous periods.

#### **Comparability and Clarity**

In the Sustainability Report the analysis of the sustainability performance has three sections: economic, social, and environmental. In each section, the performance in each country where the group operates is described and, where relevant, this is compared with the group's performance over the last five years (social and environmental performance only). The performance is analyzed and any significant change is explained in the text.

Tables and charts without comparative data are provided for indicators for which comparisons over time are not meaningful or for new indicators for which past data were not available. Application of the Global Reporting Initiative model makes possible comparisons with domestic and international organizations using the same model.

For environmental data we used performance indicators related to production, since these describe performance in a synthetic, uniform and comparable manner: the indicators for burning line are defined in terms of a ton of clinker produced, while, to ensure uniformity and comparability of data across different countries and years, the impact

over the whole production cycle is defined in terms of a ton of equivalent cement.

We also included information on the concrete sector which, with 537 plants worldwide, has certainly a lower impact with respect to the cement sector, but should be at any rate analyzed in depth, with particular regard to the issues of drainage and recycled waste management.

#### **Accuracy**

The data was verified by the area managers of our Italian and foreign companies, who, in turn, guided the personnel in charge at the plant level. The "Group Profile" and "Economic Performance" sections have been prepared using data from the Consolidated Financial Statements; these are prepared in compliance with international financial reporting standards.

#### **Timeliness**

The publication schedule for the 2013 Sustainability Report is aligned with that for the 2013 Consolidated Financial Statements; both documents are presented at the General Meeting of Shareholders.

#### Reliability

The Sustainability Report has been approved by the Board of Directors and presented for outside independent verification by PricewaterhouseCoopers. This is meant to verify compliance with the reporting principles specified in this chapter, including the final statement on the level of application of the GRI G3 guidelines.



#### **Corporate Governance System**

As at December 31, 2013, the corporate governance system of the parent company, Buzzi Unicem SpA, was in line with the recommendations made by the CONSOB (the Italian securities & exchange commission), with the principles set in the Italian Corporate Governance Code for listed companies and, more generally, with the best practices at the national and international level.

Instruments of a voluntary nature, such as the Antitrust Code, are applied by the companies of the group, including foreign companies. Measures adopted to comply with legal provisions conform instead to the provisions of the different legislative frameworks.

### Organization of the Parent Company and of the Dyckerhoff Subsidiary

In compliance with Italian legal requirements for listed companies, the parent company Buzzi Unicem SpA is organized as follows:

 a Board of Directors in charge of corporate management. Currently the B.o.D. consists of five executives and eight not-executive directors, five of which independent;

- a Control and Risk Committee consisting of three directors, most of them independent – to carry out the tasks set by the Italian Corporate Governance Code;
- a Board of Statutory Auditors consisting of three permanent auditors and two substitutes;
- Shareholders' Meeting.

In 2013 the **Dyckerhoff** subsidiary had a dual management and control structure, which included the four members of the Board of Management (B.o.D.), and the nine members of the Supervisory Board (Control Body), of whom six representing the shareholders and three the employees.

In 2013 Buzzi Unicem acquired all remaining ordinary and savings Dyckerhoff shares held by minority shareholders (so-called "squeeze-out").

As a result of the squeeze-out and of the delisting of the Dyckerhoff shares at the Frankfurt Stock Exchange, the legal structure of the Company will change, in 2014, from "Corporation" (AG) to "Limited Liability Company" (GmbH).

The new legal structure will demand some adjustments in the organization and management of the Company.

### Internal Controls and Risk Management system The system of Internal Controls and Risk

Management is the set of rules, procedures and organization structures having the aim of identifying, measuring, managing and monitoring risk.

The Board of Directors holds ultimate responsibility for the Internal Controls system.

The company has set up an Internal Auditing function charged with monitoring compliance with the internal operational and administrative procedures, established to ensure prudent and efficient management and to safeguard corporate assets.

The Board of Directors appoints a Head of Internal Auditing, who reports directly to the Board of Directors, rather than to one of the managers.

Internal Audit local functions have been created at the subsidiaries.

These units report on a line basis to the local top management of the subsidiary but functionally depend on the head of Internal Audit at Buzzi Unicem.

#### **Risk Management**

The Buzzi Unicem group has a Risk Management system that is managed by the Internal Audit function. The risk management system brings together the Board of Directors, management, and staff, to identify potential events that can have an impact on the company, to ensure risks remain within certain limits, and then to make sure, within reason, that the company goals will be achieved.

Within the internal control system, corporate risk management takes in practice the form of a six-monthly process, of review, control, and reporting of risks, based on a global risk strategy, known and established.

#### **Transactions with Related Parties**

The Board of Directors, pursuant to Consob Regulation no. 17221/2010 and subsequent amendments, has adopted the "Procedures for Transactions with Related Parties", aimed to ensure substantial and procedural transparency and accuracy of transactions with related parties.

#### **Processing of Confidential Information**

The Board of Directors has approved a "Market abuse and privileged information handbook", with the aim of creating a file with all the procedures and the practices followed in the group with regard to the external disclosure of corporate documents and privileged information.

#### **Internal Dealing**

The Board of Directors has adopted an Internal Dealing Procedure. In compliance with laws and regulations on this issue, the procedure is designed to ensure the respect of notification obligations. Such obligations are incumbent on Relevant Persons in relation to the transactions carried out in the shares or other similar instruments of listed companies in the Buzzi Unicem group.

#### **Code of Ethics**

All the main Italian companies of the group have adopted their own Code of Business Ethics pursuant to Legislative Decree No. 231/2001. This tool aims at raising the awareness of those who operate in the name and on behalf of the company of the need to behave, during the performance of their activities, in a correct and transparent manner so as to minimize the risk that crimes be committed.

#### Organization, Management, and Control Model

Given the need to ensure accurate and transparent conditions in the execution of the business and of corporate activities, to protect its reputation and image and those of its subsidiaries, shareholders, and employees, Buzzi Unicem SpA has decided to adopt an Organization, Management, and Control Model pursuant to Legislative Decree No. 231/2001.

The Model was approved by the Board of Directors in March 2003 and since then it has been constantly updated to reflect new categories of potential felonies and to identify the corresponding sensitive processes.

The Control Body was identified in the Internal Auditing department of the parent company, which was then assigned the task of supervising the effectiveness and compliance with the Model and of promoting and updating it.

All the main Italian subsidiaries have adopted their own Organization Model and also identified the Internal Auditing function of the parent company as the competent body.

#### **Antitrust Code**

The Board of Directors has approved a document setting out the "Rules of Conduct for group employees to ensure compliance with antitrust regulations".

#### **Code of Conduct**

The parent company has prepared a document setting out the standards of conduct to be applied by employees when dealing with the ethical and legal challenges that may arise from their daily activities.

The Board of Directors sent the Code to all group employees, translated in eight different languages.

Subsidiaries' management has been made especially aware of the importance of the Code and of compliance within their own organizations. Compliance with the code is an essential part of the contractual obligations and of the obligations and duties of Buzzi Unicem employees.

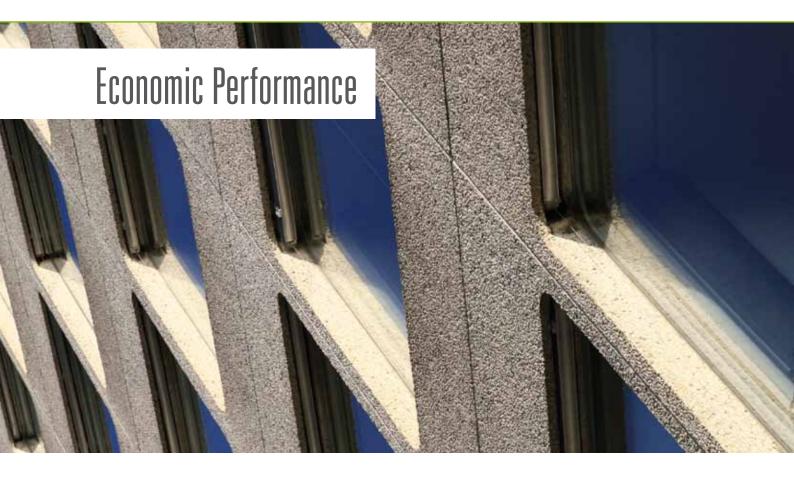


35

- 36 Economic Performance
- 42 Environmental Performance
- 52 Environmental Performance: Summary Table
- 54 Social Performance
- 66 Social Performance: Charts and Tables

# Performance Indicators





In every industry, every country where the group operates, our mission is to create sustainable value for our stakeholders. We therefore provide here the economic performance indicators for the year 2013, which are the result of the commitment and the cooperation of all those who interact with the company (Shareholders, Lenders, Community & Environment, Public Administration & Institutions, Human Resources and Corporate System).

#### **Economic Value Created and Distributed**

The year 2013 saw a gradually improvement in the world economy and international trade. Most developed economies gathered strength steadily with the help of accommodating monetary policies, increasing internal demand and positive confidence effects. Emerging economies lost some momentum, even if activity was still strong overall. Construction activity, at the source of the demand for cement and concrete, grew at a considerable pace in the USA, supported by residential demand and by steady non-residential and commercial construction activity, and in Russia, where consumption of cement surpassed the record levels reached in 2012. There was a good recovery in the Central European countries in the second half of the year. On the contrary, performance in Mexico, Italy, and some countries in the Eastern Europe division continued to lag behind.

In 2013 there were substantial differences in conditions on the different markets where the company operates.

In Italy, the protracted fall in domestic product (slowing down somewhat in the third quarter), in domestic demand, still falling, and in investments brought capacity utilization in the cement sector down to extremely low levels, forcing companies in the segment to accelerate their plans to cut production capacity to levels more consistent with the demand.

In Central European countries, after a first half of the year affected by bad weather and by the weakness of production activity, there were signs of recovery led by growth of internal demand, exports and construction, especially in Germany. In Eastern Europe a new record in cement consumption was achieved in Russia, there was a modest recovery in Poland, while in the Czech Republic and in Ukraine the construction industry remained weak.

In the United States, stronger employment and consumption growth boosted output growth, and the construction

**ECONOMIC PERFORMANCE** 

industry continued to grow at a good pace, especially in the residential and commercial segments.

In Mexico, the contraction of public investments and the unexpected deceleration of the economy caused a protracted slowdown in construction activity; the comparison with the record for cement consumption, established in 2012, made the contraction even more marked.

The trend improvement in volumes was rather strong in the United States and in Russia, moderate in Poland. Levels below those of 2012 were instead recorded in Germany, Italy, and Luxembourg, with the most marked falls in demand taking place in the Czech Republic, Mexico and Ukraine. In the ready-mix concrete sector, the markets that struggled most were Italy, the Netherlands and Poland; a slight decline was recorded in the Czech Republic, while there was double-digit growth in volumes in Ukraine and some improvement in the United States, Germany, and Luxembourg.

#### Italy

In 2013, construction investments recorded a decline in real terms estimated around 6.9% on the previous year, with output levels falling in all segments, from new dwellings, down by 18.4% on the year, to nonresidential private construction, - 9.1% and public works, -9.3%. Only residential property restructuring recorded an increase in activity on 2012, 2.6%.

Non-residential public construction continued to be penalized by curbs on capital spending, especially spending on new public works. At the local level, the Stability Pact put a brake on investments in public works essential to the local economy, such as those for soil conservation, school buildings and the functionality of cities. The rationing of credit, the uncertain economic prospects, the decline in disposable income, and the increasing difficulties in the labor market had a strong impact on the residential investment decisions of households, resulting in a marked contraction in new residential construction.

Non-residential private construction remained paralyzed as the recession persisted. The effect of the decrease in production levels was mitigated by the partial repayment of the outstanding liabilities of the public sector towards the corporate sector. The number of companies of the

sector undergoing bankruptcy proceedings increased noticeably. Our sales of hydraulic binders and clinker, including those for export, recorded a decrease. Sale prices, despite being stable on the domestic market, recorded overall a decline due to the different mix of products sold.

#### Germany

Construction activity, after suffering because of bad weather in the first part of the year, gained momentum, especially the residential segment. Estimates for investment in the construction industry suggest a 0.3% decrease for the year, with a small increase in the residential sector (+0.3%), a small decrease in the commercial sector (-1.7%) and no change in the public sector. Consumption of cement was basically stable on the previous year (-1%).

Our deliveries of cement recorded a decrease on the previous year, while there was a marginal improvement in prices. After a start to the year negatively affected by a long spell of cold weather, there was a substantial recovery in our cement deliveries. Exports and sales of oil-well binders were up, while the trend for white cement was down. Production levels for the ready-mix concrete sector were basically unchanged, with prices picking up.

#### Luxembourg

Construction activity recorded a new decline, smaller than in 2012, but there was an improvement in the last months of the year. Consumption of cement fell slightly with respect to the previous year.

There was a fall in sales of cement and clinker, including inter-group transfers and quantities for export, with average unit revenues in line with the previous year. Note, however, that from the beginning of the year, because of an organization change, some ready-mix concrete production and sale activities have been moved from Germany to Luxembourg.

#### **Netherlands**

The construction industry remained weak, with a 5.0% decline in activity. Our sales of ready-mix concrete closed the year with a marked decrease on the previous year and prices were equally down.

#### **Poland**

Construction investments activity suffered from comparison with the previous year, when it was at a record levels, falling by 8.9%. Cement consumption fell correspondingly, by 8.5%.

Our clients were less involved in the great infrastructure projects completed in 2012 than the average for the sector. As a result, after a start of the year hurt by the comparison with the excellent performance in 2012, the quantity of cement sold by our productive unit picked up, closing the year slightly up on 2012. Production of ready-mix concrete remained instead rather weak. There was a decline in the average price in local currency, small for cement, more marked for ready-mix concrete.

#### Czech Republic and Slovakia

In 2013, for the third year running, construction activity decreased, by 8.2%, and the construction sector continue to struggle. The Slovakian economy grew by 0.6% in 2013, below than the +2.6% increase recorded in 2012. Cement consumption in the Czech Republic fell to about 3.3 million tons, more than a third lower with respect to its 2008 peak. Sales of cement decreased respect to the same period of 2012, while average prices in local currency remained basically unchanged.

The ready-mix concrete sector, which includes Slovakia, also gave negative performance, although less markedly so, with both volumes and prices down on the year.

#### Ukraine

The construction sector remained weak and fell by 14.5% on the previous year, with negative consequences for the consumption of cement in the country.

The quantity of cement sold decreased, despite a recovery in a last quarter characterized by relatively mild weather, with average prices in local currency were stable. The ready-mix concrete sector gave overall a positive performance with volumes up and average prices in local currency down.

#### Russia

The construction industry closed the year with a modest decline (-1.5%), but cement consumption was still growing. For the second year running Russian consumption reached record levels (68.1 million tons against 65.2 million tons in 2012).

Sales of cement from our Suchoi Log plant grew considerably with respect to 2012.

Especially positive was the performance of sales of the so-called "oil-well" cements, aimed at the oil-extracting industry. The strength of demand made possible an equally strong increase in average sale prices in local currency.

#### **United States**

Conditions on the property market gradually improved, although there was a decline in public investments due to spending cuts at the federal, state and local level. Construction activity increased by 1.3%, more strongly in the residential (+9.3%) and the non-residential (+1.9%) sector. Public spending for infrastructure instead fell again, by 5.2%. With this background, US cement increased for the third year running, reaching 79.9 million tons (+4.5%).

Our sales of hydraulic binders were up on the year, thanks to the improved pace of shipments to the Midwest and to consistently robust demand in the South-West, where we further increased sales of the "oil-well" binders used in the oil and gas industry, especially in the sector of shale gas exploration.

Cement prices of in local currency increased, confirming the receptivity of this growing market. The production of ready-mix concrete, mainly in the South-West of the country, had a performance less dynamic in terms of volumes but more favorable in terms of prices in local currency.

#### **Mexico**

Construction activity, which in 2012 had been boosted by important public infrastructure projects, coinciding with federal and state elections, experienced a marked slow-down in 2013, especially in the public works sector. The residential sector was penalized by the financial difficulties of the major companies in the segment.

As a result, cement consumption fell (-6.6%) with respect to 2012, which had been however a record year. Sales of cement of the affiliated Corporación Moctezuma decreased; prices in local currency fell too due to weak demand and increased competition. Production of readymix concrete decreased, although prices were up.

The value of production recorded a modest decline (-2%), due to weakening of revenues in Mexico, Eastern Europe (excluding Russia), and Italy, despite good results in the USA and in Russia. Production costs benefited from favorable trends in fuel cost, while the cost of electric power increased

While our ability to generate Gross Added Value increased, as a result of devaluations carried out mainly in Italy and in Ukraine, there was a slight decrease in Net Added Value (AV, the difference between the value of the production and the consumption of goods and services), in other words in the wealth created for our stakeholders.

#### Added-Value Reclassified Income Statement

(millions of euro)

'			
	2011	2012	2013
Value of production	2,875.6	2,902.5	2,842.9
Intermediate			
production costs	-1,958.3	-1,930.9	-1,824.0
Other income			
and expenses	6.6	-3	-11.3
Gross value added	923.9	968.6	1,030.2
Amortization/deprecia-			
tion and impairment	-243.5	-258.0	-331.4
Net added value	680.4	710.6	698.8

The AV generated by our group's business activities decreased by 1.6%.

### Balance Sheet (millions of euro)

	2011	2012	2013
Current assets	1,612.6	1,650.1	1,483.5
Non-current assets	4,278.2	4,152.6	3,826.4
Invested capital	5,890.8	5,802.7	5,309.9
Short-term debt	942.9	8.808	627.0
Long-term debt	2,161.0	2,391.3	2,308.8
Equity	2,786.9	2,602.6	2,374.2
Sources of invested capital	5,890.8	5,802.7	5,309.9

The sustainability criteria by which the Balance Sheet and the Consolidated Income Statement are reclassified allow us to quantify and to allocate the corresponding benefits to the different stakeholders of the group, according to their economic, social, and environmental characteristics.

#### **Allocation of Net Added Value**

(in %)

	2011	2012	2013
Corporate System	-6	-1	-4
Human Resources	64	63	67
Public Administration			
& Institutions	8	15	16
Shareholders	2	2	0
Providers of Funds	14	15	15
Community			
& Environment	6	7	6

The breakdown and YoY change of AV shows that the share going to the corporate system remains slightly negative.

The share of AV going to "Providers of Funds" has remained unchanged. The debt position has been gradually reduced, consistently with that prudence that has always characterized our business policies.

The portion of AV supporting the "Community and Environment" also remained unchanged, confirming the company's efforts and commitment in the social and environmental field.

The remuneration of ordinary and savings shares was unchanged.

The share of AV going to "Public Administration and Institutions" increased slightly, due to the revision and/or the missed realization of deferred tax assets from tax losses accrued in some jurisdictions.

In Italy, in the 2000 – 2013 period, we made productive investments for the development of underutilized regions (mainly Sicily, Sardinia and Puglia) totaling some €67 million, benefiting from incentives granted by the Economic Development Ministry under Italian Law 488/92 and from investment incentives recognized as tax credits, for a total of approximately €11 million.

These subsidized investments account for about 10% of the total investments made in Italy in the period and have all been completed. During the year we received new subsidies for €0.5 million. To date all incentives and benefits accrued have been credited to us. During the year we did not receive any new loan and/or investment subsidies in the other geographic areas included in the scope of reporting.

Lastly, the percentage share of AV going to "Human Resources" remained high. Staff remuneration is mainly fixed. The company, however, has an incentive and loyal-ty-building plan for Italian executives featuring payments in the form of savings shares according to the achievement of objectives (MBO system).

Savings shares are granted to beneficiaries either through reserved capital increases or through use of treasury shares. The cost corresponding to the shares transferred – equal to their fair value on the allocation date – is included among staff costs. Employee benefits go beyond direct remuneration during the employment relationship, carrying over into the post-employment period. Such benefits primarily consist of pension plans, life insurance, healthcare plans and severance indemnities. Support for employees' welfare and health is therefore a hallmark of Buzzi Unicem's corporate culture. It has tangible effects on the employees' quality of life and allows us to attract and retain the most talented staff and to ensure lasting motivation and professional satisfaction.

The benefits granted varies from country to country, depending on the legal, tax and economic conditions in each region where the group operates. Liabilities are incurred towards both current and retired employees. The following table details our employee benefit obligations:

### **Liabilities for benefits to employee** (thousands of euro)

2013 2012 By category After-employment benefits Pension plans 263.827 298,380 85,808 Healthcare plans 104,228 Employees severance indemnities 23,438 25,214 Others 221 8.906 9,597 Other long-term benefits 382,214 437,640 By geographic region 24,490 Italy 26,302 Central Europe 242,020 246,400 USA 112,335 160,272 3,369 Other countries 4,666

Defined-benefit plans set the monetary amount of pension benefits granted, usually on the basis of one or more factors such as age, years with the company, and salary. The plans may be unfunded or wholly/partially funded by contributions paid by the company, and sometimes by the employees themselves, to an entity or fund legally distinct from the employer which in turn pays out the benefits to employees.

382,214

437,640

The defined-benefit pension plans set up by the group in Germany and, to a lesser extent, in Luxembourg are mostly unfunded. Pension plans in the USA are instead almost totally funded, whereas health plans are, by nature, unfunded.

The defined-benefit pension plans of companies operating in Mexico are largely funded. Employee severance indemnities (TFR, or Trattamento Fine Rapporto) are considered equivalent to an unfunded defined-benefit plan. The provision is extinguished at the time of retirement, and in special cases a portion can be paid out in advance.

The "Others" item includes loyalty bonuses granted to employees upon completion of a given tenure, and usually paid out when employment with the company ends. In particular, we note the existence in Mexico of a system called "prima de antiguedad", similar to the Italian TFR system. Payment of these benefits is certain (once minimum requirements have been met), but their exact timing is not.

The scope of our operations covers radically different social environments: from the strict regulation of pension system in Italy, we move to the more advanced plans and policies in the USA and Germany, where there is a high degree of flexibility of arrangements to meet the employees' needs according to their life expectancy.

The Czech Republic and Poland have a state pension system, similar to the Western model, funded jointly by employees and employers: this cost is included in the income statement under "Staff costs".

In these countries as well there are pension funds into which employees can pay part of their salaries; these contributions are treated as a form of supplemental pension provision and receive a tax break. The Russian and Ukrainian pension systems are purely state-funded, but they are often inadequate and employees do not have to retire at a given age: in this situation, we sometimes support employees who wish to leave the company by granting them an exit bonus.

The group also grants its employees "Other long-term benefits", generally paid upon completing a given term at the company. In this case, the carrying value of the liability on the balance sheet reflects the likelihood of the payment and its duration. Such plans are unfunded. In the USA a deferred compensation plan is provided for some employees. The sums withheld are set aside in a trust and trust profits accumulate for the benefit of the participants.





#### Respect for the environment and the local economy: Buzzi Unicem commitment to stakeholders.

Aware of the potential impact on the areas in which it carries out its own activity, Buzzi Unicem has always, and even more in the last few years, paired the development of its industrial operations with a policy of constant improvement of its environment, health, and safety management systems. The commitment of Buzzi Unicem to the stakeholders takes therefore also the form of respect for the habitats in which it operates. The results of this commitment to the protection of the environment, with the corresponding performance indicators, are presented in this section.

With respect to the production cycle of cement, the main implications concern the consumption of natural, energy and water resources, emissions into the atmosphere, drainage, and the production and recycling of waste. In this section we also describe the issues concerning shipping and packaging and we report on investments on environment and safety issues. We finally provide a summary of our management systems, certified at our production sites around the world.

All indicators for burning lines refer to a ton of clinker produced. To ensure uniformity and comparability of data across countries and years, the impacts generated along the entire production cycle refer to a ton of equivalent cement, which is found by dividing the clinker produced by the specific clinker/cement ratio.

The environmental impact of the activity of concrete plants is certainly lower than that of cement plants. For the concrete sector we describe issues related to the management of water resources and to the recycling of fly ash, drainage and noise abatement.

A summary table, at the end of this section, shows trends in the indicators consolidated at the group level over the last five years. We also report detailed results by country for 2013, for comparison across countries. For in-depth analysis we refer to the specific chapter for each country.

#### **Cement production**

In the last ten years, new and modern approaches to quantify the main environmental impacts of each product and service category have been developed for each single stage of production, use, and end life, in other words over the whole life cycle of the product. Among the tools for the analysis of industrial systems, the so-called "Life Cycle Assessment" (LCA) has taken a major role and has been widely used at the national and international level.

The results of the analysis on the life cycle of the product are then published in the Environmental Product Declaration (EPD), a modern environmental communication tool used to disclose environmental impacts, which should be as objective, verifiable, and comparable as possible.

The main impacts include greenhouse gas emissions, water consumption, and content of recycled material. These indicators receive in particular increasing attention from the experts, so that they are often shown separately and also through symbols, as Carbon Footprint, Water Footprint and Recycled content.

Several international standards are being defined in the sectors of use of the product. These standards point to the requirements for sustainable construction, both in terms of materials used and of the work as a whole.

In 2012 the analysis of the life cycle was extended to all cements produced in the Italian cement plants. The results of such analysis were then reported on the EPD for the Buzzi Unicem cements, certified in June 2012 by ICMQ (certified 12009 EPD) and later renewed.

Thanks to the cements study, Buzzi Unicem is able to carry out the analysis on the life cycle of any cement, specific for each work site, using verified and certified figures.

In this way it is possible to make available to design engineers figures measured and validated by a third party both for the recycled content of the cements and for all other environmental aspects, first of all the emissions of greenhouse gas generated over the life cycle of the product (Carbon Footprint).

#### **Natural resources**

Raw materials are used in the production of the meal or added to the clinker for the production of the end product. The main natural raw materials are limestone and marl, to add limestone, clay, shale, and sand to provide iron, aluminum, and silica. In addition to the clinker also gypsum, as setting regulator, and pozzolana are used for the production of pozzolanic cement.

For many years Buzzi Unicem has been committed to reduce consumption of natural raw materials through the use of materials from other processes, such as scale, alumina dross, fly ash, incinerator slag, sludge, chemical gypsum, and blast furnace slag, in line with "Best Available Techniques" (BAT) for the cement sector.

These materials are compatible with the production process and, in the right quantity, do not modify the qualities of the clinker and of the cement, allowing in this way to reduce natural resource consumption. The restrictive regulations for environment and quality management systems provide for the constant qualitative monitoring of such materials.

Over the years, the replacement percentage of raw materials, with alternative materials has been in the 6–8% range. In 2013 the average value for the group was 8.2%, a constant, albeit modest, rise, which brings the overall increase over five years to 30%.

Specifically, substitution reached 24.5% in Luxembourg. In Germany, Poland, Czech Republic and Ukraine the indicator was well above 10%.

The general increase in the use of recycled materials is due to greater use of slag. In 2014 significant investments are planned to enable greater use of fly ash at the Vernasca, Trino, and Göllheim plants.

#### **Biodiversity**

The availability of natural raw materials is a key factor in cement production. Their extraction in quarries and mines is the first chronological step in the productive cycle and certainly one of the first in terms of planning and of investment of economic and human resources: raw materials must be found; the location of the field must be studied under all aspects; extraction must be planned according to criteria of industrial efficiency and environmental sustainability.

Buzzi Unicem is very aware that extraction activity inevitably affects the surrounding areas, impacting the environment, the local ecosystems and the landscape. For many years, we have been striving to adopt all measures suited not only to limit this impact, but actually to rehabilitate the environment and create new environmental wealth.

This is achieved by carrying out our operations on basis of the following principles:

- optimization of resource use and incentives to the use of substitute raw materials;
- preliminary assessment of the environmental impact and its minimization during the life cycle of the extractive activities;
- preparation of a cultivation plan in full compliance, from the very beginning, with the rehabilitation project for the site;
- interpretation of legal provisions as minimum requirements for the rehabilitation project;
- involvement of stakeholders through initiatives aimed at disclosure, feedback, and assessment of the needs of the local economy and community;
- · voluntary initiatives on biodiversity.

With adequate planning, some stages of extraction activities can actually contribute to preserving biodiversity. Studies published in France and Germany have shown that protected animal species have found refuge in areas of extractive activities as new habitats have been created from reclaimed extraction sites or from parts of quarries still in use.

Even in those cases where the mine is located in an established forest, the opening of a quarry can be of interest in terms of biodiversity, if reclaimed in a way that is consistent with the surrounding habitat. Most environmental reclamation projects provide for the sites to return to their natural state. This return to the natural state, however, requires several years.

During this interval, the habitat, rehabilitated according to the guidelines defined during the stage of analysis of the area, becomes an interesting ecotone (transition area) which can be colonized by pioneer species typical of the surrounding habitats and by species typical of ecotonal habitats.

#### **Energy Resources**

The cement sector is characterized by high energy consumption and energy costs represent about 40% of total production costs, values increased in the persistent economic crisis. The needs of cement production are met for about 90% by thermal energy, with the remaining 10% representing electric power consumption. Specific electricity consumption is determined mainly by grinding and kiln processes.

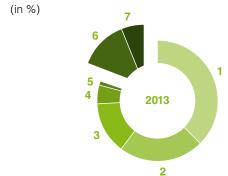
The specific consumption of kiln lines, recorded in each country and strongly related to the technologies applied, has gradually decreased over the years, as use of kilns with higher specific consumption such as wet-process kilns (Lepol) has decreased. In 2013 the specific average consumption of the group was back, after two years, below 4,000 MJ/t clinker.

The discontinuous and irregular operation of clinker burning lines, which underwent many starts and stops, has prevented further improvements in the indicator. On the other hand, given the best technologies available, the thermal factor can vary by 5-8% according to the qualitative and quantitative characteristics of raw materials and of the alternative fuels used.

The lowest specific consumption were recorded at the cement plants of Vernasca (ITA), Hranice (CZE), Chattanooga and Greencastle (USA), Tepetzingo, Cerritos and Apazapan (MEX), where rotary preheater/precalciner kilns brought specific consumption below 3,400 MJ/t clinker. Besides these excellent results, due to the technology applied, there was a steady improvement in energy performance at Suchoi Log (RUS) where specific consumption was further reduced, to less than 5,000 MJ/t clinker.

The chart shows the energy mix of the Buzzi Unicem group in 2013, with the contribution of alternative fuels such as biomass, plastics, waste (CDR), used lubricants, and solvents.

#### **Thermal contribution**



1	Pet coke	38
2	Coal	23
3	Natural gas	14
4	Lignite	5
5	Oil fuel	1
6	Solid waste	13
7	Liquid waste	6

Thermal substitution from the use of alternative fuels has reached 19.1% in 2013, with a slow but constant rise.

The use of alternative fuels allows us to reach several objectives:

- to lower the use of natural resources;
- · to lower the quantity of waste sent to landfills;
- to lower greenhouse gas emissions;
- to lower production costs;
- to dispose of solid process waste, typical of incinerators.

Many studies on the life cycle of the product show that the environmental impact of co-incineration is definitely lower with respect to that of incinerators and landfills.

It should also be remembered that the use of alternative fuels in cement kilns corresponds with the principle of waste separation, as the characteristics requested require an accurate selection of waste input.

The most environmentally conscious countries in Europe (Austria, Germany, Netherlands, and Sweden) combine in fact high levels of waste separation with high rates of energy recycling.

Our corporate objective is to continue on the chosen path: to improve even more these excellent values and to reach new agreements with the local communities and new permits to burn alternative fuels, without changing the quality standards of the end product and always ensuring the utmost safety.

The highest values of thermal substitution were recorded at the plants of Geseke (74.5%), Amöneburg (47%), Göllheim (57%), Deuna (53%), Lengerich (51%): the average for the German plants was 54.3%, a value of absolute excellence, which continues to rise. Good results were obtained also at Barletta (37%), Robilante (28%), Cape Girardeau (58%), Greencastle (44%), Noviny (46%), Hranice (38%), and Rumelange (37%).

The values recorded for specific electricity consumption are already in line with what is allowed by the best technologies of the industry and range from 86 kWh/t equivalent cement in Mexico to 148 kWh/t in the USA. The extreme variation is due not only to the different technologies applied but also to the higher clinker content in the cement required by the American market.

#### Water Resources/Drainage

Water is used in the cement production process to condition the gases discharged from the burning line, to decrease temperatures during grinding, to cool mechanical parts, to pretreat mixes in wet-process kilns and to contain generalized dustiness. Significant investments have been made for many years to reduce water consumption, with the gradual completion of closed circuit systems to cool the thermal load, the installation of water meters on the pumping system and the recycling of treated rainwater. Through these initiatives, the specific consumption for unit of product has fallen to 344 l/t equivalent cement, with the share of rainwater equal to 15%.

The cement production process does not produce sewage; drainage consists mainly of rainwater falling on the plant and of the unrecycled portion of cooling waters. In recent years, we have carried out important initiatives to treat rainwater by screening, sedimentation, and oil extraction, and to recycle rainwaters which otherwise would just end in the drains, to avoid depleting aquifers or basins.

The pollutants characteristic of drainwater from cement plants consist of suspended solids and hydrocarbon. The drainage analysis of drainwater is carried out according to the schedule set in the individual permits, often quite different. The percentage of recycled rainwater has reached high levels in Germany and in the USA and at the cement plant of Hranice in the Czech Republic.

#### **Greenhouse Gas**

An indicator characteristic of the production cycle of cement represents the emissions of greenhouse gas, in particular  $CO_2$ . Greenhouse gas emissions are mostly produced by decarbonation of raw materials, with the rest produced by combustion in the kilns used for clinker production. Emissions from decarbonation are about 62% of total  $CO_2$  emissions.

Besides these direct emissions, whose reduction is the object of the Kyoto protocol, the emissions of greenhouse gas may derive from indirect sources such as electricity use and transportation.

Last year, Buzzi Unicem took again part in the Carbon Disclosure Project (CDP), an international initiative aimed at recognizing recording systems and strategies adopted by companies to limit the progress of climate change, providing an assessment tool to institutional investors. We therefore monitored our direct emissions of greenhouse gases, those emissions due to the production process, as well as indirect ones, due to shipping and electricity consumption.

Buzzi Unicem was placed in the "Carbon Disclosure Leadership Index" (CDLI) with a score of 98/100, one of the top positions in Italy (first place in the materials sector).

With regard to the reduction of greenhouse gases, the main strategies adopted by Buzzi Unicem are:

- to produce cements with a high percentage of secondary raw materials, such as slag, ashes, and pozzolana, as partial replacement for clinker;
- to maximize the energy efficiency of kilns and to replace the older ones, which have a higher specific consumption and therefore higher factors of carbon dioxide emission;
- to use alternative fuels, with a high biomass content, that generate lower CO<sub>2</sub> emissions for equal thermal consumption.

In 2013 total  ${\rm CO_2}$  emissions in absolute terms were 20.5 million tons, with a 3.4% decrease.

The contribution of emissions from decarbonation, equal to 12.7 million tons, were down 1.8%, due to a fall in output, while the clinker content in the cement was unchanged.

The share from combustion, equal to 7.8 million tons, fell by 6%, due to a fall in output, a noticeable increase in thermal substitution and a reduction in the specific consumption of the kilns.

The emission factor of 2013 was equal to 689 kg/t cement, with a slight increase with respect to 2012. Fairly low values were recorded in Luxembourg (549), Germany (588), Czech Republic (592), Poland (604), Mexico (627) and Italy (634), while the production of cements with high clinker content and the high specific consumptions of clinker burning kilns in the USA, in Russia, and Ukraine resulted in high emission factors.

#### **Other Atmospheric Emissions**

Besides greenhouse gas emissions, the main atmospheric emissions are dust, nitrogen oxide and sulfur dioxide. Operation of cement plants and in particular of clinker burning kilns is strictly regulated and narrow limits are set, besides listing the best available technologies (BAT). These limits vary according to the raw materials and the fuels used, for example alternative fuels.

Over the years we have installed modern real-time emission monitoring systems, which allow constant monitoring of the main parameters such as dust, sulfur dioxide (SO $_2$ ), nitrogen oxide (NO $_{\rm X}$ ), hydrochloric acid (HCI), carbon monoxide (CO), total organic carbon, ammonia (NH $_3$ ), to prevent anomalous emissions.

Real-time monitoring from a central controls room allows workers, with adequate training, to intervene in real time to optimize combustion. The competent authorities, at the local and national level, have moreover real-time access to the information generated by the emission monitoring systems.

In addition to being monitored in real-time, emissions are periodically analyzed by qualified external labs. In Europe, the results of this monitoring are published in the European register of emissions (EPRTR).

#### **Dust**

Specifically, the dust emissions are produced directly by processing and moving vast quantities of dust-generating materials, activities that are an essential component of the cement production process. The dust collected by abatement systems is also reused in the production cycle, as required by industry BAT. The installation of modern baghouses made possible concentrations below 20 mg/Nm³ and the elimination of process transitors typical of electrofilters.

Besides the burning line, other emission points, with definitely lower impact, are monitored regularly. In 2013 we recorded a decrease of about 18% in total emissions and of 16% in the indicator for the emission factor of the clinker burning line, with excellent results in Italy, Germany, and the Czech Republic, where values fell below 20 g/t clinker, against an average for the group of 167 g/t clinker.

#### **Nitrogen Oxide**

The production of nitrogen oxide is due to the high temperatures reached inside the kiln during the combustion process. In fact, during combustion, the oxygen in the combustion chamber mixes with the nitrogen in the fuel.

To meet the increasingly tight concentration limits set by national laws, as specified by the best available technologies (BAT), we installed burners denominated Low-NO $_{\rm X}$  and selective noncatalytic reduction (SNCR) systems, able to exploit the reaction of an ammonia solution or a urea-based solution with nitrogen oxide.

In Italy some SNCR systems, previously fed by urea, were converted to an ammonia solution through significant investments, providing greater abatement efficiency.

In 2013, the widespread use of such abatement systems made possible a 13% decrease in the absolute value and a 10% decrease in the emission factor, to 1,799 g/t clinker. The plants of Rumelange, Nowiny, Cape Girardeau, Chattanooga, Geseke, Lengerich, and Deuna recorded levels under 1,000 g/t clinker. These excellent values could be achieved also thanks to the constant use of alternative fuels, whose combustion results in a lower contribution of nitrogen oxide.

#### **Sulfur Dioxide**

Emissions of sulfur dioxide are due to the composition of fuels and raw materials, where sulfur is present as sulphide. The basic characteristics of burning lines and the long processing times allow minimal emissions of SO<sub>2</sub>. When the content of sulfur in the materials is particularly high, or the type of plant used does not allow such captation, we implement secondary measures to decrease emissions, such as using sodium bicarbonate which, reacting with sulfur dioxide, allows a significant decrease of emissions. The efficiency of these initiatives can reach even 80%, allowing at the same time a reduction in emissions of hydrochloric acid. In 2013 a noticeable reduction, by about 60%, was recorded both for total emissions and for the emission factor.

#### Waste

Cement production does not create waste, as dust from combustion is normally incorporated in the clinker, without altering the quality of the product. Waste is produced by ordinary or extraordinary maintenance, by lab activities and occasionally by demolition activities. The only waste resulting directly from the process consists of discarded packaging material, paper, plastics, and wood.

The percentage of this packaging material that is not recycled is in any case less than 1%. This indicator includes all waste products, including those resulting from maintenance. Captated dust, called Cement Kiln Dust (CKD), in some cement plant of the USA, cannot be recycled in the productive cycle, as it is usually done in the other production units of the group, greatly raising the value of the indicator, to about 15 kg/t cement. The average value for the group was around 3.6 kg/t cement, unchanged with respect to 2012.

In the countries where current laws require a reduced alkali content in the clinker, CKDs are extracted to keep the content under control. The dust is moreover extracted to remove excess sulfur and chloride in the burning line, and then discarded or sold for later recycling.

Through sorting of waste we were able to recycle around 30% of the waste we produce. Excluding CKD dust sent to landfills, the percentage of waste recycled was over 80%.

In 2013, the amount of secondary waste or raw materials recycled within the productive cycle was 42 times the amount produced. These figures show how the production activity of Buzzi Unicem represents a solution to the problem of waste management, ensuring a quality product and limiting the depletion of natural raw materials, avoiding excessive use of landfills and incinerators, which have a greater impact on the environment.

#### **Spillage**

In 2013 we did not record significant spills. The main above-ground tanks, which contain hazardous substances, are provided with purpose-designed tailing ponds to avoid unpleasant emergencies.

Underground tanks are periodically tested for tightness to rule out the presence of tears in the wall. Double walled tanks have instead systems to identify leaks.

#### **Packaging**

Cement is wrapped in sacks which are placed on wooden pallets, adequately protected with polyethylene, while the other products are sold by weight. Packaging needs are reduced to a minimum, with the percentage of cement sold in sacks around 20% of the total.

To reduce to a minimum the production of packaging waste, wooden pallets that return to the cement plant in a usable state are mended by internal staff and very rarely sent for external recycling.

#### **Transport**

The transport indicator allows us to assess the incidence of transport, separating transport by truck, by rail and by ship, taking into account average journeys and quantities shipped. This analysis has shown that there are deep differences in the logistics of different countries. Transport by sea is strongly affected by the origin of the fuels used and the availability of transport routes. With respect to 2012, there was an increase in the factor for finished products shipped by sea, also due to the increase of some exports.

#### Concrete

While in the cement sector all major environmental issues are present, in the concrete sector the focus is on water consumption and waste recycling. Other issues managed are gas emissions, water drainage and noise emissions.

Ongoing initiatives to reduce the impact on water resources can be divided mainly between:

- recycling of water from the production process. Using closed circuits it is possible to eliminate completely industrial drainage and as a result decrease the use of water pumped from wells or from superficial bodies of water. In the concrete sector, such systems are found at 334 concrete plants. The countries most aware of these issues are Italy and the Netherlands where all plants have recycling systems;
- recycling of the water used to wash equipment, through separation and mechanical treatment systems separating aggregates from water. Such systems make possible a significant decrease in waste production, saving around 3% on pumping water and on aggregates. Increasingly strict product quality standards forbid the recycling of waters from separation systems. The result of this restriction is decreased use of separation systems. This solution was adopted, in 2013, in 231 concrete plants;
- an increasing number of concrete plants are instead using basins for the treatment of rainwater and especially of waters of first rain, through systems of screening, sedimentation, and oil extraction. These systems make possible to reduce the pollutants in the containers.

By using fly ash to replace cement in concrete plants, it is possible to decrease the consumption of raw materials of natural origins and the production of industrial waste, which would be otherwise sent to landfills.

In the concrete sector, fly ash is used instead of cement at two-thirds of the plants. Its use, even within the limits set by law, makes it possible to preserve the characteristics of concrete, reducing the impact of cement production. Average specific consumption for each cubic meter of concrete was 34 kg of ash.

The main impact, as confirmed by studies on the lifecycle of the product, therefore originates in the stages of provision (cement and aggregates production), shipping, and use.

The diffusion of concrete plants at the local level has reduced the impact of the shipping stage, while characteristics of concrete such as high thermal mass, the resistance to fire and durability allow a reduction of the main environmental impacts in the use stage and during the end life of the product.

#### **Investments and Spending**

Despite the economic crisis affecting the cement sector in the last few years, 2013 saw Buzzi Unicem continuing to improve its performance and compliance with regulatory changes with substantial investments for environmental and safety issues.

Despite a significant decrease in total investments, investments related to environmental and safety issues remained a significant percentage of the total.

In 2013 we carried out technical investments for environmental and safety issues for approximately 27 million Euro. About 11 million Euro were spent on the installation, adjustment, and update of modern dust and gas abatement systems, which made possible the results described above. Another 8 million were used to strengthen waste recycling systems. Smaller investments were made to address other environmental and safety issues, such as installation of fire prevention systems, waste water treatment systems, noise abatement systems. The incidence of environmental investments was 79%.

Besides investments, we recognized expenses for more than 35 million euro on environmental activities, including purchases of urea and iron sulphate, replacement of baghouses, monitoring of emissions, waste management, and for 7 million euro on health and safety, including consulting fees, DPI, safety testing, training, monitoring, etc.

#### **Certified Management Systems**

In 2013 we applied for certification to OHSAS standard 18001:2008 of the health and safety management system at the Italian cement plants of Barletta and Guidonia. The following table summarizes our environmental, health and safety management systems and the environmental product statements for cement plants in the different countries.

#### **HSE** management systems

		EN ISO 14001	OHSAS 18001	EPD	ISO 50001
		Environmental management system	Health & safety management system	Environmental product Statements	System management energy
Italy	Augusta	•	•	•	
	Barletta	•	ongoing	•	
	Cadola	•	•	•	
	Guidonia	•	ongoing	•	
	Manfredonia			•	
	Riva del Garda			•	
	Robilante	•	•	•	
	Settimello			•	
	Siniscola	•	•	•	
	Sorbolo	•		•	
	Travesio	•	•	•	
	Trino	•		•	
	Vernasca	•	•	•	
Germany	Amöneburg	•	•	* 0	•
	Deuna	•	•	* 0	•
	Geseke	•	•	* 0	•
	Göllheim	•	•	* 0	•
	Lengerich	•	•	* 0	•
	Neuss	•	•	* 0	•
	Neuwied	•	•	* 0	•
Mexico	Tepetzingo	•	•		
Czech Rep.	Hranice	•	•		
Poland	Nowiny	•	•		
Luxembourg	Rumelange	•			
Luxembourg	rumeiange				

<sup>\*</sup> Environmental Product Statement by VDZ (German Cement Association). This document refers to the standard cement produced in 2010 in Germany. Data shown are based on the information gathered by 51 out of 57 German producers including Dyckerhoff.

The tests, carried out at least once a year, both by internal staff and by a qualified independent body, have also made it possible to renew previous management system certifications, confirming our commitment to the protection of the environment and the workers, despite the deep crisis of the industry.

All German plants have obtained the "Energy Management Systems" ISO 50001 certification. The objective is to implement the energy management policies of the company and to maximize their efficiency.

# **Environmental Performance: Summary Table**

2009   2010   2011   2012   2013     2013     2014   2015     2013		BUZ	ZI UNICEM				
Energy   17.6   18.4   17.6   18.5   19.1   Heat substitution   %   3.955   3.981   4.007   4.022   3.979   Specific burning line consumption   GJ/t clk   120   120   118   116   119   Specific electricity consumption   kWh/t cem. eq.	2009	2010	2011	2012	2013		
Energy   17.6   18.4   17.6   18.5   19.1   Heat substitution   %   3.955   3.981   4.007   4.022   3.979   Specific burning line consumption   GJ/t clk   120   120   118   116   119   Specific electricity consumption   kWh/t cem. eq.	70.0	70.0	70.7	70.0	70.0	0' 1 / 1	0/
17.6	79.9	79.8	79.7	79.6	79.9	Clinker/cement ratio	<u>%</u>
17.6						Energy	
120   120   118   116   119   Specific electricity consumption   kWh/t cem. eq.	17.6	18.4	17.6	18.5	19.1		%
Raw materials   Raw materials other than natural   %	3.955	3.981	4.007	4.022	3.979	Specific burning line consumption GJ/	t clk
Second	120	120	118	116	119	Specific electricity consumption kWh/t cem.	eq.
Second							
Emissions   130   178   145   199   167   Dust   g/t clk     1,755   1,831   1,743   1,998   1794   NO <sub>x</sub>   g/t clk     346   235   251   465   194   SO <sub>2</sub>   g/t clk     687   686   697   688   689   Direct CO <sub>2</sub>   kg/t cem. eq.						Raw materials	
130	6.3	6.3	7.5	7.8	8.2%	Raw materials other than natural	%
130							
1,755						Emissions	
346   235   251   465   194   SO2   g/t clk     687   686   697   688   689   Direct CO2   kg/t cem. eq.		178	145	199	167	3.	
Waste generation   Waste generation   Waste generation   Waste generation   Waste generation   Waste generation   Waste produced   g/t cem. eq.							t clk
Waste generation   2921   2709   2683   3652   3672   Waste produced   g/t cem. eq.   57   40   31   30   29   Recycled   %   %	346	235	251	465	194	SO <sub>2</sub> g/	t clk
2921   2709   2683   3652   3672   Waste produced   g/t cem. eq.	687	686	697	688	689	Direct CO <sub>2</sub> kg/t cem.	eq.
2921   2709   2683   3652   3672   Waste produced   g/t cem. eq.							
S7   40   31   30   29   Recycled   %						-	
373   355   362   345   334   Water consumption   I/t cem. eq.     14		2709	2683	3652	3672	Waste produced g/t cem.	eq.
Transport   Section   Se	57	40	31	30	29	Recycled	%
Transport   Section   Se							
Transport   91   79   74   65   67   inbound – truck   km/t cem. eq.   51   127   186   176   140   inbound – train   km/t cem. eq.   184   261   259   220   191   inbound – ship   km/t cem. eq.   350   327   386   383   353   outbound – truck   km/t cem. eq.   137   164   184   188   207   outbound – train   km/t cem. eq.   179   184   176   202   289   outbound – ship   km/t cem. eq.     UNI EN ISO Environmental   certification 14001 or similar   Y/N   OHSAS Safety certification   14001 or similar   Y/N   EPD (Environmental   Y/N   Y/N   EPD (Environmental   Y/N   Y/N   TABLE   Y/N   TABLE   Y/N   EPD (Environmental   Y/N   TABLE   Y/N   T	373	355	362	345	334	Water consumption I/t cem.	eq.
91         79         74         65         67         inbound – truck         km/t cem. eq.           51         127         186         176         140         inbound – train         km/t cem. eq.           184         261         259         220         191         inbound – ship         km/t cem. eq.           350         327         386         383         353         outbound – truck         km/t cem. eq.           137         164         184         188         207         outbound – train         km/t cem. eq.           179         184         176         202         289         outbound – ship         km/t cem. eq.           UNI EN ISO Environmental           certification 14001 or similar         Y/N           OHSAS Safety certification           15         15         16         16         18001 or similar         Y/N	14	16	14	16	15	of which from rainfall	%
91         79         74         65         67         inbound – truck         km/t cem. eq.           51         127         186         176         140         inbound – train         km/t cem. eq.           184         261         259         220         191         inbound – ship         km/t cem. eq.           350         327         386         383         353         outbound – truck         km/t cem. eq.           137         164         184         188         207         outbound – train         km/t cem. eq.           179         184         176         202         289         outbound – ship         km/t cem. eq.           UNI EN ISO Environmental           certification 14001 or similar         Y/N           OHSAS Safety certification           15         15         16         16         18001 or similar         Y/N							
51         127         186         176         140         inbound – train         km/t cem. eq.           184         261         259         220         191         inbound – ship         km/t cem. eq.           350         327         386         383         353         outbound – truck         km/t cem. eq.           137         164         184         188         207         outbound – train         km/t cem. eq.           179         184         176         202         289         outbound – ship         km/t cem. eq.           UNI EN ISO Environmental certification 14001 or similar         Y/N           OHSAS Safety certification           15         15         15         16         18001 or similar         Y/N           EPD (Environmental						Transport	
184         261         259         220         191         inbound – ship         km/t cem. eq.           350         327         386         383         353         outbound – truck         km/t cem. eq.           137         164         184         188         207         outbound – train         km/t cem. eq.           179         184         176         202         289         outbound – ship         km/t cem. eq.           UNI EN ISO Environmental certification 14001 or similar         Y/N           OHSAS Safety certification         Y/N           15         15         16         16         18001 or similar         Y/N           EPD (Environmental	91	79	74	65	67	inbound – truck km/t cem.	eq.
350   327   386   383   353   outbound - truck   km/t cem. eq.     137   164   184   188   207   outbound - train   km/t cem. eq.     179   184   176   202   289   outbound - ship   km/t cem. eq.     17   18   19   21   21   certification 14001 or similar   Y/N     15   15   15   16   16   18001 or similar   Y/N     EPD (Environmental		127	186	176	140	inbound – train km/t cem.	eq.
137         164         184         188         207         outbound – train         km/t cem. eq.           179         184         176         202         289         outbound – ship         km/t cem. eq.           UNI EN ISO Environmental certification 14001 or similar         Y/N           OHSAS Safety certification         OHSAS Safety certification           15         15         16         16         18001 or similar         Y/N           EPD (Environmental		261			191	inbound – ship km/t cem.	eq.
179   184   176   202   289   outbound – ship   km/t cem. eq.	350	327	386	383	353	outbound – truck km/t cem.	eq.
UNI EN ISO Environmental  17 18 19 21 21 certification 14001 or similar Y/N  OHSAS Safety certification  15 15 15 16 16 18001 or similar Y/N  EPD (Environmental	137	164	184	188	207	outbound - train km/t cem.	eq.
17         18         19         21         21         certification 14001 or similar         Y/N           OHSAS Safety certification         15         15         15         16         16         18001 or similar         Y/N           EPD (Environmental	179	184	176	202	289	outbound – ship km/t cem.	eq.
17         18         19         21         21         certification 14001 or similar         Y/N           OHSAS Safety certification         15         15         15         16         16         18001 or similar         Y/N           EPD (Environmental							
OHSAS Safety certification 15 15 16 16 18001 or similar Y/N  EPD (Environmental	47	10	10	04	04		\//N
15	1/	۱۵	19	21	21		T/IN
EPD (Environmental	15	15	15	16	16		Y/N
		10	10	10			.,,,
	1	11_	1	13	13	`	Y/N

ITA	GER	USA	LUX	POL	CEK	RUS	UKR	MEX
	-	-					-	
75.1	68.3	92.6	69.5	72.4	78.1	87.7	80.6	77.3
				-				
10.0		00.5	07.1	40.1	00.0	0.0	0.4	0.00
13.9 3.673		20.5 4.002	37.1	46.1	38.3	0.0 4.828	0.4 5.686	3.322
108		148	3.531	3.801	126	137	135	<u> </u>
100	112	140	113	100	120	137	133	00
4.3	14.8	7.6	24.5	12.7	15.1	6.5	10.6	0.8
<u> </u>								
7	12	51	61	24	17	386	1,682	64
1,517	792	1,852	868	989	1,094	1,257	2,632	3,322
50	21	542	0	569	22	0	0	57
634	588	840	564	618	559	702	864	627
1084		13131	648	370	502	1106	789	272
88	80	19	76	98	73	98	100	48
000	100	011	47	170			1500	104
262 3		311 47	0	179 0	89 78	629	1508	164
ა	30	47	0	0	10	0	<u> </u>	
110	69	65	97	48	34	10	6	82
1		58	18	10	31	104	1,733	79
506		100	1,521	0	0	0	0	107
177		27	433	32	228	185	71	1,280
21	112	136	19	8	26	964	490	159
281	1,092	219	0	0	0	0	0	43
10	7	0	4	4	4	0	0	4
10	7	0	1	1	1	0	0	1
6	7	0	0	1	1	0	0	1
13	0	0	0	0	0	0	0	0



In this section of the Sustainability Report we report on issues related to the workforce of Buzzi Unicem, and we report the most significant indicators for the group as well as some prominent trends for the 2008 – 2013 period.

On February 15, 2013, an employee of the Luxembourg subsidiary Beton du Ried lost his life in a workplace accident. We remember our colleague warmly and stand by his family.

The issues described below are those considered important for the purposes of social reporting, keeping in mind that the current multi-regional organizational structure and the articulated nature of the company does not allow for a universal HR policy. For this reason, specific issues are treated in-depth in the sections produced locally, at country level, leaving to the following pages the objective of describing the key elements at group level.

#### **Working Conditions and Employment Data**

At the end of 2013 the Buzzi Unicem group employed a total of 11,094 people, with a 332 decrease with respect to 2012. In all countries the figure is lower than the previous year, except for Luxembourg where the transfer of personnel from the subsidiary Beton du Ried (previously in Germany) has brought staff from 158 in 2012 to 185 in 2013.

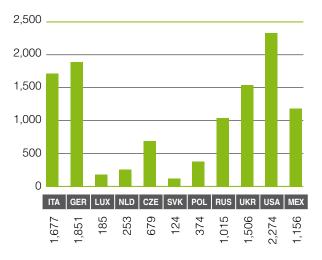
The country with the largest number of employees, 2274, is the United States, followed by Germany and Italy respectively with 1851 and 1677 employees. At global level the three macro regions in which the group operates are: Western Europe, Eastern Europe, and America, each employing approximately one third of total staff.

The main categories of contract are open-ended contracts (about 97% of the total for the group) and full time contracts (about 98%).

Breakdown of Buzzi Unicem 2013 workforce by country, category, gender, and age

- 1	ITA	GER	LUX	NLD	CZE	SVK	POL	RUS	UKR	USA	MEX	TOTAL
Managers												
supervisors												
whitecollar	999	920	81	57	184	28	177	289	382	763	327	4,207
of which												
men	864	670	69	38	118	14	113	178	229	625	223	3,141
women	135	250	12	19	66	14	64	111	153	138	104	1,066
under 30	29	136	12	1	6	1	14	45	74	45	33	396
30/50	600	450	37	36	118	14	117	190	196	494	204	2,456
over 50	370	334	32	20	60	13	46	54	112	224	90	1,355
foremen												
blue collars	678	931	104	196	495	96	197	726	1,124	1,511	829	6,887
of which		,										
men	670	920	103	189	477	90	185	628	872	1,469	809	6,412
women	8	11	1	7	18	6	12	98	252	42	20	475
under 30	44	171	24	4	27	10	13	143	153	125	170	884
30/50	377	359	51	90	294	47	115	393	672	939	557	3,894
over 50	257	401	29	102	174	39	69	190	299	447	102	2,109
TOTAL COUNTRY	1,677	1,851	185	253	679	124	374	1,015	1,506	2,274	1,156	11,094

#### **Total workforce Buzzi Unicem group 2013**



#### **TOTAL GROUP 11,094**

Regarding the so-called "negative" turnover rate, given by total terminations to total staff at the end of the year, there was a slight decrease in the indicator from 2012 to 2013 with the turnover increasing from 11.64% to 13.21%. In the 2009-2013 period the rate instead decreased from

Total employees and turnover rate for the group 2009 - 2013



14.41% to 12.81%, displaying at any rate a negative turnover with an upward trend since 2010 (the section "Social performance: Charts and Tables", at the end of this chapter provides further in-depth analysis).

#### **Work-Life Balance**

In the Buzzi Unicem group, to reconcile work and family is possible thanks to an organizational structure compatible with part-time work and flexible hours. This solution is used above all in Europe and at our headquarters and in administrative offices, especially by female staff. Among the different options to achieve a better balance between private and work life there is also telecommuting. Benefits granted to full-time employees are extended to part-time workers, usually proportionally to the time worked with respect to their full-time colleagues.

A successful example of work-life balance can be seen at Wiesbaden in Germany. On this site many opportunities are made available to help employees to reconcile work with life. In particular the presence of a corporate nursery school allows young couples with children to return to work easily and quickly, while remaining "close" to their children.

#### **Workplace Diversity**

Buzzi Unicem activity is carried out in countries and on continents which differ for culture, history, and ethnicity. This global presence draws attention to the specificities at the local level, especially, but not only, in terms of "minorities" of foreign workers. The "management of diversity" takes into account also groups of workers that are small, in number and in percentage, as is the case for the so-called gender diversity: women represent in the group about 13% of the total number of employees, a relatively low value that is due to the distinctive characteristics of the industry.

At group level there are no specific policies to actively promote minorities, but "diversity" is considered a value both for the company and for the staff themselves, even if the heterogeneity of our companies, operating in different countries, does not allow a unified picture. The specific local situation can be very different in countries with a very low presence of foreign workers (for example Eastern Europe and Mexico) with respect to others where foreign workers are present in large numbers, such as the United States and Luxembourg. It is in Luxembourg, where about 40% of the staff is of foreign origins (mainly from France, Belgium, Germany, Portugal, and Italy) that we carried out a survey in 2013, together with the Ministry for Equal Opportunity. The survey has shown that over 63% of participants is satisfied with their

professional development, although there is room for improvement. On the basis of these results the company, working with the Ministry, will draft an improvement plan.

We notice that only in the United States minorities are object of specific accounting as requested by local laws. The data reported in the table GRI LA13 equal to 115 + 563 (as it can be seen in the next section "Social Performance: Charts and Tables") therefore refer only to the US companies.

#### **Staff Incentive Programs**

Compensation policies and incentive systems are part of staff development and are managed at country level, with the objective of enhancing human capital. Usually the companies of the group do not grant free shares but provide incentives and productivity bonuses based on corporate performance, which can be different for management.

In some cases incentives are also awarded to individual employees as acknowledgment of extraordinary achievements, for innovative proposals and for the commitment on special projects that brought about a concrete improvement in performance.

We also frequently organize festivities to celebrate the commitment of our employees and also when their reaching certain milestones in terms of fidelity and seniority.

#### **Collective Bargaining**

Collective bargaining is widespread in Europe and in the cement sector, but almost absent from the concrete sector, especially in the Czech Republic and Slovakia. In the United States collective bargaining is well-established in Buzzi Unicem USA, but totally absent in Alamo.

We must point out that it is difficult to analyze at group level the degree of employee coverage by collective bargaining, given that the group operates in radically different regions, sometimes in different business segments (cement and concrete) or with separate companies (as, for example, in the United States).

In the countries in which Buzzi Unicem operates, it is in fact possible to find situations at the two opposite ends of the spectrum: in some countries coverage is total (Italy and Ukraine), in others is absent (Slovakia or the United States, for the companies Alamo and Dorsett Brothers). In most other geographic areas, coverage is usually ap-

plied to the majority of employees. The percentage of employees covered by collective bargaining grew by about one percentage point with respect to 2012 (from 71.38% to 72.44%). In the 2009–2013 period there was a small drop in the index of collective bargaining coverage, from 73.67% to 72.44%, due mainly to the increase over the period of the number of employees in countries with a lower coverage rate (Mexico) or with no collective bargaining (for example Alamo USA).

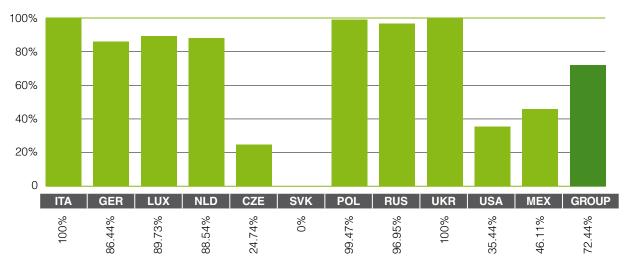
In 2013 an important event was the ongoing work of the European Corporate Committee (CAE), the body representing all European Union workers, with consulting and informational functions. The CAE meets in plenary session once a year and in 2013 the location chosen was again the Robilante plant in Italy. The two sessions of the select committee were instead held at Wiesbaden.

At the local level, a noteworthy event that took place in 2013 was the renewal in Italy of the three-year Contratti Collettivi Nazionali di Lavoro [industry-wide contract agreements] for the Cement and Construction industry. We also mention, among the others, that a new industry-wide contract agreement was signed in Luxembourg while in Poland the agreement for the period 2010-2012 was extended for another year.

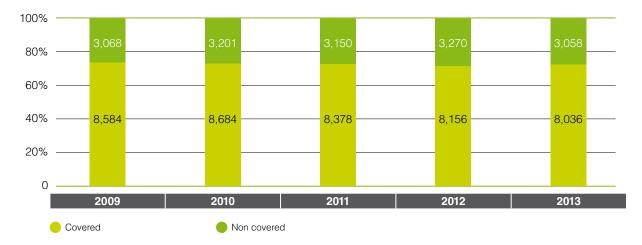
#### **Staff Participation**

Group operations in geographic areas with different cultural and social traditions and different traditions of union representation and work agreements regulation requires different approaches to increase staff participation in the corporate decision process.

#### Percentage group employees covered by collective bargaining agreements in 2013



2009-2013: percentage and number employees covered by collective bargaining agreements



In Italy there are unified union representations (RSU) whose dialogue with the company has always been characterized by honesty and a constructive spirit. In Germany and in the Czech Republic corporate law requires a third of the Supervisory Board to be employees' representatives. In general employees are represented in each country as provided for by local legislation.

Besides the provisions of local legislation, the different units have available specific forms of involvement. For example, in the Netherlands, the workforce is represented by "company councils", consisting of employees, which participate in the decision process and in some cases may even have a right to veto.

### Training and Prevention Programs on Health and Safety in the Workplace

At the different sites of the group, we are constantly promoting initiatives aimed at eliminating as much as possible the risk situations typical of the industrial activities of the company. As Safety is a complex, technical and articulated issue, the different regional units of the group develop plans and innovative approaches to involve employees and contribute to the continuous improvement of safety on the workplace.

In 2013 the group provided many and varied activities: here we provide a few examples, specifically two from Europe and two from America.

The first example concerns Poland, where last year there was an important conference on the issue "Working safely with machinery", for managers and heads of Safety. A second example is from Germany, where all cement plants are OHSAS 18001-certified (the international standard for the protection of safety and health of workers). In 2013 we again organized meetings and provided training as part of a campaign to decrease the risk of the so-called routine.

In fact the "force of habit" in the execution of tasks is one of the main causes of injuries on the workplace: by reducing concentration and focus, routine decreases the awareness of dangers and risks found daily on the workplace. The education campaign in Germany, begun in 2011, provides employees also with practical demonstrations that make clear which are the dangerous situations to avoid.

The examples from the American continent are provided by Mexico and the United States. In Mexico, we carried out in 2013 a "Health and Fitness" program, to help employees by providing health advice and monitoring nutrition according to body shape. At the same time we begun a campaign to promote physical activity and sports, while highlighting the risks from inactivity and addiction. At Buzzi Unicem USA we have a "Safety Award Program" for the plant with the best performance in terms of safety and sustainability during the year. The 2013 Award was given to the Chattanooga plant: a trophy was displayed at the plant for a year and there were other initiatives, such as a party and a T-shirt for all employees.

#### Safety on the Workplace

The health of the workers and the safety of the workplace are essential to the operations of Buzzi Unicem. Throughout the group, prevention activities regarding safety on the workplace continue to have top priority, both technically and organizationally, also through frequent training and prevention programs, such as those mentioned above.

The HSA management system for Buzzi Unicem internal and external workers starts from the analysis of injuries, accidents and, narrow misses: their causes are identified and effective preventive measures are adopted to prevent them or at any rate reduce their frequency. This systemic approach has been one of the key reasons of the steady decline over the years of group injury indicators and has significantly contributed to foster sensitivity and awareness on the issues of work safety and hygiene across the organization.

The analysis of accident statistic indicators is the basis on which we define priorities and schedule prevention and protection initiatives. The ultimate objective is to reduce potential risks and support the commitment of the company to make its own production activity increasingly safe.

Given our corporate values, therefore, we strive to continue to increase employees' awareness, apply new approaches to safety issues, and making these issues important parameters when assessing corporate efficiency and productivity. Historical data shows that approximately 70% of the accidents were due to behavioral failures, with the remaining 30% originated by structural deficiencies in plants or equipment.

Despite our constant focus on and investments in safety, we have unfortunately to report the tragic event at the Luxembourg plant, where an employee lost his life in an accident while driving a corporate vehicle.

#### **Accident Indicators**

The Frequency Index for the cement sector, that is the ratio of the number of injuries to hours worked, was equal to 5.24, a record low for the group, a 10% decrease on 2012. The total number of injuries requiring work absence was down to 63, against 69 in the previous year.

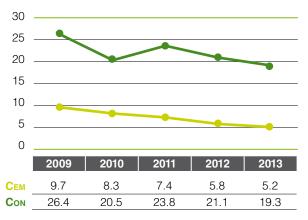
Among the excellent results, we mention those at the Cadola, Manfredonia, Riva del Garda, Settimello, Sorbolo, Göllheim, Geseke, Hranice, Volyn, Chattanooga, Cape Girardeau, and Maryneal plants, where no injuries with work absences were reported. There was one accident at the Augusta plant, the first after seven years, which still proves that the "zero injuries" objective can be achieved.

In the concrete sector, the constant decline in the number of accidents (171 in 2013) has brought the indicator down to 19.3, below 20 for the first time ever. The figure of the concrete sector is strongly affected by the scope of recording. In some countries, in fact, shipping of the finished product, during which there has always been a high number of workplace accidents, is carried out by external personnel.

Besides a marked improvement of the indicator of frequency, we recorded a further 25% decrease in the lost-time injury rate (the ratio of days lost because of injury to worked hour) for the cement sector, down to 0.18. The indicator for the concrete units showed a slight deterioration (+5%), although it remained below the average for the industry.

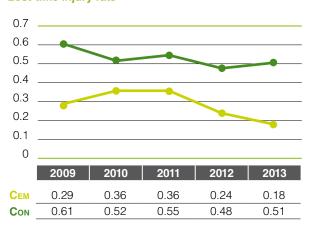
The average duration of injuries was equal to 34 days in the cement sector and 26 days in the concrete sector.

#### Injury frequency rate



Number of accidents x 1.000.000/worked hours

#### Lost-time injury rate



Days lost because of injury x 1.000/worked hours

#### Average injury duration

(days)

60

50

40

30

20

10

0

2009

2010

2011

2012

2013

CEM

30

44

48

41

34

CON

23

25

23

26

Lost days/number of injuries

#### **Training and Professional Development**

Training is a priority in the whole group and aims to increase personal skills and allow professional development. In the different countries this objective is adapted locally to take into account the needs of the company and the potential of employees. In general, it is the HR function of each individual country to organize training programs on topics of general interest, such as workplace safety, the environment, cement and concrete technology, project management, foreign language training, office technology, and management systems.

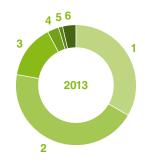
In 2013, the group provided 47,458 days of training, of which 25,068 external (provided by third parties) and 22,390 internal (provided by internal staff). With respect to the previous year, the total number of training days provided increased by about 3,700 days.

Despite the serious crisis of the last few years, education and training activities were maintained, with a focus on professional (external training) issues and issues related to workplace safety and the environment (internal training). With regard to training "from one colleague to the other", almost half of the training days were devoted to safety issues.

At the country level, we highlight the 2013 training figures for Ukraine, where there was a strong increase in training initiatives, both external and internal. The latter, mainly addressed to managers and blue-collar workers and focused on health and safety on the workplace, increased by about three days per employee (from 3.5 days in 2012 to 6.4 days in 2013), partly as a result of the requirements set by new legislation. Internal training increased instead especially for foremen and blue-collar workers, from 3.5 to 5.6 days, mainly because of technical requirements related to plant upgrades.

In Buzzi Unicem USA the increase in training days was especially high: 518 extra days were offered in 2013, bringing the total to 2,710, from 2,192 days in 2012. Also in this case the increase was due to an increase in training on workplace safety issues, to which increasing investments were directed. With regard to the support given to employees' training, we recall that in 2013 Buzzi Unicem USA offered again a "Tuition Reimbursement Program", a program to reimburse employees for the cost of professional and academic courses: in the last year five employees obtained academic and professional credit through this initiative.

#### Total days of internal training in 2013, by topic



1	Technical training	7,503
2	HSE training	9,921
3	Vocational training	3,285
4	Foreign language training	633
5	Management training	258
6	Other	790
Total	22,390	

#### Total days of external training in 2013, by topic



agement training er	957 2,150
agement training	957
	0.55
eign language training	1,405
ational training	13,745
training	4,047
nnical training	2,764
	nnical training E training ational training eign language training

#### **Human Rights**

Buzzi Unicem is committed to complying with national legislation in all the countries where it operates. The group operates in countries that have ratified the fundamental OIL/ILO (International Labor Organization) conventions abolishing forced labor and under-age labor and have integrated them into the respective domestic legislation. Buzzi Unicem operates in countries which are not considered at risk as far as human rights are concerned. In countries where Buzzi Unicem operates, compliance with domestic legislation is deemed to be effective to ensure full respect of human rights. Making sure that there is no discrimination or under-age labor is one of the group's obligations.

Therefore all management and all staff managing human resources have been fully informed on and trained in, compliance with relevant local legislation. Employees have also received our Code of Conduct and understand the underlying arguments and the common values on which our business is based.

#### **Human Rights Protection Clauses in Material Invest**ments

The persisting of the global economic crisis continued to slow down globally those strategic investments that were not yet at an advanced stage. In 2013, as in previous years, no clause for the protection of human rights was included in contracts for supplies or for equity holdings. The company, in fact, operates almost exclusively in countries not considered specifically at risk in this respect, most of which have already signed the relevant UN and ILO human rights conventions.

### **Human Rights Violation Screening for Suppliers and Contractors**

Suppliers and contractors are chosen among those who share the corporate values of our group: their selection is carried out mainly by disseminating and monitoring the application of our Code of Ethics, adopted by the parent company to make all stakeholders aware of the need to behave in a correct and transparent manner. As the group operates in countries that have already signed the main UN and ILO conventions concerning human rights, national legislation already takes care of human rights violations.

#### **Discrimination Incidents**

No episodes of discrimination were reported in 2013 in the countries in which the group operates, except for the United States where four new cases of discrimination were reported: two were resolved amicably, another was settled out of court in early 2014 and the forth is still being defined. Of the United States cases already open in 2012, two were resolved out of court in 2013.

#### **Individual Freedoms**

The other issues that fall under protection of human rights are freedom of trade union association and collective bargaining and utilization of child and forced labor. In the Buzzi Unicem group there is no risk of discrimination of this kind.

Regarding freedom of association, the high rate of collective bargaining coverage in the group testifies to the absence of risks of this kind. Moreover, surveys at all group units identified no danger of minors being exposed to hazardous activities, nor any real and concrete risk of forced labor.

#### **Activities in Support of Local Communities**

The Buzzi Unicem group takes part in a variety of initiatives in support of local communities in every country where it has a significant presence.

#### **Charitable Initiatives**

The Augusta plant for many years has organized visits of students from local schools to bring the company closer to the community and to its young people. In May 2013 the cement plant joined the initiative "Orientiamoci alla vita", a career guidance fair for senior and junior high-school students where they could receive advice on how to choose a career path after graduation.

After violent floods struck the Sardinia Region in November, the plant at Siniscola gave employees paid leave to give them the opportunity of bring relief to the nearby flooded areas of Torpè, Posada, and Olbia. The plant also contributed to the relief directly by lending a vehicle to remove mud and debris.

In Germany, an annual event is held to showcase activities at the productions sites, in particular the use of alternative fuels and the re-naturalization of quarries.

On May 25 2013, "European Minerals Day", 133 quarries in 24 European countries opened their doors to the public. The cement plant at Lengerich took part in this initiative and saw more than 2,000 visitors, between local people, media, and political figures. During the day visitors received detailed information on the extraction of limestone, hydrogeology, quarry biodiversity and renaturalization of old mining areas and were able to personally observe how extraction of raw materials can be reconciled with the protection of the environment.

In April 2013 the plant of Cimalux, in Luxembourg, took part for the first time in the "Girls' Day - Boys' Day", organized by the Ministry of Labor to raise girls' interest in technical professions and crafts, as well as in the sciences and the new technologies. Nine participants, between 12 and 16 years of age, from different schools visited the lab and the different cement production areas, after a short presentation on the operation of the cement plant.

In 2013, as in previous years, Buzzi Unicem USA carried out a collection of used tires at the production units that use them as fuel for the kilns and also a collection of computer equipment, toner cartridges, cellphones, paper, aluminum cans, and batteries.

The Cape Girardeau, Festus and Stockertown plants hosted an "Health Day" when local medical staff was available to employees for visits and check-ups.

The plant of Cape Girardeau actively supports the non-profit organization "Feed My Starving Children". Employees prepare meals that are sent to malnourished children in almost 70 countries all around the world.

The employees of the Pryor plant in Oklahoma provided relief to the people of the town of Moore, which was struck by a violent tornado in May 2013.

In Mexico, the plants of Apazapan, Cerritos and Tepetzingo held a "Health Fair", during which free medical assistance was provided to many people from near-by communities.

The plant of Apazapan promoted immunization campaigns within the local communities and schools.

#### **Donations**

In 2013, all production units made donation – in cash or cement – to religious organization, sport associations, cultural and social associations, schools, non-profits, and local entities.

The group supports two non-profit associations, A.S.P.H.I., which promotes the integration of the disabled at school and at work, and ANFASS, which campaigns for intellectually and/or emotionally disabled people.

In the United States, Buzzi Unicem USA supports the communities within which it operates with donations, fund raisers, and food collections; it supports several charities that help disadvantaged children, first of all "United Way". It also supports "The American Heart Association" and "The American Cancer Society".

In Texas, Alamo Cement sponsored the "Alamo Annual Golf Tournament", a fundraising event for charities and non-profit organizations based in Southern Texas. Around 145 people took part in the event and \$4,018 was raised for the "Special Olympics of South Texas Charity" and \$4,018 for the "Casey Wells Scholarship Fund", a fund providing college scholarships for high school students.

In Mexico all three plants support students from the local communities with donations of school material and, to the most deserving ones, scholarships. The Tepetzingo plant sponsors a youth soccer team.

#### **Buzzi Unicem Foundation Onlus**

The Buzzi Unicem Foundation was established in 2003 in Casale Monferrato by Buzzi Unicem SpA with the mission of promoting and sustaining initiatives to improve the diagnosis and therapy of Pleural mesothelioma, an aggressive type of malignant cancer caused by environmental and work-related exposure to asbestos.

This serious pathology represents an alarming social phenomenon in Casale Monferrato region, where asbestos used to be produced.

To fulfill its statutory obligations, the Foundation finances the research projects of Universities, Research centers, and Health authorities, on:

- applied research into prevention systems
- work on patients aimed to early diagnosis and treatment

The Foundation cooperates with the public sector, channeling funds to projects which encourage the sharing of ideas, experience, and suitable resources to facilitate the routes that lead to the right clinical solutions, an ideally-placed connection point between science and patients.

The scientific Committee of the Foundation, made up of doctors and researchers specialized in pulmonary diseases, professional diseases, and oncology, from different medical institutes and universities of Northern Italy, sets priorities and monitor progress.

The Buzzi Unicem Foundation is included in the Italian register of non-profit organizations and receives about 1,000 contributions each year.

#### **Group Support for Arts and Culture**

Buzzi Unicem is a member of the "Consulta per la promozione dei beni artistici e culturali di Torino" (the Organization for the protection of the artistic and cultural heritage of Turin) and is a Corporate Golden Donor of FAI (Fondo per l'Ambiente Italiano), supporting initiatives to protect the Italian art heritage.

Buzzi Unicem also supports "Il Cemento nella identità del Monferrato Casalese", a non-profit cultural organization for the study, protection, and promotion of the heritage of the local binders industry (cement and lime).

The Barletta plant has supported for several years the International Piano Competition "Mauro Paolo Monopoli". The event, which gathers young pianists from over 40 different countries, is a true reference point for the musical and cultural life of the town of Barletta.

#### **Group Support for the Environment**

In a few Italian regions, environment protection legislation mandates that when extending or opening a quarry in a wooded area, the latter should be rebuilt or upgraded in a near-by location. For this reason and for the attention that has always paid to the areas within which it operates, Buzzi Unicem has introduced two reforestation projects, one for the area around the quarry

of Gavota Noisa (near Robilante), the other for an area in the municipality of Valdieri near the quarry of Roaschia, which had been struck by fire.

In the Netherlands, Dyckerhoff Basal joined a scheme of the Dutch government to give tax incentives to employees going to work by bike. Every employee who uses a bike at least every other working day to get to work will receive, every three years, a bonus for the purchase of a new bike.

In the United States, the Festus plant continued in 2013 the environmental management program on 526 hectares owned by the company begun in 2012, the objective of protecting the community, preserving wildlife habitat and providing public benefits such as a better air and water quality.

#### **Group Support for the Community**

The plant of Lengerich in Germania has involved children from a local Youth Center and school in a project to embellish the plant. After first becoming acquainted with the cement production process, the young artists, under the guidance of a professional artist, have transformed a wall of 100 m² into a colorful mural, showing the cement production cycle, from the extraction of limestone up to the "big-bag" (see picture on pages 6 and 7).

In Ukraine, the leisure and cultural activities of the employees are encouraged at the employees' cultural center at the plant Volyn-Cement. Dancing and singing groups for children were organized in 2013, in addition to new clubs for theater, guitar, arts, and crafts. Since April the center also host a pre-school to prepare four- and five-year olds for elementary school.

#### **Transparency of Business Conduct**

In Italy, in 2013, Buzzi Unicem updated the "Transactions with Related Parties" and "Internal Dealing" procedures, as well as the "Market abuse and privileged information handbook".

In 2012, the list of offenses under Legislative Decree 231/01 was extended to include the offenses of "Employ of citizens of third countries whose stay is irregular", "Extortion, incitement to give or promise benefit and

corruption" and corruption of private citizens. Following these legislative developments, the Supervisory Body updated in 2013 the Code of Ethics and the Models of all companies in the group.

In 2013 Buzzi Unicem updated its internal procedures, both for cement and for concrete companies, to comply with the "Guidelines for the evaluation of the ethical accountability of business partners" issued by AITEC – Associazione Italiana Tecnico Economica del Cemento and by ATECAP to help member companies to mitigate the risk of forming business partnerships with members of criminal organizations or people involved in any way in some of the most serious offenses covered by Legislative Decree 231/2001.

In 2013 Buzzi Unicem adopted a new procedure "Management of Reporting" with the objective of defining clear and well-defined channels to ensure the reception, the analysis, and the processing of reports of alleged illegal behavior.

The management process must ensure that the identity of the informant remains confidential and that he/she is shielded from retaliation, discrimination or penalization of any kind.

In Germany, in the companies of the Dyckerhoff group, all activities are subject to fraud risk analysis, as part of the annual integrated internal control process.

According to the Code of Conduct, any offers, payments, demands for, and acceptance of cash in any form is considered unacceptable. "Dyckerhoff's Groupwide Effective Internal Audit Standard" requires all units to provide information directly to Corporate Audit, about all types of fraud and corruption.

Dyckerhoff has adopted internal whistleblowing procedures, encouraging all employees to inform Corporate Audit about any potentially illegal situation of which they have become aware.

In the Czech Republic and in Slovakia staff receives periodically training on corruption issues and all employees have been made aware of the Buzzi Unicem Code of Conduct. The policy on sales activities is very strict: local salespeople and plant managers do not have access to

financial resources, as this could encourage corruption. In addition, the discounts granted, the complaints received, the inventories, and the journeys made by concrete mixers are checked every month to detect possible irregularities.

In Russia, supply contracts are always awarded after bids are received from at least three suppliers, all products are sold at list prices and discounts are granted only after being approved by the top management of the company.

In the United States, periodic reviews of sales, purchases, finance, marketing, and governmental affairs departments ensure that the company acts in compliance with the provisions of FCPA (US Foreign Corrupt Practices Act) and RICO (Racketeer Influenced and Corrupt Organization Act). Alamo Cement Co., operating in a context where the overall risk of corruption is low, complies with the already mentioned federal laws (RICO).

In Mexico, in the period in question, we carried out audits of several departments, focusing on those most exposed to the risk of corruption and conflicts of interest.

#### Training on Ethics and Transparency Issues

The training course begun in 2012 and aimed to familiarize employees with the Legislative Decree 231/2001, the Model itself, and the Code of Ethics was completed in 2013. We held eleven training sessions at the plants of Augusta, Robilante, Vernasca, Siniscola, Settimello, Trino our head office in Casale Monferrato, which were attended by a total of 121 employees, between Managers, Officers, and Supervisors, as per training plan. At the end of each session, a test was taken by those attending to verify the effective learning of the issues discussed.

In the United States, the Alamo plant provided specific training on "Basic Principles of USA Antitrust Law" and "Basic Antitrust and Trade Regulation Statues" for 104 employees, between managers and salespeople. We also provided specific training, making use of relevant case studies, on the ways to identify violations so that illegal activities can be prevented.

#### Corruption

No instances of corruption were reported in the context of the activities of the group in 2013.

### Position and Participation in Public Policy and to Lobbies

In Italy, Buzzi Unicem SpA is an active member of AITEC, the Italian Cement Association, and of Cembureau, the European Cement Association, based in Brussels. Through AITEC, Buzzi Unicem contributes to the dialog between industry and institutions, social parties, public and private entities, and organizations. AITEC makes available years of experience and know-how to those who wish to better understand the cement industry, either for educational and professional reasons or for personal interest.

Cembureau represents the cement industry in front of the European Parliament and other EU institutions. Through this association, we have been able to present our point of view on the evolution of EU legislation on environmental, energy, product standards, and sustainability issues.

In Germany, in the cement sector, Dyckerhoff is a member of the "Cement Manufacturers Association" (VDZ), already a member of Cembureau. In the concrete sector Dyckerhoff is instead member of the "Union of Concrete Producers".

In Luxembourg, Cimalux actively supports Fedil, the "Luxembourg Business Federation", and Cembureau. Cimalux is also a founding member of the "National Council for Sustainable Construction" whose objective is to promote more sustainable development of the construction sector.

In Poland, Dyckerhoff Polska is active in several associations such as the "Polish Cement Association", the "Polish Association of Ready Mixed Concrete Producers" and the "Polish German Chamber of Commerce & Industry".

In the Czech Republic, Zapa Beton is a member of the "Cement Manufacturers Association" and Cembureau.

In Ukraine, Dyckerhoff Ukraina is a member of the "European Business Association", the "American Chamber of Commerce", and the "Camera di Commercio Italiana per l'Ucraina". The objective of our participation in these associations is to encourage the evolution of legislation and legal reforms against corruption and red tape, and to create a community of Western and local companies to improve the economic situation.

In the United States Buzzi Unicem USA is a member of the "Portland Cement Association" (PCA) which campaigns for a fair implementation of legislation aimed at reducing greenhouse gas emissions.

Buzzi Unicem USA is represented on several PCA committees, including the "Transportation and Infrastructure Committee", whose aim is to develop a common approach to infrastructure and transportation issues. It is also an active member of the "Research and Education Foundation" (RMC) which has the objective of improving the quality and the sustainability of the concrete sector.

Alamo Cement is a member of the "Alamo Area Council of Government" (AACOG), a forum for the discussion of issues at the local, state, and nation level, to make suggestions to the competent authorities, in particular with regard to the environment.

The company participates actively also in the South Central Texas Cement and Lime Manufacturers (SCTC/LM) group, which includes four cement producers and one lime producer. At the state level, Alamo Cement is involved in the "Texas Association of Business" (TAB), which deals with environment, human resources, and legislation issues. It is moreover a member of the "Texas Cement Producers Group" (TCPG) and the "Portland Cement Association" (PCA).

In Mexico Corporación Moctezuma is a member of the "Camera National del Cemento".

#### **Sanctions**

In the United States we paid a penalty around \$104,350 for violations of safety regulations, as well as \$22,100 for failing to comply with tax laws and payment schedules.

## Social Performance: Charts and Tables

#### Breakdown of 2013 workforce by country



**TOTAL GROUP 11,094** 

#### Turnover rate of 2013 workforce by country



LA2

**GROUP 13.21%** 

2009-2013: total group employees by contract type

	2009	2010	2011	2012	2013
Total Workforce	11,652	11,885	11,528	11,426	11,094
Men	9,952	10,236	9,932	9,841	9,553
Women	1,700	1,649	1,596	1,585	1,541
Open-end					
contracts	11,179	11,500	11,165	11,096	10,816
Fixed-term					
contracts	473	385	363	330	278
Full-time	11,407	11,658	11,313	11,223	10,914
Part-time	245	227	215	203	180

LA1

The 2012 figure for total workforce was updated with respect to what had been indicated in the 2012 Financial Statements

2009-2013: total number and turnover rate of group employees

	2009	2010	2011	2012	2013
Rate	44.44	10.50	10.47	44.64	40.04
turnover %	14.41	10.59	12.47	11.64	13.21
Total					
workforce	11,652	11,885	11,528	11,426	11,094
Total					
new hires	1,146	1,492	1,178	1,228	1,134
Total					
terminations	1,679	1,259	1,438	1,330	1,466
of which					
for resigned	735	659	729	664	865
of which					
for retirement	224	185	221	205	206
of which					
for dismissal	720	415	488	461	395

LA2

Turnover rate = total terminations/total workforce

### 2009-2013: percentage and number employees of the group covered by collective bargaining agreements

	2009	2010	2011	2012	2013
Workforce total	11,652	11,885	11,528	11,426	11,094
Personnel covered by collective bargaining	8,584	8,684	8,378	8,156	8,036
Coverage ratio %	73.67	73.07	72.68	71.38	72.44

LA4

#### Minimum notice period in case of organization changes

Italy	11 weeks
Germany	4 weeks
Luxembourg	no notice
Netherlands	4 weeks
	8 weeks (cement),
Czech Republic	6 weeks (concrete)
Slovakia	8 weeks
Poland	12 weeks
Ukraine	8 weeks
Russia	9 weeks
USA	9 weeks (for plant closure)
Mexico	4 weeks

LA5

### 2013 absentee rate by geographic area (illness, injuries, other causes)

	Absentee rate in %	of which for strikes in %	Occu- pational diseases	Deaths
Italy	2.96	0.02	11	0
Germany	5.79	0	0	0
Luxembourg	3.36	0	0	1
Netherlands	4.29	0	0	0
Czech Rep.	2.60	0	0	0
Slovakia	1.82	0	0	0
Poland	4.44	0	0	0
Russia	1.89	0	2	0
Ukraine	2.53	0	0	0
USA	2.20	0	0	0
Mexico	1.48	0	0	0
Group	2.98	0.002	13	1

#### 2009-2013: absentee rates for the group

	2009	2010	2011	2012	2013
Absentee rate %	2.92	2.76	2.89	2.76	2.98
of which for strikes	0.01	0.03	0.01	0.01	0.002
professional diseases	7	12	10	8	13
deaths	0	0	0	2	1

LA7

LA7

### Accident indicators 2013 by geographic area (CEMENT)

	Indicator frequency	Indicator lost-time injury	Average injury (dd)
Italy	7.88	0.26	32
Germany	11.68	0.29	25
Luxembourg	14.98	0.04	3
Czech Rep.			_
Slovakia	0	0	0
Poland	6.26	0.43	70
Russia	1.85	0.01	6
Ukraine	0.42	0.01	16
USA	5.43	0.40	73
Mexico	3.95	0.05	12
Group	5.24	0.18	34

LA7

### Accident indicators 2013 by geographic area (CONCRETE)

	Indicator frequency	Indicator lost-time injury	Average injury (dd)
Italy	4.1	0.28	68
Germany	31	0.54	17
Luxembourg	73.2	0.24	3.3
Netherlands	1.9	0.01	5
Czech Rep.			
Slovakia	4.1	0.12	30
Poland	6	0.63	104
USA	34.8	0.90	26
Mexico	14.9	0.46	31
Group	19.3	0.51	26

LA7

Injury frequency rate = number of injuries x 1.000.000/worked hours

Lost-time injury rate = working days lost for injuries x 1.000/worked hours

Average injury duration = lost days/number of injuries

#### 2009-2013: accident indicators

	2009	2010	2011	2012	2013
Cement					
Indicator					
frequency	9.66	8.26	7.41	5.87	5.24
Indicator					
lost-time					
injury	0.29	0.36	0.36	0.24	0.18
Average					
duration					
injuries (dd)	30	44	48	41	34
Concrete					
Indicator					
frequency	26.39	20.51	23.80	21.13	19.3
Indicator					
lost-time					
injury	0.61	0.52	0.55	0.48	0.51
Average					
duration					
injuries (dd)	23	25	23	23	26

### Average days of external and internal training 2013 for employee, by category\*

	External	Internal
Total group employees	2.29	2.05
Managers, office supervisors,		
white collars	1.88	1.26
Foremen, blue-collars	2.54	2.53
Managers, office supervisors, white collars	1.88	1.2

#### LA<sub>10</sub>

\* Excluding 153 apprentices

#### 2009-2013: external training for employee

	2009	2010	2011	2012	2013
Total days of training	20,707	20,001	24,406	23,973	25,068
Average days for employee	1.8	1.7	2.15	2.13	2.29
Managers, office supervisors, white collars	1.58	1.4	2.02	1.79	1.88
Foremen, blue-collars	1.91	1.87	2.22	2.34	2.54

LA10

#### 2009-2013: internal training for employee

	2009	2010	2011	2012	2013
Total days of training	20,075	24,344	22,444	19,814	22,390
Average days for employee	1.74	2.07	1.97	1.76	2.05
Managers, office supervisors, white collars	1.36	1.24	1.24	1.35	1.26
Foremen, blue-collars	1.94	2.53	2.4	2.01	2.53

LA10

### Ratio of basic salary of female to male employees in 2013

(in %)

(111 70)	Managers, office supervisors, and white-collars	Foremen, blue-collars
Italy*	90	80
Germany	80	90
Luxembourg	70	80
Netherlands	57	44
Czech Republic	57	97
Slovakia	77	100
Poland	50	120
Russia	61	69
Ukraine	80	76
USA	66	84
Mexico	50	100

### Breakdown of 2013 group employees by category, gender, age

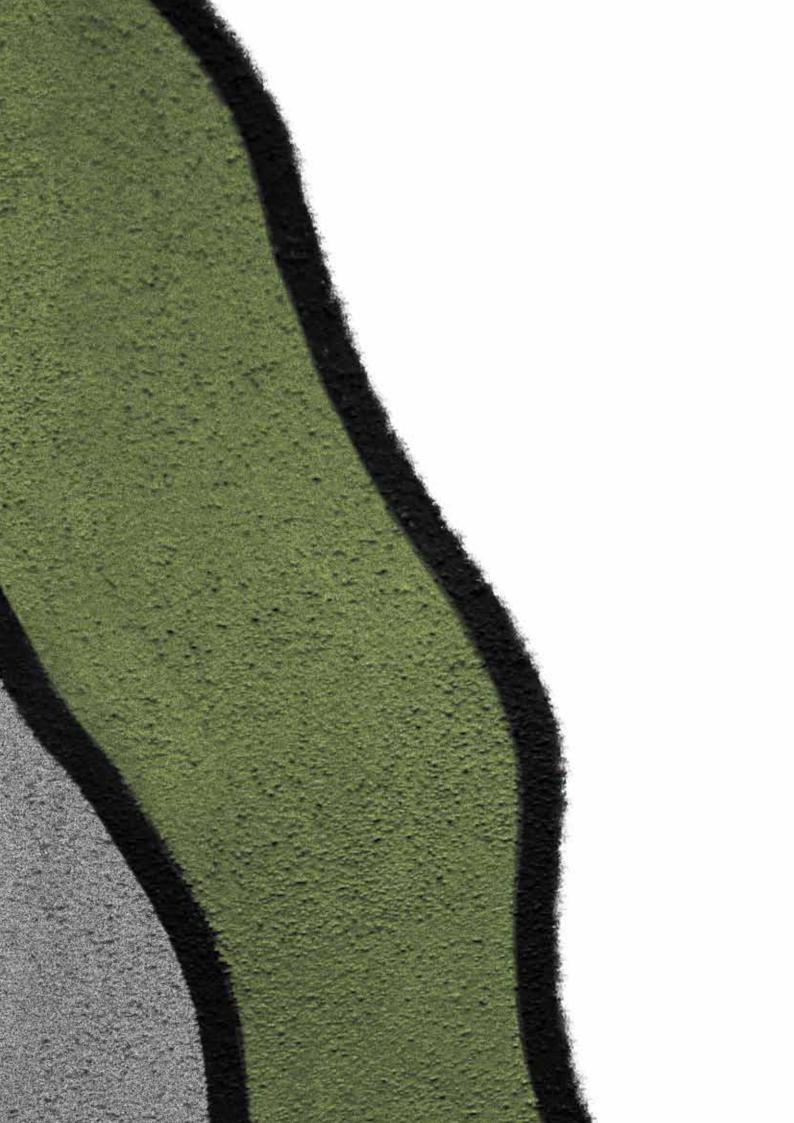
Managers, supervisors, white-collars of which	4,207
Men	3,141
Women	1,066
Under 30	396
30/50	2,456
Over 50	1,355
Minorities	115
Foremen, blue-collars of which	6,887
Men	6,412
Women	475
Under 30	884
30/50	3,894
Over 50	2,109
Minorities	563
Total group	11,094

LA14

\* In Italy excluding 47 managers (46 men, 1 woman)

LA13

From internal analyses carried out at country level, no significant differences, due to gender discrimination, were observed at Buzzi Unicem between the basic salary of male employees and that of female employees with the same macro category (managers, supervisors, white collar worker, foremen, blue-collar worker), experience and tasks performed. The significant differences observed are due mainly to the way the indicator is calculated as this does not take into account the different contractual levels within the same macro category and whose trend can be influenced by the limited female presence in some categories, limiting the comparability of compensation levels.



71

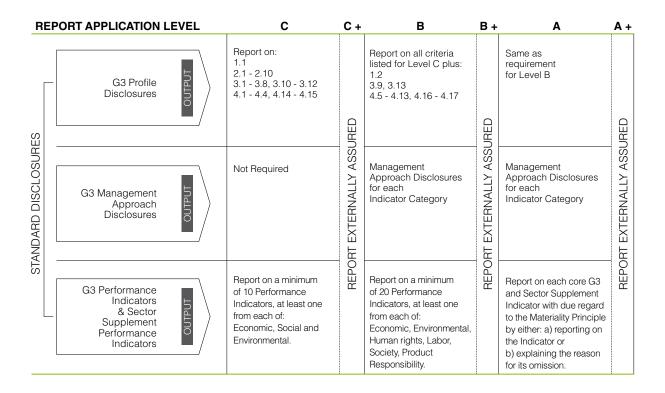
PERFORMANCE INDICATORS

- 72 GRI Table of Contents
- 74 Statement of Compliance



# Self-declared Application Level GRI G3

The Buzzi Unicem group Sustainability Report 2013 was prepared according to the Sustainability Reporting Guidelines issued by the Global Reporting Initiative (GRI) G3, application level A+.



The table of contents of the GRI is available at the following address: http://www.buzziunicem.it/online/it/Home/Sostenibilita/Indicatoridiperformance.html



#### **BUZZI UNICEM SPA**

INDEPENDENT REPORT ON THE LIMITED ASSURANCE ENGAGEMENT OF THE SUSTAINABILITY REPORT 2013



## INDEPENDENT REPORT ON THE LIMITED ASSURANCE ENGAGEMENT OF THE SUSTAINABILITY REPORT 2013

To the Shareholders of Buzzi Unicem SpA

- We have carried out the limited assurance engagement of the Sustainability Report of the Buzzi Unicem Group (hereafter the "Group") as of 31 December 2013 (hereafter the "Report") following the procedures summarized in paragraph 3 of the present document. The Board of Directors of Buzzi Unicem SpA are responsible for the preparation of the Report in accordance with "Sustainability Reporting Guidelines" version 3.0 issued by GRI (Global Reporting Initiative) that are detailed in the paragraph "Methodology Note" of the Report. The Board of Directors are also responsible for the definition of the Group objectives regarding the sustainability performance and the reporting of the achieved results. We are responsible for the preparation of this Report on the basis of the work performed.
- Our work has been conducted in accordance with the principles and guidelines established by the "International Standard on Assurance Engagements 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information" (ISAE3000), issued by the International Auditing and Assurance Standards Board. ISAE3000 requires the compliance with ethical principles ("Code of Ethics for Professional Accountants"), including professional independence. It also requires that our work is planned and performed with the aim of obtaining a limited assurance, rather than a reasonable assurance, that the Report is free of material errors. A limited assurance engagement of the Sustainability Report consists in interviews, primarily with company's personnel responsible for the preparation of the information included in the Sustainability Report, in the analysis of the Sustainability Report and in other verification procedures.
- 3 The verification procedures performed on the Report are summarized as follows:
  - a) correspondence of economic and financial information to those reported in the Buzzi Unicem consolidated Financial Statements as of 31 December 2013. As for this activity we made reference to the auditors' report dated 4 April 2014, issued by other auditors;
  - b) analysis of the processes underlying the generation, recording and management of quantitative data included in the Report concerning the Italian, the German and the Luxembourgeois companies of the Group operating in the cement sector and concrete sectors. In particular, we have carried out the following procedures:
    - meetings with management representatives of Buzzi Unicem SpA, Dyckerhoff AG
      and Cimalux S.A. to achieve a general understanding of the information, accounting
      and reporting systems in use to prepare the Report, as well as of the internal control
      processes and procedures supporting the collection, aggregation, processing and
      transmission of data and information to the department responsible for drawing it
      up. These companies were selected on the basis of a qualitative and quantitative risk
      analysis;

#### PricewaterhouseCoopers Advisory SpA

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- on-site verification of the cement plant in Lengerich (Germany);
- on-site verification of the cement plant in Esch-sur-Alzette /Rumelange (Luxembourg);
- analysis, on a sample basis, of the documentation supporting the Report, in order to confirm the reliability of data and information collected through meetings, interviews and on-site verifications and to confirm they were properly managed;
- verification of how data and information are managed in the selected sites and how they are subsequently aggregated and consolidated at Group level;
- analysis of the completeness and internal consistency of qualitative information included in the Report compared with the guidelines identified in paragraph 1 of the present document;
- f) obtaining a representation letter, signed by the legal representative of Buzzi Unicem SpA, relating to the completeness and reliability of the Report and of the information and data included in it, as well as to the compliance with the guidelines identified in paragraph 1 of the present document.

A limited assurance engagement is less in scope than a reasonable assurance engagement carried out in accordance with ISAE3000 and, as a consequence, it provides a lower level of assurance that we became aware of all the significant events and circumstances that a reasonable assurance engagement could have identified.

Regarding the comparative data relating to the Sustainability Report 2012, reference should be made to our assurance statement dated 22 April 2013.

Based on the procedures carried out nothing came to our attention that causes us to believe that the Sustainability Report of the Buzzi Unicem Group as of 31 December 2013 is not in compliance, in all material respects, with "Sustainability Reporting Guidelines" version 3.0 issued by Global Reporting Initiative, application level A+, as stated in the paragraph "Methodology Note" of the Report.

Turin, 18 April 2014

PricewaterhouseCoopers Advisory SpA

Signed by

Paolo Bersani (Partner)

This report has been translated from the original, which was issued in Italian. We have not performed any control on the Sustainability Report 2013 translation.

Notes	

#### **Editorial Coordination**

Accordo, Torino

### BUZZI UNICEM S.P.A.

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This Sustainability Report has been completed in accordance with GRI A+ standards

