

SUSTAINABILITY  
REPORT

2016





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 assets.

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

**Vision**



**Buzzi Unicem**

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**Pietro Buzzi**  
Chief Executive

A handwritten signature in black ink that reads "Pietro Buzzi".



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**Michele Buzzi**  
Chief Executive

A handwritten signature in black ink that reads "Michele Buzzi".

## During the course of the 2016 financial year we have seen some important events, which will significantly influence our approach towards sustainability.

Just over a year ago, the 21st edition of the Conference of Parties (COP21) drew to a close in Paris after an 'historic' agreement had been reached on environmental policy: this agreement was pursued, supported and shared by 195 Countries and in years to come it is destined to have a major impact on the way we live, produce and access resources.

The cement industry must do its part, by trying to reduce emissions, particularly of CO<sub>2</sub>: for this reason we have initiated an important organizational project in all Countries in which the group operates, to promptly respond to the legitimate expectations of our stakeholders.

Another event that is worth remembering is the approval, at the end of 2016, of legislative decree n. 254, which concerns the publishing of non-financial information. This Decree makes it obligatory for listed companies to disclose non-financial information and, as a result, a company's sustainability report has become as important as its financial statement.

We know that we are well-prepared for this new obligation, thanks to the experience we have acquired even before European

lawmakers formally codified it: our stakeholders must be able to know and assess our performance even more broadly than has been the case until now.

Finally, we would like to remember another important event which concerns the strengthening of our organization in terms of sustainability, i.e. the appointment of a Corporate Sustainability Manager, who, starting from this year, will play a key role in accelerating the take-up and spread of sustainability principles within our company and improving the communication of our values and modus operandi to all interested parties.

The Sustainability Report which we hereby present, consolidates and presents an evolved version of several key processes which we commenced last year: the materiality matrix, certain stakeholder engagement initiatives aimed particularly at employees and local communities and the improvement of data collection and validation procedures.

The path of sustainable development requires commitment, goodwill and passion: we are relying on everyone's help to make the company of tomorrow.

# THE GROUP AT A GLANCE

## INTERNATIONAL PRESENCE

### Europe

<b>Italy</b>	Buzzi Unicem, Unical, Cementi Moccia (50%), Laterlite (33%)
<b>Germany</b>	Dyckerhoff, Deuna Zement, Dyckerhoff Beton
<b>Luxembourg</b>	Cimalux
<b>Netherlands</b>	Dyckerhoff Basal Nederland
<b>Poland</b>	Dyckerhoff Polska
<b>Czech Republic and Slovakia</b>	Cement Hranice, ZAPA beton
<b>Ukraine</b>	Dyckerhoff Ukraina
<b>Slovenia</b>	Salonit Anhovo (25%)

### Asia

<b>Russia</b>	Sukholozhskcement, Dyckerhoff Korkino Cement
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### America

<b>USA</b>	Buzzi Unicem USA, Alamo Cement, Kosmos Cement (25%)
<b>Mexico</b>	Corporación Moctezuma (50%)

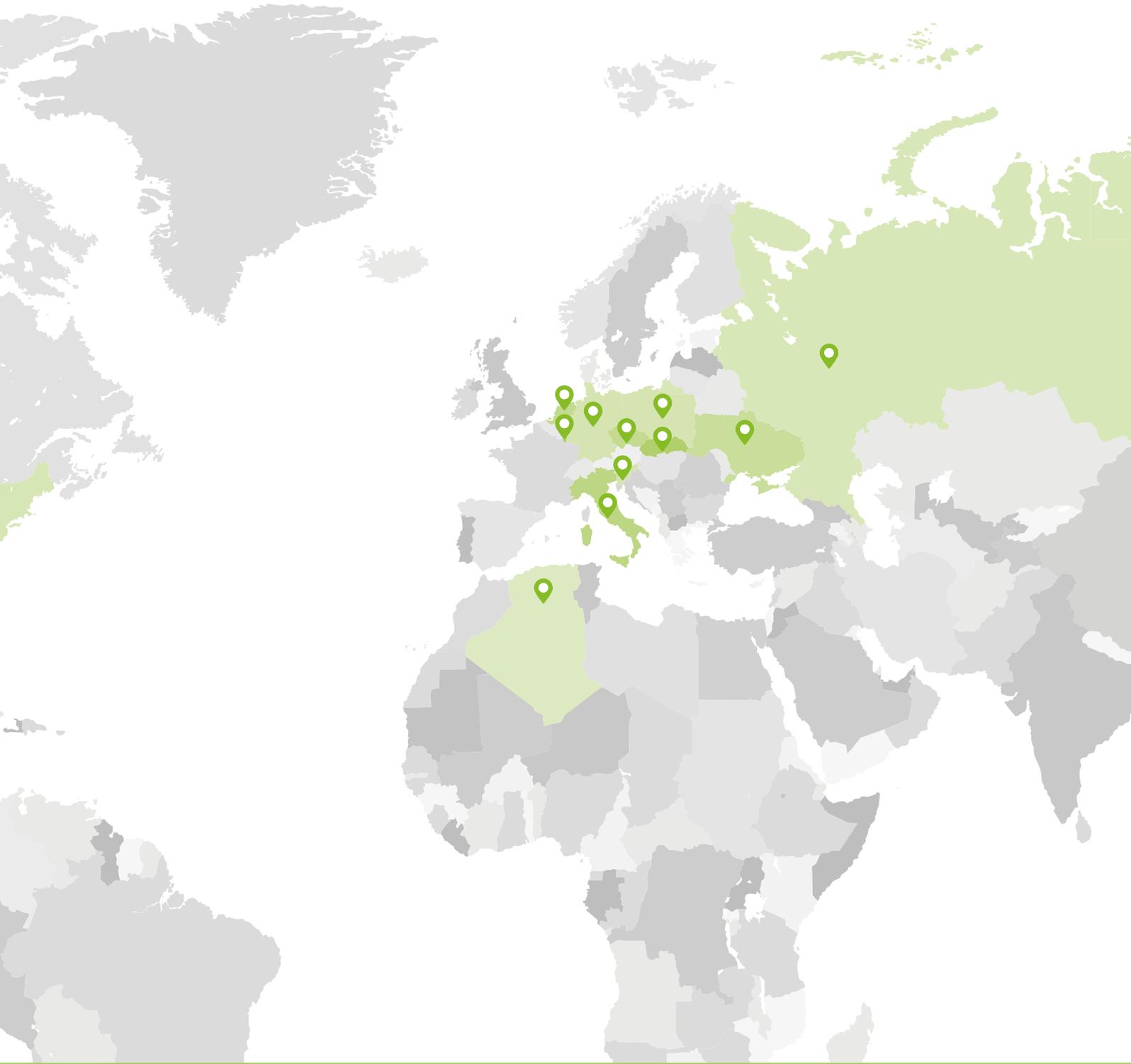
### Africa

<b>Algeria</b>	Société des Ciments de Hadjar Soud (35%) Société des Ciments de Sour El Ghozlane (35%)
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The Buzzi Unicem Group is committed to promoting sustainability in all countries in which it operates





## Operating structure

		ITA	GER	LUX	NLD	POL	CZE SVK	UKR	RUS	USA	TOTAL	MEX <sup>1</sup>
Cement plants	n.	9	7	2	-	1	1	2	2	8	32	3
of which grinding	n.	3	2	1	-	-	-	-	-	-	6	-
Cement production capacity	m tons/ years	9.0	7.2	1.4	-	1.6	1.1	3.0	4.3	10.2	37.8	8
Ready-mix batch plants	n.	132	110	3	13	27	69	5	-	72	431	36
Aggregate quarries	n.	5	3	-	1	-	9	-	-	3	21	3
Deposits and terminals	n.	3	3	-	-	1	-	2	1	36	46	-

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

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

## Key Figures

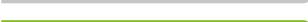
		2010	2011	2012	2013	2014	2015	2016
Cement sales	t/000	26,570	28,218	27,263	23,852	24,280	24,857	24,901
Concrete sales	m <sup>3</sup> /000	14,379	15,066	13,641	11,887	12,048	11,936	11,938
Aggregate sales	t/000	10,651	9,708	8,642	7,869	7,558	8,120	6,839
Sales revenues	€ m	2,648	2,787	2,813	2,510	2,506	2,662	2,669
Capital expenditure	€ m	268	157	234	222	318	304	236
Headcount at year end	n.	11,316	10,956	10,837	9,938	10,117	9,738	9,975

The years from 2010 to 2012 include Mexico at 50%. The years from 2013 do not include Mexico.



## Sales revenue

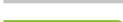
(millions of euro)

2010		2,648
2011		2,787
2012		2,813
2013		2,510
2014		2,506
2015		2,662
2016		2,669

The years from 2010 to 2012 include Mexico at 50%.  
The years from 2013 do not include Mexico.

## Capital expenditures

(millions of euro)

2010		268
2011		157
2012		234
2013		222
2014		318
2015		304
2016		236

The years from 2010 to 2012 include Mexico at 50%.  
The years from 2013 do not include Mexico.

## Environmental performance - highlights

		2012*	2013*	2014*	2015**	2016**
CO <sub>2</sub> Emissions	kg / t cem. eq.	688	689	706	697	699
Specific thermal consumption	MJ / t clinker	4,021	3,979	4,009	4,190	4,224
Thermal substitution	%	18.5	19.1	19.3	24.4	27.0

<sup>(\*)</sup> Mexico: figures at 100%

<sup>(\*\*)</sup> Excluding Mexico

## Social performance - highlights

	2012*	2013*	2014*	2015**	2016**
<b>TOTAL WORKFORCE</b>	<b>11,426</b>	<b>11,094</b>	<b>11,222</b>	<b>9,738</b>	<b>9,975</b>
Management	-	-	-	-	435
White collars	4,292	4,207	4,190	3,764	3,184
Blue collars	7,134	6,887	7,032	5,974	6,104
Trainees	-	-	-	-	159
Marginal / Helpers	-	-	-	-	93
Total hires	1,228	1,134	1,784	1,069	1,905
Percentage of hiring	10.8%	10.2%	15.9%	11.0%	19.1%
Total terminations	1,330	1,466	1,656	1,448	1,668
Turnover rate	11.6%	13.2%	14.8%	14.9%	16.7%
Absence rate (illness/injuries)	2.8%	3.0%	2.8%	3.2%	3.3%
Total days of training	31.0	34.0	39.0	35.5	32.1

<sup>(\*)</sup> Mexico: figures at 100%

<sup>(\*\*)</sup> Excluding Mexico

# Cement plant locations

As at 31 December 2016

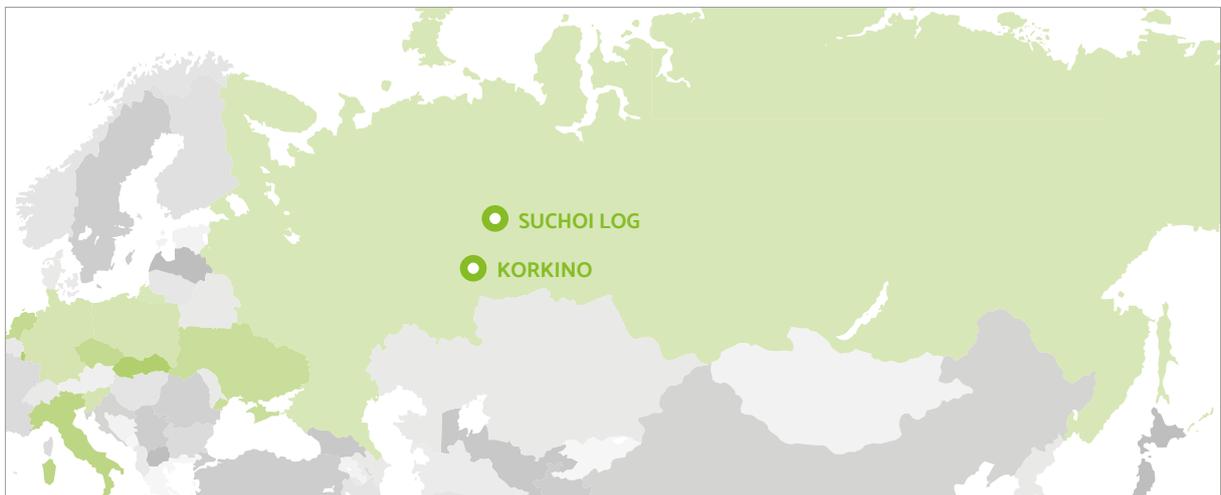
## Europe and Africa



Caption

- Cement plants
- Grinding plants

### America and Asia



## Italy

9

plants

9.0

(million tons)  
cement production  
capacity

132

concrete  
batch plants

5

aggregate  
quarries

3

deposits  
and terminals

		2016	2015	var% 16/15
Cement production	t/000	3,443	3,682	-6.5%
Concrete sales	m <sup>3</sup> /000	2,779	2,569	+8.2%
Aggregate sales	t/000	893	1,153	-22.5%
Aggregate sales	€ m	375.2	381.1	-1.6%
Capital expenditures	€ m	25.4	18.6	+36.2%
Headcount at year end	no.	1,377	1,435	-4.0%



## Germany, Luxembourg and Netherlands

9

plants

8.6

(million tons)  
cement production  
capacity

126

concrete  
batch plants

4

aggregate  
quarries

3

deposits  
and terminals

		2016	2015	var% 16/15
Cement production	t/000	6,231	6,099	+2.2%
Concrete sales	m <sup>3</sup> /000	4,512	4,452	+1.4%
Aggregate sales	t/000	2,924	3,067	-4.7%
Aggregate sales	€ m	723.2	720.1	+0.4%
Capital expenditures	€ m	51.3	39.1	+31.4%
Headcount at year end	no.	2,162	2,113	+2.3%



## Poland

1

plant

1.6

(million tons)  
cement production  
capacity

27

concrete  
batch plants

1

terminal

		2016	2015	var% 16/15
Cement production	t/000	1,535	1,350	+13.7%
Concrete sales	m <sup>3</sup> /000	777	729	+6.6%
Aggregate sales	€ m	95.0	96.8	-1.8%
Capital expenditures	€ m	9.2	4.6	+99.5%
Headcount at year end	no.	368	365	+0.8%



## Czech Republic and Slovakia

1

plant

1.1

(million tons)  
cement production  
capacity

69

concrete  
batch plants

9

aggregate  
quarries

		2016	2015	var% 16/15
Cement production	t/000	859	836	+2.8%
Concrete sales	m <sup>3</sup> /000	1,535	1,621	-5.3%
Aggregate sales	t/000	1,271	1,524	-16.6%
Aggregate sales	€ m	136.2	135.6	+0.4%
Capital expenditures	€ m	8.9	5.0	+76.7%
Headcount at year end	no.	778	747	+4.1%



## Ukraine

2

plants

3.0

(million tons)  
cement production  
capacity

5

concrete  
batch plants

2

deposits  
and terminals

		2016	2015	var% 16/15
Cement production	t/000	1,765	1,710	+3.2%
Concrete sales	m <sup>3</sup> /000	125	115	+8.4%
Aggregate sales	€ m	79.8	69.8	+14.3%
Capital expenditures	€ m	4.1	6.5	-38.0%
Headcount at year end	no.	1,558	1,304	+19.5%



## Russia

2

plants

4.3

(million tons)  
cement production  
capacity

1

terminal

		2016	2015	var% 16/15
Cement production	t/000	3,286	3,363	-2.3%
Aggregate sales	€ m	154.4	166.7	-7.4%
Capital expenditures	€ m	12.7	9.9	+27.9%
Headcount at year end	no.	1,455	1,469	-1.0%



# United States of America

8

plants

10.2

(million tons)  
cement production  
capacity

72

concrete  
batch plants

3

aggregate  
quarries

36

deposits  
and terminals

		2016	2015	var% 16/15
Cement production	t/000	7,782	7,817	-0.4%
Concrete sales	m <sup>3</sup> /000	2,210	2,451	-9.8%
Aggregate sales	t/000	1,751	2,376	-26.3%
Aggregate sales	\$ m	1,237.3	1,230.1	+0.6%
Capital expenditures	\$ m	138.3	244.5	-43.5%
Headcount at year end	no.	2,277	2,305	-1.2%



**Buzzi Unicem**  
commits to align itself one year  
ahead of schedule with the  
requirements of Legislative Decree  
30 December 2016, n. 254, in terms  
of the reporting of non-financial  
and diversity information



POLYSIUS

Buzzi Unicem

# .01

## CORPORATE GOVERNANCE

**Buzzi Unicem adopts a system of corporate governance that is in line with the recommendations issued by CONSOB. Its system is inspired by the principles contained in the Corporate Governance Code of listed companies and, more generally, by national and international best practices. Voluntary instruments are employed in all of Buzzi Unicem's foreign companies.**

### The corporate bodies

- Shareholders' meetings are the deliberative collective body comprising shareholders (or their representatives). It is the body that makes and expresses the decisions that will be implemented by the Board of Directors.
- The Board of Directors is the collective body for the management of the company and is vested with all ordinary and extraordinary management powers. It guides and controls the company and comprises 3 executive members and 10 non-executive directors, 7 of whom are independent. The Honorary Chairman is not a Board member.
- The board of statutory auditors is required to ensure compliance with the law and company bylaws, and verifies that corporate activities are carried out in accordance with the principles of proper administration. They also monitor the suitability of the company's organizational structure, the internal control system and its administrative/accounting system. The current board of statutory auditors has 3 regular members and 2 alternate members.

With regard to the committees recommended by the Corporate Governance Code, the Board of Directors did not deem it necessary to set up a Nominating Committee, given that the company has a concentrated share ownership and because the role and standing of the independent and non-executive directors, as well as the self-assessment procedure of the Board of Directors, allow it to perform the functions attributed to the Nominating Committee by the Corporate



**The Board of Directors chose not to set up a sustainability committee but, considering the operational duties of the Sustainability Steering Committee and the Corporate Sustainability Manager, it has entrusted a supervisory role to the Control and Risk Committee**

Governance Code, especially in light of the composition of the Board of Directors (majority of independent directors). The Board of Directors has also decided not to set up a Remuneration Committee since the role and standing of the independent and non-executive directors enable there to be an authoritative and independent assessment of the respective matters during the board's meetings. Moreover, salary proposals for executive directors and directors with special assignments are presented to the Board of Directors by independent directors.

The Board of Directors did set up the Control and Risk Committee. The Committee is currently composed of 3 members and has suitable accounting and financial know-how. It has consultative and propositional functions relating to the assessments and decisions of the Board of Directors on internal control and risk management systems and on the approval of periodic financial reports. The Committee was also given the function of providing a prior opinion to the Board of Directors on internal control and risk management.

The Board of Directors chose not to set up a sustainability committee but, considering the operational duties of the Sustainability Steering Committee and the Corporate Sustainability Manager, it has entrusted a supervisory role to the Control and Risk Committee.

The Board of Directors also set up the committee for transactions with related parties, that is responsible for issuing the opinions required by Consob Regulation n. 17221/2010 and as amended. It is composed of 3 independent Board members.

#### **Code of conduct, internal control and risk management system**

The Internal control and risk management system is a set of rules, procedures and organizational structures to identify, measure, manage and monitor the main risks. The Code of Conduct is the most important of these and establishes the principles that all employees of Buzzi Unicem must respect in facing and overcoming ethical and legal challenges. This document has been translated into eight languages and is sent to all Buzzi Unicem employees.

The Company's internal control and risk management system is inspired by the guidelines of the COSO (Committee of Sponsoring Organizations of the Treadway Commission). It contributes to: guaranteeing the efficiency and effectiveness of corporate processes providing an adequate management of the risks that could prevent the Company from reaching its objectives; ensuring the reliability of the financial information, the internal/external reporting system through the use of processes, procedures and systems that enable it to generate a flow of reliable



information both inside and outside the company; ensuring compliance with laws, regulations, bylaws and internal procedures; safeguarding and protecting corporate assets from inappropriate or fraudulent use or loss. Therefore, this definition of internal control and risk management system has a broader scope; it is not limited to accounting controls and the process of financial and economic reporting; it also covers other important aspects of the business, like the protection of resources, operational efficiency and effectiveness and compliance with laws, regulations and policies of the organization. Within the scope of the observation of risks control, the risks identified through the inventory are updated every six months, and cover a three-year timeframe. Outside of this time interval, risks can be evaluated and registered, provided they can be suitably identified. Buzzi Unicem's managers and supervisors are responsible for all the foreseeable material risks in their departments, regardless of whether these were identified in the corporate system.

Buzzi Unicem's managers and supervisors are supported in the above-mentioned activities by the Internal Audit Department which, on one hand has the role of independent supervisor of the risk management system, while on the other hand must ensure that the system evolves. The Internal Audit Department reports to the Board of Directors and liaises continuously with the director in charge of the internal control and risk management system, without prejudice to the mutual independence of the respective functions. The Board of Directors approves the group's Audit Plan on an annual basis, having consulted the board of statutory auditors and the director in charge of the internal control and risk management system. To complete the annual control process, in the meeting for the approval of the Financial Statement, after receiving the approval of the control and risk committee, the Board of Directors assesses the effectiveness and suitability of the internal control and risk management system.



**The definition of the Company's internal control and risk management system has a broader scope: it is not limited to accounting controls and to the process of financial reporting; it also includes other important aspects of the business, like the protection of resources, operational efficiency and effectiveness as well as compliance with laws, regulations and the policies of the Buzzi Unicem group**

The Internal Audit Department verifies the reliability of financial information, compliance with the Company's internal procedures, obligations relating to occupational health and safety, environmental legislation, the management of staff and relations with government authorities. This process confirms the Company's comprehensive approach to risk management. The Internal Audit Department prepares the quarterly report, which includes a summary of required amendments to procedures and the result of the activities, and highlights any weaknesses that may be identified, providing recommendations for improvements. The report is sent to the Chairman of the Board of Directors, the Director responsible for the internal control and risk management system, the Board of Statutory Auditors, the Control and Risk Committee and the Manager responsible for the drafting of corporate accounting documents, and will be assessed by these bodies during specific quarterly meetings.

Finally, in the context of the system of control and for Italian companies alone, the Board of Directors has adopted the Model of Organization, Management and Control pursuant to Legislative Decree n. 231/2001, of which the Ethical Code of Conduct is an integral and substantive part.

The Internal Audit Department operates as the Supervisory Body.

#### **Transparency in the conduct of business**

Buzzi Unicem believes that, along with full compliance of laws, ethics represent a fundamental aspect in conducting business, as they add value to the company and the geographical areas in which it operates. All strategic and operational activities are based on ethical principles and legal regulations and are in line with the best existing practices. In recent years, there has been a specific focus on corruption, anti-trust and conflict of interest issues.

The Audit Plan covers all the countries in which the Company operates and takes into account different levels of risk in the various geographical areas when planning audit activities. The Plan has covered almost all of the group (81% implementation), with different types of controls depending on the country level risk and sector risk.

In Italy, operational audits were conducted in cement plants, concrete production sites and in plant management offices; the plan has set itself the target of covering all production units in a three-year period.

As well as operational audits, there can be unplanned audits that may occur either at the request of the management or following whistleblowing reports. For years, the Company has had an internal reporting system in place for employees to report irregularities or breaches to applicable laws using a procedure that has also been made known to its foreign subsidiaries. Anonymity is insured to protect workers from reprisals, discriminations or penalizations. All reports that are received from employees are evaluated and examined by the local Internal Audit team under the supervision of the parent company's Internal Audit Department. During the course of 2016, 10 audits were conducted based on whistleblowing: in 8 cases the report turned out not to be reliable; in two cases, they resulted in immediate corrective action.

#### **Communication of policies relating to ethics and transparency**

In 2016 the Company's Board of Directors updated the "Manual on market and insider information" and the "Internal Dealing Procedure" in line with new EU Regulation n. 596/2014 and the respective EU implementing and delegated regulations. These documents were also distributed to the foreign companies.

In Italy, in 2016, the Board of Directors approved the updates to the Model of Organization, Management and Control and the Code of Ethics, which take into account changes to the law during the course of 2015. In particular, Legislative Decree 231/2001 introduces the crime of self-money laundering and five new environmental crimes. To complete the periodic training activities set out by the Model on issues governed by Legislative Decree 231/2001, the updated versions of these documents were sent to all employees by email along with a note describing the main changes.

In Italy, in orders that are sent for acceptance to all suppliers, there is a clause through which suppliers declare that they have read the Company's Code of Ethics - which is available on its website - and undertake to respect its principles and provisions. Breach of the Code of Ethics represents a serious breach of contractual obligations and can result in the termination of the contract itself. In countries with a higher level of risk, suppliers have been made aware of the ethical principles the company adheres to by sending them the Code of Conduct and asking them to comply with this.



**Buzzi Unicem believes that ethics are a fundamental aspect in conducting business and that, together with full compliance with laws, these add value to the company and the territories in which it operates**

### Anti-corruption

During the course of 2016, Russia, Czech Republic, Slovakia and USA were the first countries to organize training activities on issues of anti-corruption which were attended by a total of 328 employees in 2016 (7%). In 2017 Buzzi Unicem will be extending its commitment in this regard to the other countries.

### Antitrust

Competition laws are a fundamental component of the global environment in which Buzzi Unicem operates; for this reason, in 2011, the parent company issued the “Directives concerning conduct for employees of Buzzi Unicem for compliance with laws protecting competition” (Antitrust Code). This document was sent to the foreign companies of the group who proceeded to inform employees, particularly those in sales department, with regard to its content. In Italy and the various Countries in which Buzzi Unicem operates, training courses are held on anti-trust issues and were attended in 2016 by 194 employees in Germany, 34 in Holland, 10 in Ukraine and 126 in the United States.

### Penalties

In Italy, since 2014 Unical S.p.A. has been paying a penalty under anti-trust laws for allegedly implementing an anti-competitive agreement in 2004. The amount paid in 2016 was 791,690.40 euro. With regard to this penalty, an appeal lodged by Unical is currently pending. Further details are provided in Additional Note 47 of the Consolidated Financial Statement.

A total amount of 161,395.71 euro was paid by the Company for non-compliance with laws and regulations and administrative irregularities.





# .02

## STAKEHOLDER ENGAGEMENT

**For companies wishing to pursue a sustainable development model, dialogue and cooperation with stakeholders are essential to understand and satisfy the requirements of local areas.**

Dialogue (engagement) with stakeholders is one of the main instruments for defining and managing effective business strategies in the medium and long term.

In Buzzi Unicem, dialogue with significant stakeholders (employees, customers, suppliers, investors and the authorities) has evolved naturally into a structured debate with the main players in local areas who have expressed a keen desire to be informed and involved on certain Company matters. Buzzi Unicem divides its relevant stakeholders into Shareholders (and providers of capital), Customers (including end users), Suppliers and Contractors, its Employees (and trade union representatives), and the Local Area (authorities, media, NGOs, local communities and membership).



### EMPLOYEES

Given its attention to the “internal stakeholder” Buzzi Unicem has decided to invest in several training and prevention initiatives, with a particular focus on work-related safety. Furthermore, every year, Buzzi Unicem hosts the European Work Council’s meeting with the aim of improving relations between companies and worker representatives.



### CUSTOMERS

In Buzzi Unicem, the company and its customers work together in synergy to develop innovative technical solutions to best respond to the demands and challenges posed by a constantly evolving market.



## SUPPLIERS

Buzzi Unicem has a continuous relationship with its suppliers and, thanks to a highly effective supply chain, it creates mutual value and advantages by focusing on excellence. Suppliers are chosen on the basis of their technical and economic competitiveness, as well as their reliability and solidity. All suppliers and contractors must comply with the Company's Ethical Code of Conduct, which emphasizes the need for appropriate and transparent conduct while carrying out the requested activities.



## SHAREHOLDERS

Constant shareholder relations are encouraged by means of targeted communication, such as meetings, presentations, press statements and roadshows. More details can be found in the Economic Performance section.



## LOCAL COMMUNITIES

Buzzi Unicem is fully committed to research for technical solutions that can reduce the environmental and social impact deriving from its business activities. The company encourages a dialogue with institutions, opinion groups and civil society and supports community life in the areas where it has its production sites. Buzzi Unicem is also a member of CEMBUREAU, the Brussels-based organization which represents the cement industry in Europe. The association acts as a spokesperson for the cement industry and brings to the attention of the European Union issues relating to the use of alternative materials and fuels and environmental protection, emissions, biodiversity and occupational health and safety.

## Let's talk. Parliamone.

Being part of a multinational group means having to constantly deal with different entities, situations and cultures to manage risks and opportunities. Cultural diversity represents a constant source of wealth for the company and the ability to listen and engage constructively represent new goals for the sustainable development of the company.

At Buzzi Unicem listening means offering a prompt response to stakeholders through a focus on their requirements. The response will vary from community to community but it must be clear in spreading awareness of the fact that growth is beneficial to everybody.

The group's managers and employees are actively involved in numerous initiatives to benefit local communities. Here are some of the most significant examples.



**Here are some of the most significant initiatives developed by Buzzi Unicem in 2016**

**Buzzi Unicem's policy of listening manifests itself in prompt responses dictated by attention to requirements**



### **OPEN DAY**

**Welcome! Benvenuti! Bienvenidos! ласкаво просимо! The year of the open house.**

In all Countries in which the group operates, open days are organized for people to see inside its plants, with every effort made to make these visits pleasant and completely safe.

During the course of 2016, many of our plants opened their doors to the families of employees, visitors and people wishing to understand how a cement plant works. In particular, in Ukraine, Mexico, Italy and the United States these occasions were developed by our employees to make them interesting and informative.

On June 1st 2016, for the "International Children's Rights Day", the Yugcement (Ukraine) plant organized a special visit, by opening its doors to its employees' children. There was a great turnout of children, who had to be divided into three groups based on age. This became an opportunity for them to visit the cement plant and see where and how their mothers and fathers work, learning about the main phases in the processing of cement by looking at photos and videos



M4DT

RAIDILAH

ROYAL HOLLANDIA  
MEMORIAL

and touching raw materials with their hands. In the second phase of the visit, the children were brought to the lab to see how cement and raw materials are analyzed and used in the various production departments.

In June and July, the three Mexican plants - Apazapan, Tepetzingo and Cerritos - welcomed approximately 6000 people who had come to learn or find out more about Corporación Moctezuma's path towards sustainability. Five key issues were identified from the materiality matrix: climate change with a focus on energy supply and air quality, water, reforestation activities, local communities and social impact, health and safety. An educational/informational process was

then organized on these issues for all visitors. In the Apazapan plant there was also an in-depth focus on the project for its new production line. Aside from the cement plant, guests of all three production sites were given access to the quarries, laboratories, and the kiln control room.

Also in June, in the United States, the Stockertown cement plant opened its doors to employees and their families to celebrate its centenary. More than 250 people attended a photo exhibition on the history of the plant, got to see the quarry equipment, found out more about the production cycle of cement and saw the opening of the "Hercules Meadow" nature reserve, that was created within the production site. The children were able to play "games of the past" and got to meet "Fefe" the mascot of the local baseball team, "Iron Pigs". All participants received a copy of the commemorative booklet "Stockertown Plant - A Hundred Years In The Making".



## NATURE RESERVE OPENED

The "**Hercules Meadow**" nature reserve was opened in the United States within the production site

## FAMILY AND FRIENDS - ITALY

At the end of the summer, the Vernasca plant organized the "Family and Friends" event during which it welcomed more than 400 people who were able not only to visit the site but also follow a debate on various issues such as the energy valorization of Solid Urban Waste, the implications for the local territory of emissions and inputs and innovative concrete applications.

For children, games and educational workshops were organized on the issue of waste recycling and the importance of a healthy and appropriate diet. All participants were asked to write down their thoughts in a white book, while children were also asked to leave a colorful handprint on a panel to mark the start of the process we wish to embark on with the new generations.



## PHOTOGRAPHY EXHIBITION

In the United States a photography exhibition on the history of the plant was attended by more than **250 visitors**



## Buzzi Unicem's plants adhere with management training programs for students

### EDUCATION

#### Games for future managers

Students of all schools and all ages were invited to visit the plants in all the countries in which the group operates along with their teachers. In certain Countries, our plants have management training programs where children are able to contend with actual management simulation games. The Company's managers offer their know-how and experience while the youngsters are given training opportunities and potentially embark on careers.



Dyckerhoff Cement Ukraine was actively involved in the 3rd and 4th edition of the “Smart Challenge”, a competition which was created in 2015 for students from the Rivne region. The aim of this challenge is to identify and develop new managerial talent through various assignments involving the resolution of business problems. These problems can be linked to financial, social or business development situations within the company where the children are asked to conduct a complete analysis in order to find a solution to the criticalities. The objective of the competition is to offer young talent a real opportunity to begin a career in management by initiating a dialogue with companies that will ideally result in internships, training and employment.

Young aspiring German managers are invited to take part in MIG, the Management Information Game, which the Lengerich cement plant is actively involved in together with other companies in Germany. The MIG is a computer-based simulation where the students get to step into the shoes of directors and managers to resolve management problems. The competition is for high school students and the final phase is designed to initiate a dialogue between participants and companies who are involved as experts from specific sectors. The Lengerich plant welcomed 20 students from the Hannah Arendt school, with managers assigned to assist the children in structuring the management activities of three competing companies, so that they could learn some basic management techniques. Three apprentices from the plant also took part in the MIG.

300 students took part in the “Driver’s day” where they had the chance to interact with professionals from the sector and put their skills to the test

In the United States, the managers of the Maryneal plant take part in “Senior Interview Days” that are held in May at “Sweetwater High School”. During this two-day period, students are invited to present their resumes to representatives of the organizations involved in the project and have job interview simulations in order to get feedback from the companies that could be their employers in the future. This initiative creates a direct contact between the school and local companies and offers students a glimpse of working life.

In Russia, for the third year running, Sukholozhskcement took part in the “Driver’s day”, where drivers of various vehicles get to show off their motoring skills to members of the local community and students from local schools. In 2016, about 300 students took part in the event which offers people interested in this line of work the opportunity to come face-to-face with professionals and put their own ability to the test. The Sukholozhskcement employees who have these types of roles provided technical explanation and illustrated the importance and responsibilities of their jobs to the students.

For a city, retaining talent represents a major added-value and a source of economic development for the future. The Sukhoy Log plant plays an active role in career orientation programs which it has supported with initiatives like the installation of touchscreens in schools, so that students can obtain information in real time on the plant and on aspects of production work in order to encourage their interest in careers within the company.



**In Buzzi Unicem, the safeguarding of health is a value that translates into concrete actions after listening to and understanding the needs of the communities in which the company operates**



## CHILDREN AND HEALTH

### Health, the first duty in life

In Buzzi Unicem, health protection is a value that extends to tangible actions after listening and understanding the needs of the communities in which the company operates. For this reason, numerous initiatives have been started which were designed and developed according to the requirements of the various Countries.

Some of these initiatives feature the direct involvement of the company staff, e.g. in Russia, where Sukholozhskcement organizes a summer camp every year in Sosnovy Bor for the children of its employees. In Sosnovy Bor the children can unwind at the end of the school year but above all they can receive suitable care if they have any illnesses.

Also in Russia, every three months, in collaboration with the Trade Union, the Regional Centre for the Prevention and Treatment of HIV and the City Hospital, Sukholozhskcement organizes the distribution of leaflets on HIV and AIDS. The Sverdlovsk region has one of the highest transmission rates in the country so the Sukholozhskcement plant has provided its specialized staff to collect and analyze information from the local health facilities and create complete and understandable information material, thanks to the use of infographics. This material is made available in hospitals and in businesses in the city, as well as on the website of the Local Council and on internal television networks.

In the United States, the employees of the Pryor plant organized a “Pie Auction” during the monthly safety meeting. The cakes were auctioned and proceeds were donated to the American Cancer Society that has been active for 100 years in finding cures for the disease and offering support to patients during treatment.

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**CHESS BOARDS**

produced with the contribution of Zapa Beton who provided its concrete and technical know-how for their construction free of charge

## CULTURE

### Šachy na ulici - chess on the street

One of the most interesting cultural initiatives involving the sponsorship of exhibitions or events is the project which the employees of Zapa Beton took part in. “Šachy na ulici”, which literally means “chess on the street” is an initiative spearheaded by the Piananaulici cultural association in the Czech Republic. In recent years, a number of chessboards were positioned in the cities and players can bring their own pieces or use the ones provided. To support this highly successful initiative throughout the country, Zapa Beton provided its concrete and technical know-how free of charge for the construction of 63 chessboards all over the Czech Republic. Chess offers an interesting form of aggregation and healthy competition amongst experts, enthusiasts and beginners.





### **iCampeonas!**

In Mexico, the initiative by Carlos Cesar Flores Ocaranza, Director of the Cementos Moctezuma Training Center continues with the selection of talent aged between 13 and 17 for the soccer team Las Tres T's ("The Three Ts" i.e. the cities near the plant: Tepetzingo, Tezoyuca and Tetecalita). Since 2016 the team also selects girls, and they immediately demonstrated their quality by winning the Tournament Estatal Telmex 2016.

It is important to remember that Ocaranza's commitment goes beyond the search for sporting talent: to continue to be selected for the team, the

kids must have an average grade score of eight point five and conduct themselves appropriately.

The inclusion of girls also aims to promote gender equality, and confirms this initiative's adherence to "Proceso academico deportivo integral orientado al exito", a project that aims to train people through sports which are based on the principles of discipline, respect, honesty and team work.

Some of the talent selected by Ocaranza go on to play as professionals, but even those who don't make a career out of it learn rules and useful techniques to face other opportunities in their careers and lives.



## COP21 AND THE PARIS AGREEMENT FOR COMBATING CLIMATE CHANGE

The COP (Conference of the Parties) is the governing body of the international treaty for responding to climate change (UNFCCC). Its duty is to establish the objectives for reduction and invite States to detail how they intend to pursue these, while also promoting collaboration, developing support mechanisms (financial, technological and the necessary skills) and putting in place five-year review cycles, and inviting States to increase their objectives in a synchronized manner.

The Paris Conference, which is known officially as COP21 (is the twenty-first such conference, with the first having been held in Berlin in 1995), has set the following global objective:

**“In years to come we must not exceed a ceiling of 2 degrees Celsius (3.6 degrees Fahrenheit) in terms of the global temperature increase. Countries that signed the agreement have been asked to strive to limit this increase to 1.5 degrees Celsius by 2100”.**

The event involved 150 Heads of State and Prime Ministers who attended the opening day, making this the largest ever concentration of leaders in history. All 195 Countries present at the summit signed the Paris Agreement (to these we must add the European Union, that was also a signatory) with undertakings on the following macro-issues:

- processes for the reduction and capture of CO<sub>2</sub> emissions;
- access to sources of renewable energy;
- collaboration mechanisms (market related and otherwise);
- improvement in the training of people and entities delegated to the process of implementation, so that human and organizational capital can accelerate change.

The Paris agreement is not an end in itself but it marks a significant turning point within an agreed and transparent legislative framework. There is no denying that climate change is underway, but with prompt collective action we can avoid the worst consequences.



**In Germany some employees from Wiesbaden were involved in “Wiesbaden engagiert” a project for the maintenance of a fruit garden**



## VOLUNTARY WORK

### Modern angels

In Germany, some employees from the headquarters in Wiesbaden took part in “Wiesbaden engagiert” (Wiesbaden committed) a project of public interest involving a number of companies in the local area. In particular, the Dyckerhoff people were involved in looking after a fruit garden under the supervision of landscape gardeners, in order to guarantee the growth and production of the trees. This project was organized in collaboration with the charity “Naturefund” which purchases land all over the world to protect orchards and fruit gardens from neglect and conserve species diversity.

In the United States, the employees of the Festus plant were involved in “Adopt a Roadway”, an initiative promoted by MoDOT, Missouri Department of Transport which involves a vast voluntary project for the cleaning of roads. Between 8 and 12 employees of the Festus plant participate on a rotating basis to the cleaning of roads every three months. This initiative keeps the roads clean and secure.

Also in the United States, the Greencastle plant was involved in the national voluntary project “Adopt a family”. The project involved putting needy people in touch with people who could help them. In particular, the family selected for the project draws up a wish-list and the volunteers not only procure the items on the list but also deliver them directly to the recipients.

# .03

## MATERIALITY MATRIX

### COP21 confirms and reinforces Buzzi Unicem’s Materiality Matrix.



**The growing attention to climate change underscores the importance of CO<sub>2</sub> emissions and energy issues, both of which are priorities for Buzzi Unicem**

The Materiality Matrix, which is defined as a map of Buzzi Unicem economic, environmental and social impacts, is constructed in accordance with the Global Reporting Initiative (GRI, version G4) guidelines.

The Materiality Matrix consists of a Cartesian coordinate system in which material business management characteristics are positioned on the basis of their graded “significance” to Buzzi Unicem (X axis) and their stakeholders (Y axis). The closer a point is to the top right-hand corner, the higher the importance of this point for both Buzzi Unicem and its stakeholders. The Matrix uses the “arc” approach so the final part of each axis is also important.

A few of the aspects the Materiality Matrix highlights relate to occupational health and safety, air quality and greenhouse gas emissions, compliance with laws, use of alternative fuels and development of human capital.

Despite its apparent simplicity, the definition process is detailed and complex. The first phase of the process for defining the material issues involved identifying a series of potentially “significant aspects” (about 60), deriving from an analysis of corporate documents and comparing our data with data from various publications specializing in sustainability, such as the GRI guidelines and the Dow Jones Sustainability Index. During a second phase, this selection was refined in consideration of the operational and geographical contexts in which we work. The final result of the exercise identified 30 “material aspects” that were



evaluated by some of the Company's managers and shareholders and certain stakeholders.

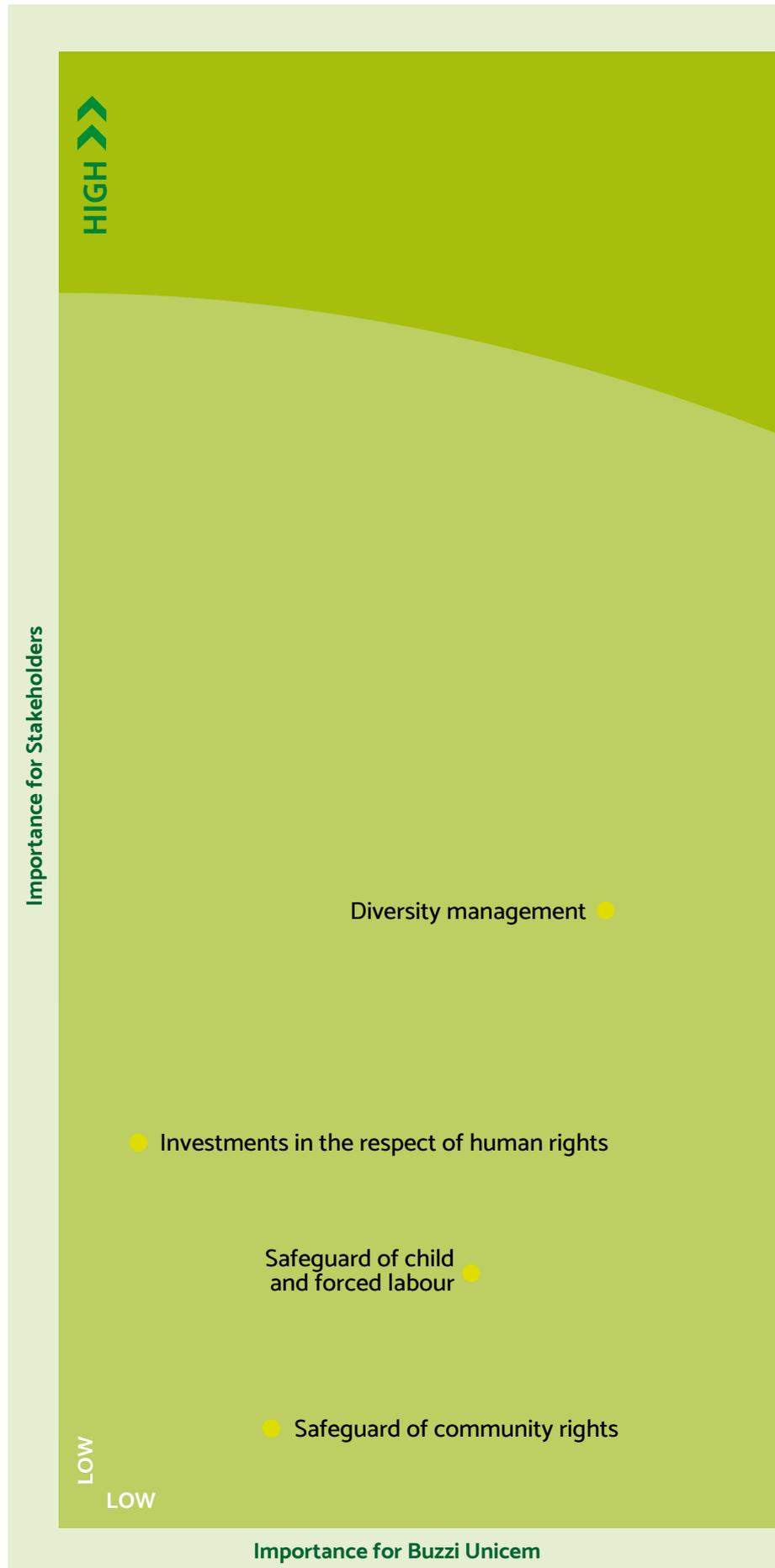
During the development of the first edition of the Materiality Matrix, discussions with stakeholders were mediated by the Company's managers who also represented the respective stakeholder categories, i.e.: Sales Managers represented our customers, Human Resources Managers represented our employees, Supply Managers represented our suppliers, General Managers and Operation Managers represented the local communities.

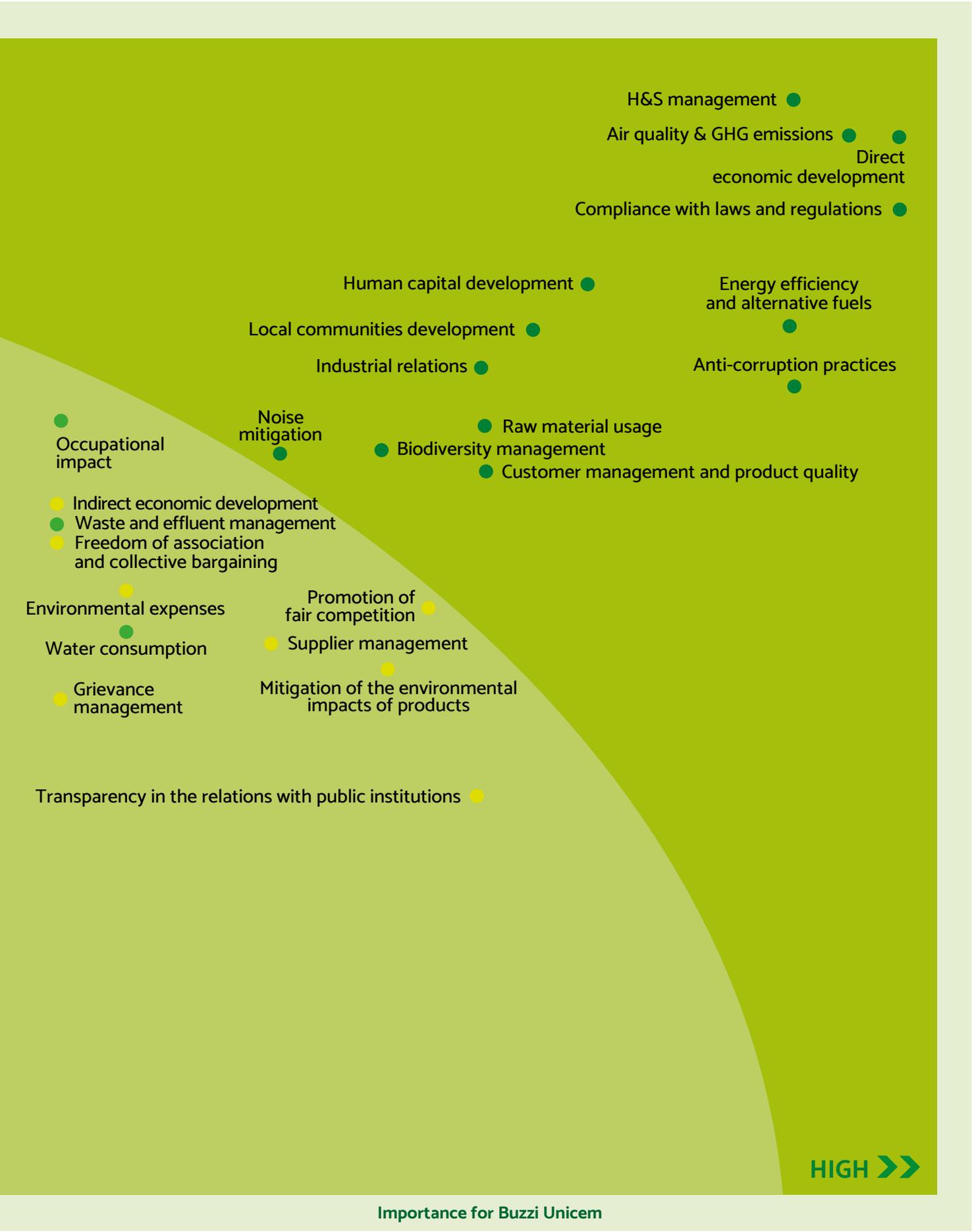
The Materiality Matrix also provides the basic format

for the disclosure of non-financial performance, as it clearly identifies the issues which the Company must report on. On the basis of the Matrix we redefined the data collection tool (Reporting Package) which is needed to report on the indicators that make up the Sustainability Report. The Materiality Matrix is, and will increasingly become, the primary management tool used by Buzzi Unicem to define sustainability policies and strategies, identify focus areas for stakeholder engagement (transparency and accountability) and subject matters and issues for internal and external disclosure.



THE MATERIALITY MATRIX, WHICH IS DEFINED AS THE MAP OF BUZZI UNICEM'S ECONOMIC, ENVIRONMENTAL AND SOCIAL IMPACTS, IS DRAWN UP IN ACCORDANCE WITH THE GUIDELINES OF THE GLOBAL REPORTING INITIATIVE (GRI G4)





# .04

## ECONOMIC PERFORMANCE

The sustainability criteria used for the reclassification of the Balance Sheet and Consolidated Income Statement allow the company to quantify and assign the respective benefits to the multiple stakeholders.



### Dialogue with Stakeholders

As part of dialogue-oriented initiatives with stakeholders, Buzzi Unicem has regularly involved shareholders, investors and capital providers through a variety of communication channels, in Italy and abroad, both at the institutional level through the Annual General Meeting, press releases, presentations in institutional investor roadshows and conferences, and through meetings and conference calls for discussing performance and development strategies.

The main events that Buzzi Unicem participated in during 2016 were as follows:

- Engineering & Construction Conference organized by Equita in Milan in April
- Institutional Investors Roadshow organized by A Bernstein in June in London
- Italian Investment Conference organized by Unicredit and Kepler Cheuvreux in Milan in June
- Italian CEO's Conference organized by Mediobanca in Milan in June
- Italian Infrastructure Day 2016 organized by Borsa Italiana (Italian Stock Exchange) in Milan in September



**Buzzi Unicem has regularly involved shareholders, investors and providers of capital through a variety of communication channels, in Italy and abroad**

- Institutional Investors Roadshow organized by Equita in Zurich and Geneva in September
- Italian Conference organized by J.P. Morgan in Milan in September
- Institutional Investors Roadshow organized by Mediobanca in Paris in October

Aside from information on the history of the group, the website [buzziunicem.it](http://buzziunicem.it) contains information on the different countries in which the Company operates, a presentation of the products it offers customers, its commitment to quality, as well as a description of the work performed by its research laboratories and certifications these have obtained. There is also a large section dedicated to sustainability as well as information for shareholders within the Investor Relations section: in particular there is ample space dedicated to Corporate Governance, a press releases page, copies of annual and interim accounts, a description of the shares and shareholders, share prices, a list of equity analysts who follow the company as well as information on resolutions from the ordinary and extraordinary general meetings.

Through its Investor Relations department, Buzzi Unicem provides the financial community with the information, operating trends and performance, and also reports the opinions and assessments of the financial community on the company's management, thereby nurturing a relationship of active understanding and ongoing collaboration.



## Markets

Looking more closely at our core markets, it should be pointed out that in the United States investments in construction - to which the cement and concrete demand is closely related - maintained an expansionary trend, particularly in the commercial building sector, albeit at a more regular pace than was observed during the years 2014-2015. In Germany, the recovery in building activity proved to be better than expected.

In Italy, construction investments showed increased overall but were only robust in the renovation of residential property.

Amongst the Eastern European nations, the trend within the construction sector was lively in Poland and the Czech Republic, while in Russia it remained weak and declining. In Ukraine, after two years of heavy reductions, investments returned to grow, albeit modestly.

In the financial year that has just ended, the group sold 25.6 million tons of cement (+0.3% compared to 2015). The trend of improving volumes was favorable in Central Europe, thanks to a recovery in dispatches

**25.6**  
million tons of

**CEMENT SOLD BY  
BUZZI UNICEM  
DURING THE  
COURSE OF 2016**

**+0.3%**

increase in sales of cement  
compared to 2015



**Investment in construction in the United States continued the expansionary trend, albeit at a steadier pace compared to the accelerations in the two-year period 2014-2015**

that begin in the spring months and, on the whole, even in Eastern Europe, with improvements in Poland, Czech Republic and Ukraine, which more than offset a marginal downturn in Russia.

A slightly weak demand in the second semester resulted in a limited reduction in sales for the financial year as a whole in the United States and this reduction was more pronounced in Italy where there were no signs of a recovery in consumption.

Sales of ready-mix concrete amounted to 11.9 million cubic meters, just as in 2015.

Volumes increased in a satisfactory manner in Italy - thanks to the increase in scope - and Poland; in Germany and Benelux the sales trend was up slightly on the previous year, while there was a reduction in volumes in Czech Republic and the United States.

# 39.7

million euro

## TOTAL INVESTMENTS

made in 2016 in Germany

### Italy

In the property sector there was a consolidation in signs of stabilization, despite the more uncertain prospects for the non-residential segment. Investments in construction increased slightly, although this increase was only robust with regard to the refurbishment of residential property. The Italian cement Association, Aitec, has estimated internal deliveries of cement of approximately 18.7 million tons, which represents a reduction of 4.7% from the previous year. This was the tenth consecutive year in which domestic demand fell (and in absolute terms it is now 60% down on the peak level that was reached in 2006). Our hydraulic binders and clinker sales volumes were down 6.2%, penalized by a sharp reduction in exports.

Sales prices did not change significantly in the year-over-year comparison. In the ready-mix concrete operations, the sales trend was up, favored by the increase in scope resulting from the business combination in the Milan area, with prices in line with last year. Thanks to a favorable trend in fuel prices - which more than offset higher electricity prices - and

under control fixed costs, unit production costs fell marginally.

### Investment activity

Investments aimed at improving technological and environmental efficiency and safety in the workplace continued during the course of the year.

In particular it is worth reporting the project for the production of a oil-well cement in Siniscola worth 2.7 million; the increase in reserves of raw material, as well as excavation and securing works in the quarries in Robilante, Augusta, Vernasca and Guidonia for a total of 1.8 million; the new pitch power line and the installation of the Polab in Vernasca for 1.1 million; structural restoration and other civil engineering works in Augusta, Guidonia and Siniscola for 1.2 million; the installation of de-dusting filters and hot gas pipelines in Robilante for 0.5 million; the expansion of the electrical bagging system and other departments in Barletta for 0.3 million; the installation of a new belting for the raw materials conveyor belt in Augusta for 0.3 million.

### Germany

On the whole there was a good level of growth in the construction sector, particularly in the residential sector that was partly driven by demand resulting from the high level of net immigration.

Our deliveries of hydraulic binders closed up 3.4%, thanks to a more robust pace in the second half of the year, albeit with weak average prices (-2.4%). Despite falling for the year as a whole, demand for oil-well cement showed an encouraging recovery during the last quarter. Ready-mix concrete output recorded a fairly consistent development (+1.6%), with a marginal decline in prices (-0.5%). Unit production costs were down marginally, thanks to the favorable trends for fuel and energy prices which more than offset the increases in fixed costs.



### Investment activity

Investments in 2016 amounted to 39.7 million. The most significant investments related to improvement works of 6.8 million in Göllheim, comprising the conversion to a baghouse filter, the modernization of the final phase pre-heater, the installation of the SCR technology to reduce emissions, the updating of the firing system for the use of alternative fuels, the amendment to the raw mill separator.

The Deuna plant received investments worth 4.2 million, that were essentially used for the expansion of the evaporation towers, the introduction of the SCR technology and the conversion from electrofilter to a baghouse filter.

It is also worth noting the purchase of operational quarry vehicles in Lengerich and Göllheim for a total of 2.7 million; the increase of the storage and processing capacity of alternative fuels and the conversion of the electrofilter to a baghouse filter in Lengerich for 2.1 million; the secondary tank for alternative liquid fuels and the conversion to a baghouse filter in Amöneburg

for 1.9 million; the enlargement of the terminal in Hamburg for 0.8 million and the modernization of the clinker silo in Neuss for 0.7 million.

### Luxembourg and Netherlands

In Luxembourg investments in the construction sector and domestic consumption of cement continued their positive trend. In the Netherlands, the construction sector was buoyed by a recovery in the property market and there were visible signs of progress, particularly in the residential sector.

In Luxembourg and the Netherlands thanks to the good performance in the domestic market and the support of exports, our cement sales, including intercompany transfers and exports, led to a solid growth with marginally weaker average unit revenues.

Ready-mix concrete output was similar to the previous year, with favorable prices. The unit production costs showed a favorable development, thanks to the trend for energy prices and the stability of fixed and overhead costs in the plant.

### Investment activity

In 2016 investments amounted to 11.6 million, which included 4.0 million for the silos for storing filter dust; 0.9 million for the storage and feeding of alternative fuels; 0.7 million for the pipelines gas to the raw mill, 0.6 million for the rainwater reservoir; 0.6 million for the dosage of industrial slurry; 0.5 million for the collection and transportation of dust from the conditioning towers; 0.5 million for the enlargement of quarry reserves.

### Poland

The trend for investments in construction has on the whole been positive, as has consumption of cement. In Poland, volumes sold accelerated in the second half of the year and increased significantly, although average prices in local currency were lower than the previous year. Ready-mix concrete output also showed a positive trend, with an increase of 6.6%, with prices up.

There was also an improvement in the unit production costs in local currency thanks to a reduction of fuel and energy costs, while fixed costs improved as a result of the operating leverage effect.

### Investment activity

In 2016 investments amounted to 9.2 million, including 2.0 million for the storage of alternative fuels, 0.5 million for laboratory automation, 0.5 million for the continual analysis of raw materials, 0.4 million for operational quarry machines and 1.2 million for a mobile plant in the concrete sector.

### Czech Republic and Slovakia

Investments in construction remained favorable thanks to the strengthening of the private sector contribution.

In the Czech Republic our sales volumes for cement exceeded the good figures from the previous year, with average prices in local currency marginally down. The ready-mix concrete sector, which also includes Slovak operations, achieved lower production levels but had higher average prices. The unit production costs in



local currency showed a positive trend, thanks to the reduction of fuel and energy costs that offset increases in the major fixed costs.

### Investment activity

In 2016 investments amounted to 8.9 million, including 1.4 million for the improvement of the electrofilter, 0.9 million for the purchase of land, 0.4 million for the cement dispatch department, 0.3 million for blending and dosage of bypass dust in cement grinding, 0.3 million for the renewal of the bridge crane and, in the concrete sector, 0.9 million for the modernization of ready-mix systems.



### Ukraine

They were encouraging signs in terms of investments in construction, in contrast with the major reductions in recent years. In Ukraine cement volumes sold by our plants, under regular operations, were up compared to last year, with prices in local currency moving up strongly.

Ready-mix concrete output grew, albeit not very significantly, with average prices in local currency in line with inflationary adjustments.

The conversion of results to euro was penalized by a continual depreciation of the local currency.

“

**In Ukraine, investment in construction presented encouraging signs, bucking the trend of major reductions in the recent past**

The growth in unit production costs in local currency, especially for fuel and energy, reflected the inflation rate in the country.

#### **Investment activity**

In 2016 investment amounted to 4.1 million, that were concentrated in the Volyn plant where 1.9 million was invested in quarry excavation costs, 0.4 million was invested for interventions on kiln electrofilter 5 and 0.3 million was spent on modernizing the cooling filter and the clinker transporter for kiln 5.



**In Russia, the trend for investment in the constructions sector remained weak, but prospects for the future are more favorable with the lessening of the severity of the decline**

#### **Russia**

Investments in the construction sector remained weak in 2016, but there is reason to be optimistic given the marked slowdown of the decline. In Russia our sales volumes improved in the second half of the year and over the twelve months closed slightly down on the previous year. Average prices in local currency remained stable. Thanks to the recovery in demand during the last quarter, the category of oil well cements – that are used in the extraction industry – were up for the year. The depreciation of the ruble had a negative impact on turnover, but despite being penalized in absolute terms by the foreign exchange effect, our operations in the country confirmed an absolutely remarkable Ebitda to sales margin within the group. The unit production costs in local currency grew less than inflation, with prices substantially stable for fuels while there was an unfavorable change for electrical power.

#### **Investment activity**

In 2016 investments amounted to 12.7 million, including 3.2 million in Korkino for their heating system, the internal refurbishment of the finish mills and kiln rings. The main investments in Suchoi-Log involved strategic replacements, the expansion of the feeding and extraction to the finish mills, the modernization of cement silos, the dosing feeders of the raw mix, the bridge crane and finally the purchase of operational plant and vehicles and railway cars for distribution.

### United States of America

Investments in the construction sector slowed down to +2.2%, with more robust variations in the commercial and residential segments, and consumption of cement in the country grew less than in the previous year, to reach 91.9 million tons.

After the brilliant start to the year and the clear decline during the summer months, our sales of hydraulic binders for the full year decreased slightly, with a more pronounced weakness of demand in Texas, particularly in the Houston area, where the economy is strongly influenced by oil price trends.

Deliveries of special oil well products showed some signs of recovery at the beginning of winter but declined as a whole over the year.

Ready-mix concrete output – that is principally in Texas – suffered from the unfavorable weather conditions and indirectly from the oil and gas crisis, closing down on the previous year.

Sale prices trends in local currency were favorable, and there was a greater change in the cement sector than in the ready-mix concrete sector.

Variations in the dollar exchange rate were not significant. The unit production costs, expressed in local currency, remained quite stable, with favorable developments for fuels and an unchanged trend for electric power.

### Investment activity

The main investments during the financial year included 75.0 million for the modernization and enlargement project of the plant in Maryneal (Texas); the new production line was opened in July 2016.

The completion of the projects for the adaptation to the new environmental standards (NESHAP) involved investments of 2.3 million; in addition, 4.6 million were invested in the construction of the new distribution terminal in Temple (Texas) and 2.3 million were invested in the purchase of new truck-mixers.





### Outlook

In Italy, according to recent estimates by the cement industry association, the best-case scenario is for cement consumption in 2017 to be in line with the previous year. The production structure is still highly fragmented and would require consolidation between the various players to finally achieve a better balance between supply and demand. In the second half of the year 2016 there was a sharp trend reversal as regards costs, especially for energy, the impact of which will be clearly visible during the current year.

We believe that, although we will not reach break-even, our results should continue to improve progressively through a higher level of activity in the ready-mix concrete sector resulting from the expansion in scope, and a possible hike in prices after four years of gradual decline.

In Central Europe, the market conditions are expected to remain in line with the previous year, therefore we foresee a favorable effect on volumes, no significant changes in prices and slightly improving results.

The outlook in Poland is of a consistently strong demand, which should support a trend reversal in prices after recent decreases, and thus result in similar operating profits to the previous year.

In the Czech Republic we estimate a substantial stability of market conditions, with possible improvements in variable and overhead costs and consequently operating results that are in line with or slightly higher than 2016.

In Ukraine, although the prospects for economic development are uncertain and clearly influenced by the progress of reforms, we can reasonably expect an improvement in volumes in line with 2016 and a further considerable increase in prices to try to offset the trend in energy costs which is expected to be very unfavorable. Assuming that the local currency will become more stable against the euro, operating results will be similar or slightly lower than last year.

In Russia the economic situation is showing encouraging signs of recovery.

**2017 United States of America: we expect an improved result, that will also reflect the contribution of the greater production efficiency in Maryneal (Texas) for the year as a whole**

The demand for cement, after two years of slowdown, should stabilize.

The purchasing power of the ruble is still weak when compared with the situation three years ago, but if its relative appreciation is confirmed, operating results in euro will be better than the previous year.

The pace of recovery in the United States of America remains robust, reinforcing the expectations of development in construction investments and cement demand. In this favorable context, despite some difficulties related to the development of the market in Texas, it is reasonable to assume that prices will rise, with energy costs inflation at about 10%. We therefore expect an improved result for the year as a whole, which will also reflect the contribution of the higher production efficiency at Maryneal (Texas).

The above considerations suggest an increasing level of profitability for the current year in the United States and slightly better results in Central and Eastern Europe. In Italy, the economic performance will be



**The capacity to generate Gross Value Added consolidated (+5.1%) whereas the Net Value Added strengthened even further, having increased by 7.2%**

influenced by a demand that is still sluggish and a rise in inflation within the industry.

**Direct economic value generated and distributed**

The value of production improved slightly (+0.8%), thanks to the robust evolution of the result in the United States and solid growth in Central Europe, that was driven by the good performance in the domestic market and exports. Revenues fell slightly in Eastern Europe, mainly as a result of unfavorable exchange effects, while in Italy the reduction was more evident and also penalized by a net reduction in exports. Production costs fell thanks to the favorable trend for energy prices. There was a consolidation in the capacity to generate gross value added (+5.1%), with an even larger increase (7.2%) in the net value added (hereinafter VA), i.e. the wealth created for the various stakeholders.

### Value added reclassified Income Statement

The sustainability criteria used for the reclassification of the Balance Sheet and Consolidated Income Statement allow the company to quantify and assign the respective benefits to the multiple stakeholders of the group, on the basis of their different economic, social and environmental nature.

The VA generated by the activities of our group increased by 7.2%.

(million euro)	2016	2015	2014
Value of production	2,730.5	2,710.3	2,592.7
Intermediate production costs	1,650.7	1,712.8	-1,681.1
Other income and expenses	10.2	39.5	92.2
<b>Gross value added</b>	<b>1,090.0</b>	<b>1,037.0</b>	<b>1,003.8</b>
Amortization and depreciation	-202.6	-209.2	-244.0
<b>Net value added</b>	<b>887.4</b>	<b>827.8</b>	<b>759.8</b>



### A breakdown of net value added

(in %)	2016	2015	2014
Enterprise system	17	16	16
Human resources	51	55	56
State and institutions	19	15	11
Shareholders	0	0	0
Sponsors	8	9	12
Community and environment	5	5	5

From the breakdown and variation of the VA on an annual basis, we can see that the component destined to the enterprise system increased.

The progressive reduction of the VA destined to “Sponsors” continued as a result of the improvements in indebtedness, that is comfortably within the levels of prudence that have always characterized our industrial policy.

The share of VA assigned to “Community and Environment”, which represent the initiatives and commitment of the company at a social and environmental level, remained significant.



**The share of the Value Added “Community and Environment” which represents the commitment of the company at a social and environmental level, remained consistent**

The remuneration of ordinary and savings Shareholders remained unchanged.

The VA share relating to “State and Institutions” increased from the previous year, including as a result of the failure to report deferred tax assets on financial losses sustained by the company in certain areas.

In Italy, between 2000-2014 the company invested approximately 71 million euro to develop under-utilized areas in Italy (primarily in Sicily, Sardinia and Puglia), taking advantage of tax breaks granted by the Ministry of Economic Development in accordance with Law 488/92 as well as investment subsidies granted via tax credits, totaling approximately 11 million euro.

These subsidized investments represented approximately 10% of overall investments made in Italy during this period and have all been completed.

To date all subsidies and tax breaks have been credited, while in other geographic areas in the scope we have not received relevant new financing and/or subsidies to investments.

Finally, a large percentage share of the VA continues to be assigned to “Human Resources”.

Staff remuneration is mainly fixed but the company offers an incentive and loyalty plan for staff with managerial duties, based upon targets being reached (MBO system).

## Balance sheet

(million euro)	2016	2015	2014
Current assets	1,526.7	1,356.3	1,244.3
Non-current assets	4,282.1	4,164.7	3,925.3
<b>Invested capital</b>	<b>5,808.9</b>	<b>5,521.0</b>	<b>5,169.6</b>
Short-term debt	463.8	930.7	534.0
Long-term debt	2,538.2	2,010.7	2,273.5
Equity	2,806.9	2,579.6	2,362.1
<b>Sources of invested capital</b>	<b>5,808.9</b>	<b>5,521.0</b>	<b>5,169.6</b>

Benefits to employees go beyond the direct remuneration they receive during the course of their employment, and also include the period of time after employees leave the company. Specifically, these benefits mainly comprise pension schemes, life insurance, healthcare plans and severance payments.

Supporting the wellbeing and health of our employees is a distinctive feature of how Buzzi Unicem operates, which translates into concrete actions to support the

quality of life of our employees that in turn enables us to attract and retain the best workers and maintain their motivation and professional satisfaction.

The benefits provided vary from country to country depending on the legal, fiscal and economic conditions of each area in which the group operates.

The obligations referred to both current and former employees. The employee benefit obligations are shown in detail below:

(thousand euro)	2016	2015
<b>By category</b>		
Post-employment benefits		
Pension plans	318,726	304,492
Health plans	97,766	98,072
Severance indemnity	18,210	19,608
Other long-term benefits	9,704	10,091
	<b>444,406</b>	<b>432,263</b>
<b>By geographic area</b>		
Italy	19,187	20,554
Germany, Luxembourg, The Netherlands	277,268	260,886
USA	143,865	148,436
Other countries	4,086	2,387
	<b>444,406</b>	<b>432,263</b>



**Benefits to employees also include the period of time after they leave the company**

Defined benefit plans can be unfunded or entirely/ partially funded by contributions paid by Buzzi Unicem and, sometimes, by employees to a company or fund that is legally separate from the Buzzi Unicem which provides the benefits to employees.

#### **Italy**

TFR employee severance payments are considered to be an unfunded benefits plan. The entry reflects the residual obligation relating to the compensation that is due in Italy to employees until 31 December 2006 for companies with more than 50 employees, or during the course of the working life for other companies.

The valuation of liabilities is updated every year, in conformity with Italian Labor laws. The TFR ceases to

accrue when an employee retires or resigns and an advance can be paid out in special cases. The level of benefits provided relate to the date on which an employee is hired, the duration of the employment and the employee's salary. The obligation, which amounts to 18,210 thousand euro (19,608 thousand in 2015), has an average weighted duration of 10 years.

### Germany and Luxemburg

The plans guarantee pension services, early retirement, survivors' pensions, payments to orphans and generally include benefits in the case of permanent disability.

The level of benefits provided is related to the employees hiring date, salary and duration of employment.

The obligation has a weighted average duration of 15 years. Obligations in Germany amount to 281,375 thousand euro (265,894 thousand euro in 2015) and are partially financed by an external fund. The value of the assets is 27,204 thousand euro (27,596 thousand euro in 2015) and reduces the amount reported as liabilities. All other pension plans in Germany and Luxemburg are financed exclusively by accounting provisions.

The obligation for health expenses in Germany is also unfunded and includes a commitment to reimburse 50% of private insurance premiums to former employees, their spouses and/or surviving spouses. This health care plan was closed in 1993 and has a residual average weighted duration of approximately 6 years.



**In the Unites States pension plans are almost completely funded whereas healthcare plans are unfunded by nature**

### Netherlands

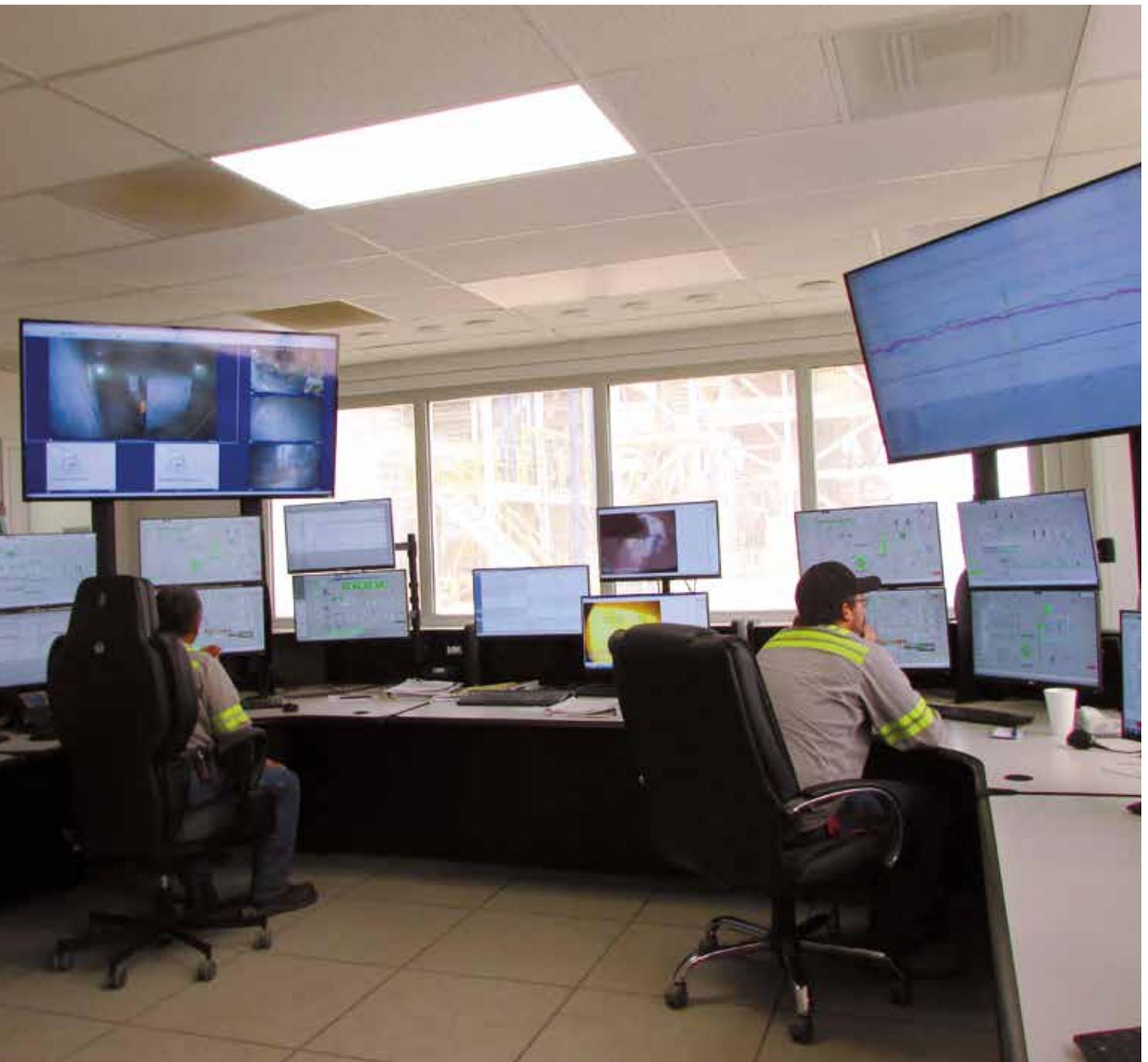
Pension or early retirement obligations amounted to 18,336 thousand euro (16,387 thousand in 2015) and depend on salary and duration of employment and generally also guarantee benefits to survivors. Plans are funded by paying into an insurance policy, but the company also has some obligations. The value of the assets in the insurance plan is 17,509 thousand euro (15,496 thousand in 2015) and reduces the amount reported as liabilities. The weighted average duration of the obligations is 19 years.

### United States of America

In the United States pension plans are almost completely funded, whereas healthcare plans are unfunded by nature. Pension plans provide for pensions and early retirement, benefits for survivors (spouse or children) and benefits in the case of permanent disability. Benefits for employees or their heirs are calculated on the basis of salary and years of service. For blue-collar workers, or their heirs, benefits are calculated on the basis of salary, years of service and a multiplier that is periodically renegotiated. The majority of the obligations – 289,408 thousand euro in 2016 (283,521 thousand in 2015) – is covered by an external pension fund; its fair value of 248,835

thousand euro (237,365 thousand in 2015) decreases the amount reported under liabilities. These plans have been closed since 1 January 2011 and the weighted average duration is approximately 12 years. There are also obligations not covered by assets for a small number of employees, the weighted average duration of which is between 11 and 14 years.

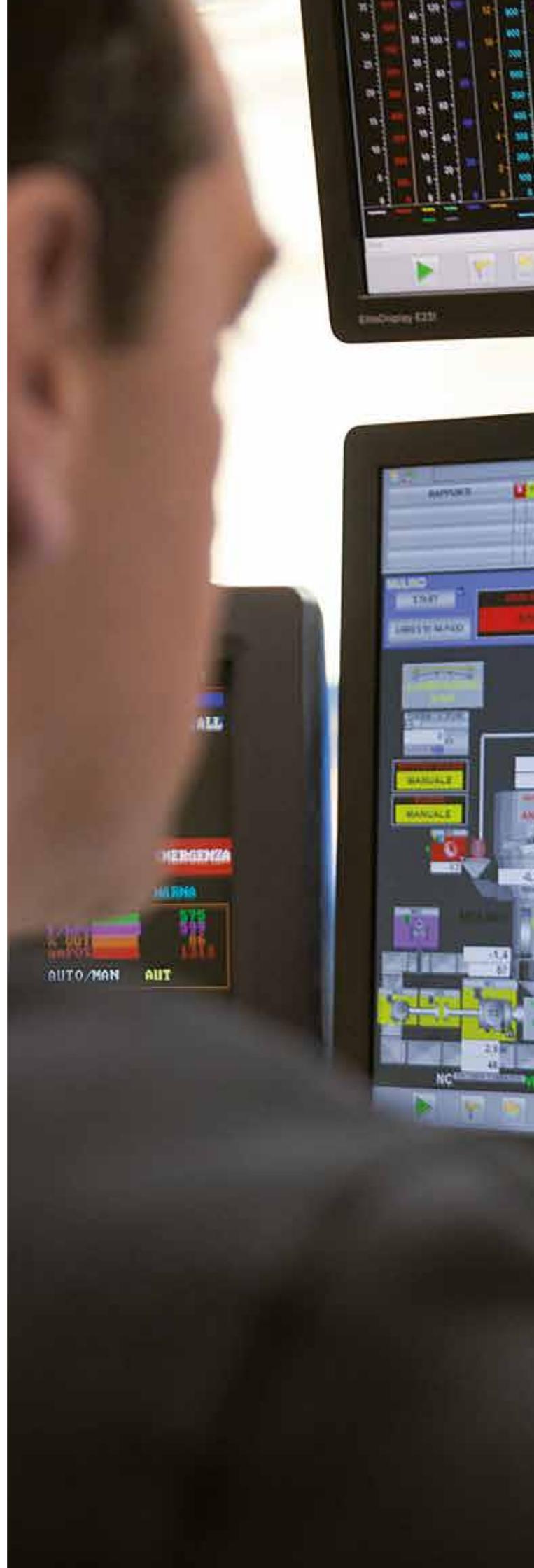
Healthcare plans provide for the coverage of medical expenses not covered by public health or the payment of supplemental private insurance policies. Amounts paid to employees and, if significant, to their spouses, depend on years of service and do not include benefits for survivors. The weighted average duration of these obligations is approximately 10 years..



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## ENVIRONMENTAL PERFORMANCE

Buzzi Unicem acknowledges the value of the Paris Agreement and continues to contribute towards reducing CO<sub>2</sub> emissions in the medium and long term, by reducing the clinker/ cement ratio, increasing use of alternative fuels with a substantial calorific value and high biomass content, while taking all necessary steps to steadily improve the thermal and electrical energy efficiency of its plants.





### Natural resources

Optimizing the consumption of natural resources is a priority in Buzzi Unicem. The raw materials mainly used in cement making are limestone, marl, clay, sand, schist and iron-ore. Gypsum and pozzolana are also used according to different types of cement.

Some of these materials can be substituted with products and non-hazardous waste from other industrial processes. For example, mill scales, alumina dust, sludge, can be used instead of iron minerals; chemical gypsum, slag, fly ash, and incinerator slag, with hydraulic characteristics, instead of clinker itself and pozzolana.

The use of these materials allows for lower consumption of natural raw materials. In particular, the use of slag and fly ash has a positive influence on the clinker/cement ratio as well as on emissions and energy impacts.

In 2016, the percentage of natural raw materials replaced is 10.1% as in 2015.



# 10.1%

### NATURAL RAW MATERIALS

replaced by Buzzi Unicem in 2016

### Biodiversity

Buzzi Unicem is committed to protecting natural resources impacted by its industrial activities.

The main goal of mitigation is to restore previously existing biodiversity by adopting a model grounded on the following principles:

- Optimizing the use of resources and incentivizing the use of secondary raw materials;
- Conducting preliminary assessment of environmental impacts and minimizing them during the life cycle of the extraction activity;
- Preparing a planting plan consistent with the area's rehabilitation project right from the start;
- Legal compliance must be the minimum requirement when establishing each quarry rehabilitation plan;
- Involving stakeholders through transparency, discussion and evaluation of needs of territory and local communities;
- Considering initiatives on biodiversity.

As a result of Buzzi Unicem's efforts, some protected wild species have chosen to shelter in the abandoned

# 26%

Reduction of water consumption for cement production of 26% thanks to the improvement in all nations



areas of still-active quarries and in old extraction sites that have been restored.

#### Water resources

Water consumption in the cement production process is mainly due to the preparation of the slurry in wet-process kilns, the treatment of exhaust gas from the kilns, the quenching of the cement during grinding, cooling of engines and dust abatement.

Buzzi Unicem contributes to saving water resources by monitoring its consumption, implementing new water recirculation circuits, using treated rainwater and optimizing industrial wastewater recovery systems.

All aspects that are in line with best practices in the industry. In 2016, specific cement water consumption recorded 300 l/t cement (404 l/t cement in 2015). Contribution from meteoric water is 19%, an increase over 2015. A global 26% reduction was possible thanks to improvements in all countries.

In 2016, concrete estimated water consumption is reported for the first time (173 l/concrete cubic meters).

**Buzzi Unicem is constantly committed to optimizing its consumption of natural raw materials**

Finally, Buzzi Unicem continues to reduce the amount of waste by monitoring consumption, optimizing supply systems, recovering and reusing waste water, and constructing rainwater treatment systems, including screens and sediment and oil-removal systems.

#### Energy resources

Production of cement, and especially of clinker, is energy intensive. Producing clinker with good properties requires a temperature of around 1,450 Celsius degrees in cement kilns.

Thermal energy demand is therefore connected to installed technologies and continuity of production itself.



Despite difficult market volumes in some countries, with stops and decreased efficiency, thanks to numerous improvements and investments, the specific consumption in 2016 is around 4,200 MJ/t clinker, the same as in previous years.

Apart from optimization, Buzzi Unicem is also committed to the responsible use of alternative fuels with low alkali contents and high biomass value, as suggested by the Best Available Techniques for the sector.

2016 confirmed the excellent result in the Czech Republic, Poland and Germany with more than 60% of

thermal substitution, Luxembourg over 40%, USA over 20% and Italy over 15% and growing. The global rate is 27% with a biomass content of 18%.

Thanks to the use of alternative fuels, Buzzi Unicem avoided releasing 315,568 tons of CO<sub>2</sub> emissions in the atmosphere (307,606 in 2015).

It is important to note that the special clinker production process does not leave solid residues such as combustion ashes (to be treated further in special landfills). That is why valorization of alternative resources in the cement sector is considered a Best Available Technique within the integrated waste cycle.



The diagrams below illustrate the energy mix used in 2016 (biomass included in solid waste)

**Thermal contribution**  
(in %)

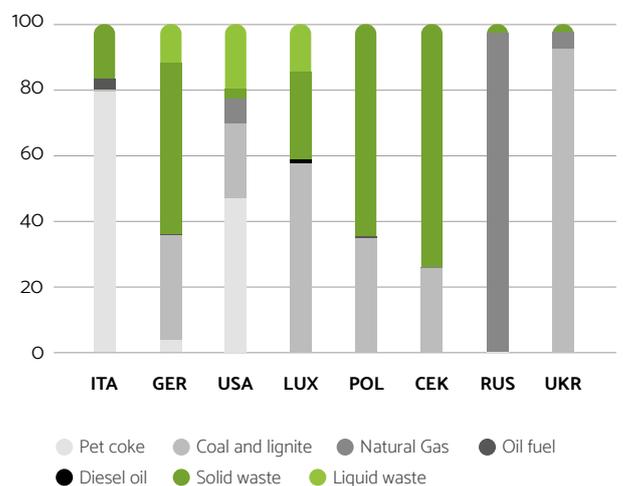


1	Pet coke	26.7
2	Coal and lignite	26.8
3	Natural Gas	18.9
4	Oil fuel	0.5
5	Diesel oil	0.1
6	Solid waste	18.0
7	Liquid waste	9.1

Reducing electrical energy consumption is another priority for Buzzi Unicem. In cement manufacturing, electricity accounts for around 10% of the total energy requirement. Specific consumption in 2016 is 125 kWh/t cement, slightly better than previous years. The improvement is due to numerous activities in all production sites.

Energy Certification (ISO 50001) in Germany, Energy Star System in USA and specific energy audits in Italy are just some examples of the efforts made by Buzzi Unicem around the world.

**Thermal contribution: fuel by country**  
(in %)





### Greenhouse gases

Producing clinker entails decarbonizing limestone, which takes place at about 900°C. At this temperature, the limestone ( $\text{CaCO}_3$ ) decomposes into  $\text{CaO}$  and  $\text{CO}_2$  (61% of total  $\text{CO}_2$  emissions). Additionally,  $\text{CO}_2$  comes from combustion.

In line with COP21 and Paris Agreement, Buzzi Unicem is committed to reducing its greenhouse gas emissions by:

- Reducing clinker/cement ratio of its cement types;
- Increasing use of alternative fuels with substantial calorific value and high biomass percentage.

In 2016 the clinker/cement ratio was 80.9%, unchanged with respect to the last two years but with different results in various countries. An increase in Russia (88.2% in 2015 and 89.2% in 2016) and USA (91.6% in 2015 and 91.8% in 2016) was balanced by a marked improvement in Germany (70.5% in 2015 and 68.9% in 2016).

In 2016, the use of alternative fuels for firing, as described previously, rose to 27% (24.4% in 2015) with a biomass content in solid alternative fuels of 18% (20% in 2016).

The Buzzi Unicem  $\text{CO}_2$  emission factor is 699  $\text{kg CO}_2/\text{t}$  cem eq (697  $\text{kg CO}_2/\text{t}$  cem eq in 2015). The trend is unchanged due to changes introduced following the standardization of methods of measuring  $\text{CO}_2$  between EU countries (in Emissions Trading Scheme regime) and non-EU-ETS countries. Using the same methodology, the  $\text{CO}_2$  emissions factor in 2015 would have been 702  $\text{kg CO}_2/\text{t}$  cem eq.

### Other atmospheric emissions

Besides the greenhouse gas emissions described above, other pollutants such as nitrogen oxides ( $\text{NO}_x$ ), particulate matter, sulfur dioxide ( $\text{SO}_2$ ), metals and micro-pollutants (such as mercury, Hg) are also continuously monitored. These modern emissions monitoring systems provide real-time data about the





monitored pollutants, and allow better management, timely reaction, optimal environmental protection and also transparency towards stakeholders. Data is available through the web.

Thanks to new fabric filters (FF) instead of electrostatic precipitators (EP), dust emissions decreased to 104 g/t clinker (50% less than 2013). The best records were in Italy, Germany and Poland with less than 10 g/t clinker.

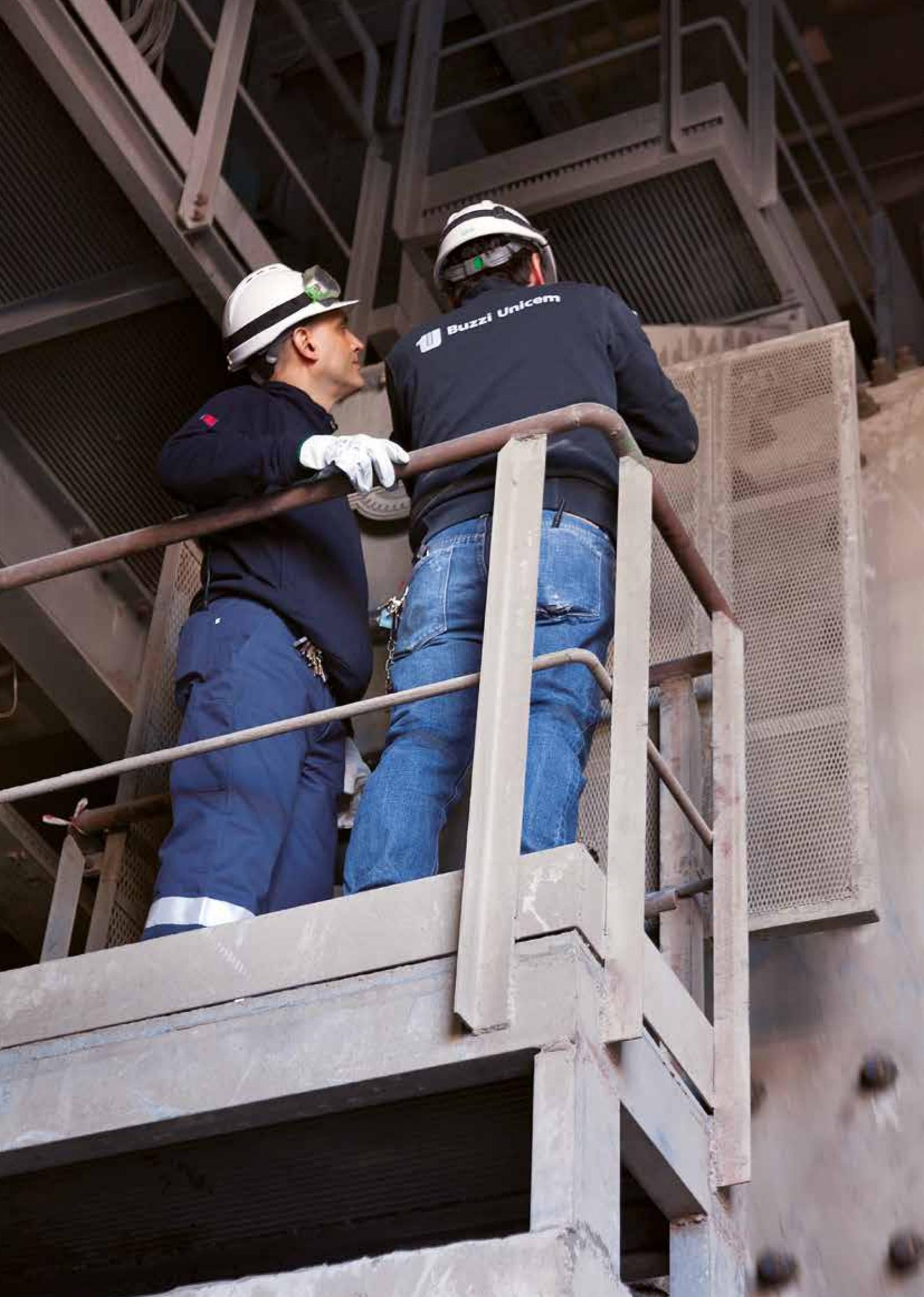
Stringent emissions limits for nitrogen oxides (NO<sub>x</sub>) coming from combustion, are granted by use of SNCR systems and new-generation Low-NO<sub>x</sub> combustors. In 2016, the global average is 1.582 g/t clinker (1,476 g/t clinker in 2015). Germany, Luxemburg, Poland and Check Republic performed an emissions factor of 1,000 g/t clinker.

Sulfur dioxide (SO<sub>2</sub>) emissions comes from sulfur contents of natural resources and fuels. The emissions factor is 264 g/t clinker (223 g/t clinker in 2015). The

best performances are in Italy, Germany, Luxemburg and Czech Republic where Best Available technologies are installed and the emissions factor is less than 50 g/t clinker.

Lastly, the average mercury (Hg) emissions factor is aligned to previous years: 27 mg/t clinker in 2016 and 29 mg/t clinker in 2015. Strong coverage is reached (95% of sites). Continuous emissions monitoring of mercury is available in Germany, Luxemburg and USA (21% of sites).

The progressive implementation of Continuous Emissions Monitoring systems (CEMs) for dust, NO<sub>x</sub>, SO<sub>2</sub> and Hg demonstrates the long-term commitment on the part of Buzzi Unicem. Particularly, referred to 2016 clinker production, the coverage is: 48% dust emissions (unchanged with respect to 2015), 59% NO<sub>x</sub> (56% in 2015), 53% SO<sub>2</sub> (unchanged with respect to 2015) and 29% Hg (20% in 2015).



### Waste management

Cement production does not generate waste except that resulting from ordinary and extraordinary maintenance, from laboratory activities and from demolition if any.

Buzzi Unicem's efforts to manage its waste production better focuses on the following two strategies:

- Reduction of Cement Kiln Dust (CKD) generated during production activities. The CKD is normally reintroduced into the production cycle in appropriate amounts. This is not the case for the United States and in Poland where local legislation considers CKD as waste, thus bringing the indicator to about 3,8 kg/t (40% less than 2015 thanks to specific activities at the Greencastle site in USA.

- Increase in the selection and separation of waste produced in order to facilitate collection and valorization. In 2016, 38% of waste was recovered. This data is strongly influenced by the disposal of CKD. In nations in which this type of waste is not produced, the percentage destined for valorization is around 80%.

### Noise

The environment and safety management systems ask for periodic monitoring of external noise emissions (in Decibel). Identifying critical issues and improvement areas allows Buzzi Unicem to target investments, particularly in cement plants near population centers.

Today noise levels are monitored in approximately 26% (20% in 2015) of production sites (100% in Italy, Czech Republic and Poland). This monitoring led to improvement investments of approximately € 260,000 to install noise mitigation systems such as silencers and sound-absorbing panels.

The use of such systems can reduce noise emissions, together with the use of appropriate Personal Protective Equipment (PPEs) to reduce the noise exposure of employees, internally and externally on site.



**The progression in the use of continuous monitoring systems (CEMs) is testimony to Buzzi Unicem's commitment over time**

### Product Life Cycle

Measuring the environmental impact of products during their life-cycle is the basis of main Green Public Procurement Policies that are already in place around the world. In particular, diffusion of procedures for quantifying environmental impacts related to each stage of the life-cycle (from cradle to cradle) has raised general interest in Life Cycle Assessments (LCAs). Customers, architects and engineers like these initiatives and expect this data.

Buzzi Unicem has been committed to evaluating the LCA of its products since 2003, with the very first products to be manufactured at its Vernasca site (Italy). Over the last few years, this practice has been extended to all cement types produced in Italy, also thanks to the Environmental Product Declaration (EPD). The EPD is a modern tool which supports the communication of main environmental impacts of products.

To encourage even wider sharing of this tool, Buzzi Unicem is implementing a web-tool for internal and external stakeholders (customers, architects, engineers). This web-tool, smart and with a simple interface, will show data verified by a third party on the recycled contents of cement products and other environmental impacts.

Buzzi Unicem is now capable of producing specific LCAs of its concrete for each construction site. Further information can be found in the “Environmental Performance: Summary” section.



**The adoption of management systems guarantees a reduction of the environmental and social impact and the streamlining of corporate processes**

### Environmental, health and safety management systems

		EN ISO 14001	OHSAS 18001	EPD	ISO 50001
		Environmental Management system	Occupational health & safety Management system	Environmental Product Declarations	Energy Management system
<b>Italy</b>	Augusta	•	•	•	
	Barletta	•	•	•	
	Guidonia	•	•	•	
	Robilante	•	•	•	
	Settimello			•	
	Siniscola	•	•	•	
	Trino	•		•	
	Vernasca	•	•	•	
<b>Germany</b>	Amöneburg	•	•	••	•
	Deuna	•	•	••	•
	Geseke	•	•	••	•
	Göllheim	•	•	••	•
	Lengerich	•	•	••	•
	Neuss	•	•	••	•
	Neuwied	•	•	••	•
<b>Czech Republic</b>	Hranice	•	•		
<b>Poland</b>	Noviny	•	•		
<b>Luxembourg</b>	Rumelange	•			
<b>Russia</b>	Korkino	•	•		

\* Environmental Product Declaration 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.



## Environmental Performance: Summary table

2012*	2013*	2014*	2015**	2016**		
79.6	79.9	80.4	80.9	80.9	Clinker/cement ratio	%
<b>Energy</b>						
18.5	19.1	19.3	24.4	27.0	Thermal substitution	%
4.022	3.979	4.009	4.190	4.224	Specific burning line consumption	GJ / t clk
116	119	118	127	125	Specific electricity consumption	kWh / t cem. eq.
<b>Raw materials</b>						
7.8	8.2	8.0	10.1	10.1	Raw materials other than natural	%
<b>Emissions</b>						
199	167	118	111	104	Dust	g / t clk
1,998	1,794	1,831	1,476	1,582	NO <sub>x</sub> <sup>(1)</sup>	g / t clk
558	232	248	223	264	SO <sub>2</sub> <sup>(1)</sup>	g / t clk
688	689	706	697	699	CO <sub>2</sub> direct <sup>(2)</sup>	kg / t cem. eq.
25	27	36	29	27	Mercury	mg/t clk
<b>Waste generation</b>						
3,652	3,672	4,572	6,024	3,759	Waste produced	g / t cem. eq.
30	29	28	21	38	Recycled	%
<b>Water consumption<sup>(3)</sup></b>						
345	334	336	404	300	Water consumption <sup>(3)</sup>	l / t cem. eq.
16	15	16	18	19	of which from rainfall	%
21	21	19	18	18	Environmental certifications UNI EN ISO 14001 or equiv.	number
16	16	16	15	16	Safety certifications OHSAS 18001 or equiv.	number
13	13	12	8	8	EPD (Environmental Products Declaration)	number

<sup>(1)</sup> From 2015, where available, we used the emission data reported to the local authorities.

<sup>(2)</sup> The methodology for the calculation of CO<sub>2</sub> emissions has been revised compared to the previous years of reporting. The new methodology involves the use of standard factors listed in the WBCSD and IPCC Protocols for the calculation of emissions from non-ETS participants to EU countries. For EU countries (Italy, Germany, Luxembourg, Poland and the Czech Republic) the reported emissions are tested as a part of the annual process for monitoring and reporting of CO<sub>2</sub> emissions according to the EU ETS and extended to non UE -ETS countries.

<sup>(3)</sup> The methodology for the construction of the indicators related to water consumption was revised in 2015. It is noted that for the construction of this indicator is only the water consumption process is accounted for.

<sup>(\*)</sup> Mexico: figures at 100%

<sup>(\*\*)</sup> Excluding Mexico

	<b>ITA</b>	<b>GER</b>	<b>USA</b>	<b>LUX</b>	<b>POL</b>	<b>CEK</b>	<b>RUS</b>	<b>UKR</b>
	75.4	68.9	91.8	66.4	71.5	77.6	89.2	81.3
	16.3	63.8	22.3	40.9	64.6	62.5	1.2	1.0
	3,610	4,030	4,160	3,601	4,087	3,677	4,822	5,801
	104	111	141	111	111	130	136	139
	5.4	14.7	7.2	29.9	13.9	12.9	6.1	11.4
	5	7	42	38	9	31	280	662
	1,298	763	1,893	855	958	722	2,713	1,641
	15	26	613	15	477	32	90	13
	627	584	814	532	598	605	719	871
	9	28	28	10	119	26	0.1	46
	1,449	804	8,195	1,417	3,687	533	3,754	701
	85	88	12	88	100	77	97	78
	241	160	267	66	115	158	469	1,072
	1	25	53	0	0	100	0	0

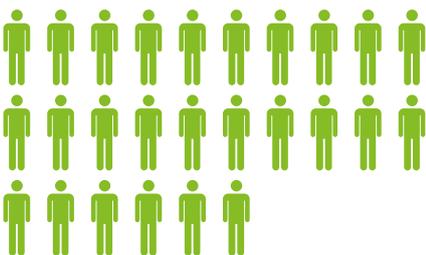


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## SOCIAL PERFORMANCE

Buzzi Unicem is committed to a process of continual improvement in the collection and comparison of indices and information relating to the management of its human capital.

9,975



Number of Buzzi Unicem employees at the end of 2016

### Occupational Health and Safety

As of 2015, in accordance with the best practices for the sector, Buzzi Unicem has also started to monitor the accident rates of its external suppliers and contractors, aside from measuring injuries to its own employees.

The main accident indicators we report on are the Lost Time Injury Frequency Rate (LTIFR), which measures the frequency of injuries that resulted in absences from work, the Total Injury Frequency Rate (TIFR), which measures injuries that occurred, with or without absences from work, the Severity Rate (SR) which, like the average duration, measures the seriousness of reported injuries, as well as the Fatality Rate which relates to fatal accidents. The indicators are calculated for cement and concrete plants.

Aside from a company's financial performance, it has become increasingly important to evaluate occupational injuries: the identification of the causes of injuries and the definition of corrective actions are necessary conditions for preventing their repetition. This systematic approach has resulted in a constant improvement of the Company's injury rates over the years.

Sharing the dynamics associated with accidents in the various production units helps us to raise awareness of events that can result in injuries, so we can define suitable prevention and protection measures.

The following table shows all the accident indicators.

	Cement			Concrete			Total		
	Buzzi Unicem	Contractors	Total	Buzzi Unicem	Contractors	Total	Buzzi Unicem	Contractors	Total
Injuries	45	35	80	95	24	119	140	59	199
Lost days	2,116	896	3,012	3,592	540	4,132	5,708	1,436	7,144
Fatal injuries	1	1	2	0	0	0	1	1	2
LTIFR	3.5	7.6	4.6	17.1	10.8	15.3	7.6	8.6	7.9
TIFR	15.9	16.3	16.0	23.6	18.5	22.2	18.2	17.0	17.9
SR	0.17	0.19	0.17	0.65	0.24	0.53	0.31	0.21	0.28
Average duration	47	26	38	38	23	35	41	24	36
FR	1.4	3.3	1.98	0	0	0	1.0	2.3	1.4

The frequency indicator (LTIFR) is 7.9 (8.6 in 2015) and, confirms a constant reduction in the number of injuries: 199 compared to 220 in 2015. Compared to the average for the concrete sector, the frequency rate remains high, especially for injuries in Germany and USA, but we have also seen an improvement in these countries.

The TIFR is 17.9 (17.1 in 2015) and comprises the 251 injuries which did not result in absences from work. The severity rate (SR) for 2016 is 0.28 (0.25 in 2015). This negative trend derives in particular from a drop in the number of hours worked and from an increase in the average duration (from 30 to 36 days) of absences from work.

Buzzi Unicem recorded two fatal injuries in 2016: one took place in Luxemburg in the premises of a supplier and another occurred in Ukraine with the transportation company Dyckerhoff Transport.

The constant effort of Buzzi Unicem results in its training in the area of occupational health and safety.

In the various geographical areas in which it operates, projects are in place that which to prevent typical situations of risk in industrial environments and implement innovative initiatives involving the workforce in order to constantly improve preventive measures and promote a culture of safety.

#### Working conditions and employment data

The number of employees in the Buzzi Unicem Group at the end of 2016 was 9,975. The countries with the highest number of employees are: United States of America (2,277), Germany (1,849), Ukraine (1,558), Russia (1,455) and Italy (1,377).

Globally, there are three main areas in which the Company operates: western Europe, eastern Europe and America (each area has about a third of the workforce). Employment contracts are mainly open-ended (93%) and full-time (98% of total contracts). There was an increase in the employee turnover rate, which measures the total number of employees leaving the company by the end of the year, from 14.9% in 2015 to 16.2% in 2016.

### Work-Life Balance

It is possible to achieve a work-life balance at Buzzi Unicem thanks to an operational structure that allows flexible working hours. In the coming years Buzzi Unicem is committed to identifying, sharing and promoting best practices in the countries it operates in, starting from positive examples such as the experience in Wiesbaden in Germany.

Employee benefits normally also apply to part-time workers, in proportion to the time they work compared to their full-time colleagues.

### Workplace Diversity

The Group operates in different countries and continents. Our global presence has a specific local focus, particularly with regard to the presence of “minority” foreign workers.

There are no specific policies at group level but diversity is considered a value when it is in line with the values of Buzzi Unicem. Local situations are often different, with some countries that have a very limited number of foreign workers (eastern Europe) and others with very high levels, like the United States and Luxembourg.

**It is possible to find a balance between working life and family life at Buzzi Unicem thanks to an operational structure that allows flexible working hours**



### Staff incentive programs

Salary policies and incentives systems are delegated to the various countries but are coordinated with the aim of developing the Company’s human capital. We do not normally offer shares to employees, but we do provide incentives and bonuses based on company and individual performances. Incentive schemes differ depending on working duties and managerial level. The Company also offers incentives for individual employees in recognition of extraordinary results, innovative proposals and involvement on special projects that led to actual improvements in Buzzi Unicem’s performance.

### Collective bargaining

In Europe, collective bargaining is extended to and guaranteed at all levels.

In the United States, collective bargaining is common and widespread thanks to a proactive approach by Buzzi Unicem USA.

In 2016, the European Works Council (EWC), which is the advisory and information body for all workers in the European Union, continued its work. The EWC meets in a plenary session once a year, with the Buzzi Unicem headquarters in Casale Monferrato selected as the



# 32.1

## HOURS OF TRAINING PER CAPITA

provided in 2016  
by Buzzi Unicem

venue. The Committee met twice during the course of the year in a non-plenary form, in Wiesbaden and Rome.

In Italy, there are trade unions (RSU) whose relationship with the company has historically been characterized by transparency and a spirit of collaboration; in Germany and the Czech Republic, according to the respective local regulations, a third of the Supervisory Board consists of employees. More generally, employees in all countries are represented in accordance with local legal regulations, and although these can vary from region to region even within the same country, representation always takes place in accordance with the Company's Code of Ethics.

### Training and professional development

Training has always been a priority and is intended to increase professional skills and promote career advancement. Different countries have their own training plans based on local requirements. At a broader level, Human Resources departments in individual countries organize training programs on issues of general interest such as: health and safety, protection of the environment, technology in the cement and concrete sectors, project management, learning of foreign languages and management systems.

In 2016 at the group level 32.4 hours of training were provided per employee - compared to an average for the sector of 30 hours - for a total of 39,686 days, and the investment plan remained unchanged even in countries where the Company's performance has been unsatisfactory.

The country with the highest number of days invested in training was once again Russia with a program in Omsk which increased the plans of training available thanks to specialist planning and a combination of professions. The average number of training hours per employee was 78.7.

### Human rights

Buzzi Unicem operates in states that have ratified the core conventions of the ILO (International Labour Organization) regarding the abolition of forced labor and child labor, and which have largely incorporated these principles within their respective national legal systems.

With regard to aspects linked to the right of association, the high level of collective bargaining is one example of the absence of risks in terms of membership of association and trade unions in the Buzzi Unicem Group.

The choice of suppliers and contractors aims to share the corporate values that inspire Buzzi Unicem

Managerial staff or staff with managerial duties is informed of and trained to respect local labor law. Moreover, our workforce has received the code of conduct and is aware of the Company's values.

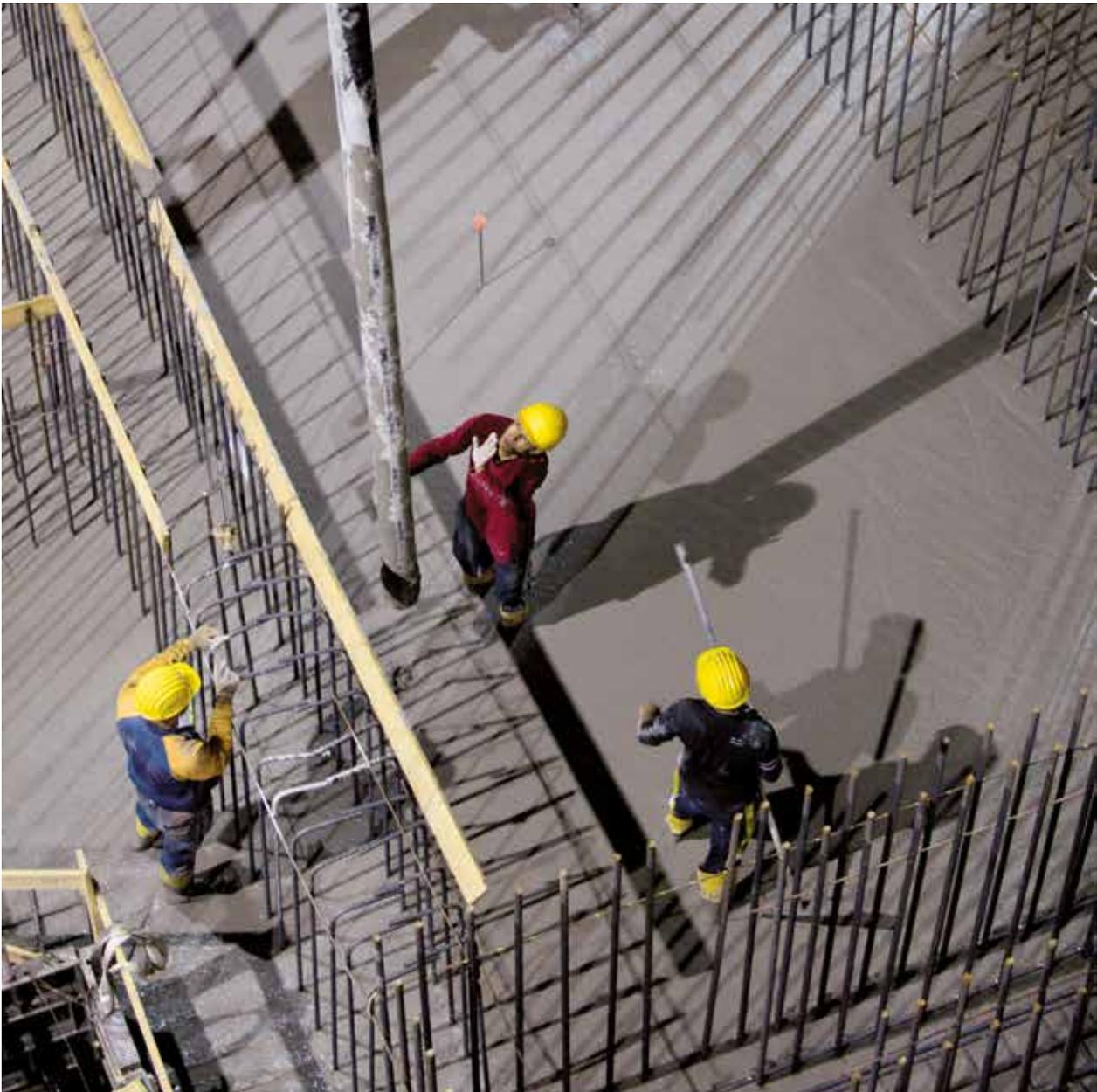
#### Human rights protection clauses in large investments

In 2016 no protection clauses for human rights were stipulated in supply contracts for plants or financial stakes, since the Company operates in countries that are not considered to pose a specific risk in this

regard and which have signed the main UN and ILO conventions on this subject matter.

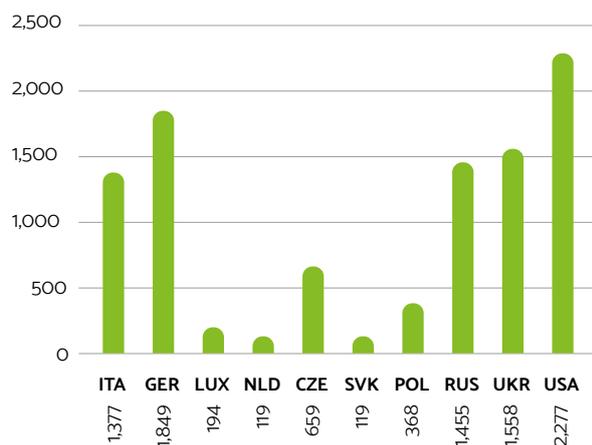
#### Large suppliers and contractors that have been subject to human rights screening

We prefer to select suppliers and contractors who share our corporate values. This is achieved by distributing and verifying that they have applied the Ethical Code of Conduct with the aim of making all our suppliers aware that they must conduct themselves appropriately and transparently.



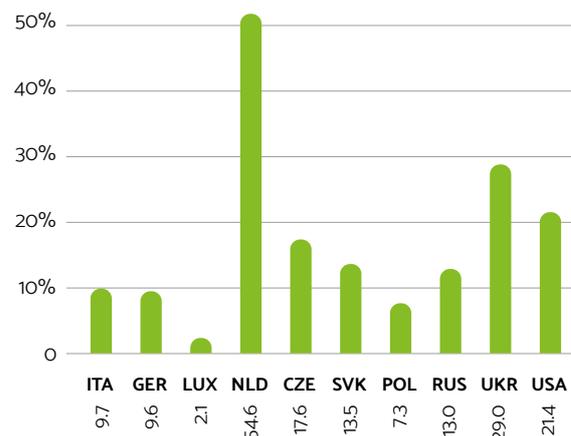
# Social Performance: Charts and Tables

### Breakdown (2016)



**TOTAL GROUP 9,975**

### Turnover rate (2016)



**TOTAL GROUP 16.7%**

### Total group employees by contract type (2012 - 2016)

	2012*	2013*	2014*	2015**	2016**
<b>Total staff</b>	<b>11,426</b>	<b>11,094</b>	<b>11,222</b>	<b>9,738</b>	<b>9,975</b>
Men	9,841	9,553	9,544	8,287	<b>8,404</b>
Women	1,585	1,541	1,678	1,451	<b>1,571</b>
Open-end contracts	11,096	10,816	10,936	9,501	<b>9,261</b>
Fixed-term contracts	330	278	286	237	<b>707</b>
Full-time	11,223	10,914	11,046	9,359	<b>9,067</b>
Part-time	203	180	176	142	<b>195</b>

\* Mexico: figures at 100%

\*\* Excluding Mexico

### Total number and turnover rate of group employees (2012 - 2016)

	2012*	2013*	2014*	2015**	2016**
<b>Rate turnover %</b>	<b>11.6</b>	<b>13.2</b>	<b>14.8</b>	<b>14.9</b>	<b>16.7</b>
Total workforce	11,426	11,094	11,222	9,738	<b>9,975</b>
Total new hires	1,228	1,134	1,784	1,069	<b>1,905</b>
Total terminations	1,330	1,466	1,656	1,448	<b>1,668</b>
of which male				1,240	<b>1,458</b>
of which female				208	<b>210</b>

\* Mexico: figures at 100%

\*\* Excluding Mexico

### Breakdown by gender (2016)

	ITA	DEU	LUX	NED	REP CECA	SLO	POL	RUS	UCR	USA	TOT
<b>Management</b>	105	63	12	4	11	2	5	16	17	200	<b>435</b>
of which male	98	56	12	2	9	1	5	11	11	184	<b>389</b>
of which female	7	7	0	2	2	1	0	5	6	16	<b>46</b>
<b>White collars</b>	779	647	72	38	163	25	177	421	366	496	<b>3,184</b>
of which male	661	437	60	29	93	15	110	277	213	359	<b>2,254</b>
of which female	118	210	12	9	70	10	67	144	153	137	<b>930</b>
<b>Blue collars</b>	487	908	106	73	481	89	186	1,018	1,175	1,581	<b>6,104</b>
of which male	480	891	104	68	460	83	176	841	906	1,560	<b>5,569</b>
of which female	7	17	2	5	21	6	10	177	269	21	<b>535</b>
<b>Trainees</b>	6	149	4	0	0	0	0	0	0	0	<b>159</b>
of which male	5	133	1								<b>139</b>
of which female	1	16	3								<b>20</b>
<b>Marginal / Helpers</b>	0	82	0	4	4	3	0	0	0	0	<b>93</b>
of which male		43		4	3	3					<b>53</b>
of which female		39		0	1	0					<b>40</b>
<b>Total</b>	<b>1,377</b>	<b>1,849</b>	<b>194</b>	<b>119</b>	<b>659</b>	<b>119</b>	<b>368</b>	<b>1,455</b>	<b>1,558</b>	<b>2,277</b>	<b>9,975</b>

### Employees covered by collective bargaining agreements (2016)

	2012*	2013*	2014*	2015**	2016**
<b>Total staff</b>	<b>11,426</b>	<b>11,094</b>	<b>11,222</b>	<b>9,738</b>	<b>9,975</b>
Employees of the group covered by collective bargaining agreements	8,156	8,036	8,227	7,417	<b>7,661</b>
Indicator of coverage %	71.38	72.44	73.31	76.20	<b>76.80</b>

\* Mexico: figures at 100%

\*\* Excluding Mexico

### Minimum notice period in case of organization changes (2016)

Italy	11 weeks
Germany	4 weeks
Luxembourg	no notice
Netherlands	4 weeks
Czech Republic	8 weeks
Slovakia	8 weeks
Poland	12 weeks
Russia	9 weeks
Ukraine	8 weeks
USA	5 days - 8 weeks

### Group absentee rate (2012-2016)

	2012*	2013*	2014*	2015**	2016**
<b>Absentee rate %</b>	<b>2.8</b>	<b>3.0</b>	<b>2.8</b>	<b>3.2</b>	<b>3.3</b>
of which male				3.1	<b>3.3</b>
of which female				3.5	<b>3.0</b>
Occupational diseases	8	13	6	6	<b>1</b>
Deaths	2	1	2	2	<b>2</b>

\* Mexico: figures at 100%

\*\* Excluding Mexico

### Annual compensation\* (2016)

Italy	8.57
USA	13.13
Germany	12.81
Netherlands	3.04
Luxembourg	4.71
Poland	12.32
Czech Republic	14.57
Slovakia	17.46
Ukraine	34.45
Russia	19.33

\* Ratio of annual compensation for the highest-paid individual to the median annual compensation for all employees

**Absentee rate by geographic area: illness, injuries, strikes, employees only (2016)**

	Absentee rate in %	of which male absentee in %	of which female absentee in %	Occupational diseases	Deaths
Italy	3.4	3.5	2.8	1	
Germany	5.4	5.4	5.7		
Luxembourg	6.3	6.2	6.9		
Netherlands	6.6	6.5	8.1		
Czech Republic	3.6	3.9	1.9		
Slovakia	2.7	3.3	0.0		
Poland	3.4	3.2	4.1		
Russia	2.0	2.0	1.9		
Ukraine	2.7	2.7	2.6		1
USA	2.2	2.2	1.6		

**Group average hours of training per capita (2016)**

		of which male	of which female
Hours of training per capita	<b>32.1</b>	33.6	24.2
Management	<b>40.5</b>	36.1	77.1
White collars	<b>22.8</b>	22.7	23.2
Blue collars	<b>37.0</b>	38.4	21.8
Trainees	<b>9.4</b>	9.2	10.2

**Average hours of training per employee (2012-2016)**

	2012*	2013*	2014*	2015**	2016**
Total hours of training	350,296	379,664	435,856	345,952	<b>317,488</b>
Hours of training per capita	31.0	34.0	39.0	35.5	<b>32.1</b>
Management	-	-	-	-	<b>40.5</b>
White collars	25.0	25.0	30.0	22.8	<b>22.8</b>
Blue collars	35.0	40.0	45.0	43.6	<b>37.0</b>
Trainees	-	-	-	-	<b>9.4</b>

\* Mexico: figures at 100%

\*\* Excluding Mexico

**Accident indicators by geographic area: cement - employees only (2016)**

	LTIFR (Lost Time Injury Frequency Rate)	SR (Severity Rate)	Average injury (dd)
Italy	9.5	0.46	48
Germany	1.6	0.04	23
Luxembourg	11.1	0.75	68
Czech Republic and Slovakia	3.2	0.05	14
Poland	3.2	0.13	41
Ukraine	1.1	0.01	8
Russia	1.5	0.04	27
USA	5.0	0.31	62
<b>Total</b>	<b>3.5</b>	<b>0.17</b>	<b>47</b>

**Accident indicators by geographic area: cement - including contractors (2016)**

Italy	9.5	0.39	41
Germany	4.5	0.10	22
Luxembourg	23.7	0.93	39
Czech Republic and Slovakia	5.5	0.21	37
Poland	1.6	0.07	41
Ukraine	1.2	0.03	26
Russia	13	0.03	24
USA	5.8	0.26	45
<b>Total</b>	<b>4.6</b>	<b>0.17</b>	<b>38</b>

**Accident indicators by geographic area: concrete - employees only (2016)**

Italy	6.6	0.26	39
Germany	23.4	0.63	27
Luxembourg	0	0	0
Holland	7.5	0.13	17
Czech Republic and Slovakia	0.9	0.03	31
Poland	3	0.53	174
Ukraine	0	0	0
USA	31	1.25	40
<b>Total</b>	<b>17.1</b>	<b>0.65</b>	<b>38</b>

**Accident indicators by geographic area: concrete - including contractors (2016)**

Italy	3.2	0.13	39
Germany	26.0	0.63	24
Luxembourg	0	0	0
Holland	4.5	0.08	17
Czech Republic and Slovakia	0.9	0.03	31
Poland	2.2	0.39	174
Ukraine	0	0	0
USA	28.5	1.15	40
<b>Total</b>	<b>15.3</b>	<b>0.53</b>	<b>35</b>



POLYSUE

GEARS

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## METHODOLOGY NOTE

**A year ahead of schedule, compared to the deadline set by the new legislative Decree of 30 December 2016, n. 254, implementing directive 2014/95/EU of the European Parliament and Council of 22 October 2014, containing an amendment to directive 2013/34/EU. Buzzi Unicem commits to align itself with the new reporting requirements for the disclosure of non-financial information and information on diversity by certain large companies and groups.**

### **Materiality and reporting methodology**

Buzzi Unicem is committed to continually improving the quality, materiality, completeness and reliability of the information it publishes in order to guarantee the highest level of transparency. Buzzi Unicem has been consolidating and publishing its non-financial information since 2001.

The contents and publication timeline of the Sustainability Report are in line with last year. In 2015 Buzzi Unicem transitioned to the new Global Reporting Initiative (GRI, version G4) guidelines at the “In Accordance -Core” level. As required by the GRI, the Report focuses on the aspects highlighted by the Materiality Matrix.

The Report comprises two sections: the first describes the Company’s sustainability process and how this is integrated within its business; the second focuses on the Company’s economic, environmental and social performances. Unlike the English version, the Italian version of the document contains specific details about the Italian situation.

In the section Environmental Performance, indicators relating to specific consumption and emission factors for dusts, NO<sub>x</sub>, SO<sub>2</sub> and Hg are shown per ton of clinker produced. Indicators relating to specific electrical consumption, CO<sub>2</sub> emission, waste production and water consumption are instead shown per ton of equivalent cement produced.

Equivalent cement is defined as the potential production of cement using all of the clinker produced, without calculating transfer and variation of stock.

### Reporting process

The Company's reporting processes is supported by the gathering of data and information based on the "Reporting Package", which is a detailed list of indicators and definitions which is sent by the Sustainability team to the individual area managers of the country where Buzzi Unicem operates. As of 2015 every country has appointed a "Sustainability Coordinator" and "Stakeholder Engagement Owner" with the aim of developing a stakeholder engagement process and improving the reporting process.

### Reporting scope

The economic data and information reported in the Sustainability Report refer to all companies included in the Consolidated financial statement by means of the full consolidation method.

A year ahead of schedule, compared to the deadline set by the new legislative Decree of 30 December 2016, n. 254, implementing directive 2014/95/EU of the European Parliament and Council of 22 October 2014, containing an amendment to directive 2013/34/EU, Buzzi Unicem has aligned itself with the new reporting requirements for the disclosure of non-financial information and information on diversity by certain large companies and groups.

Therefore, as of this year, as provided by the Decree, Buzzi Unicem has aligned the scope of its Sustainability Report with the scope of the Consolidated Financial Statement, excluding Mexico from environmental and social reporting.

For greater ease of comparison, the 2015 Data were recalculated in accordance with the new scope.

For the calculation of greenhouse gas emissions of cement plants in Italy, Germany, Luxembourg, Poland and Czech Republic that fall within the Emissions Trading System (EU ETS), the Company used the criteria required by Regulation (EU) n. 601/2012 of the European commission, which establishes guidelines for the monitoring and disclosure of greenhouse gas emissions in accordance with directive 2003/87/EC of the European Parliament and Council.

Additionally:

- all data refers to the period 01-01-2016 to 31-12-2016;
- the quantitative environmental and social data were consolidated in full;
- economic data came from the Consolidated Financial Statement;
- starting from 2015, besides fully consolidating the data for the Russian Korkino cement plant, the reporting scope for accident data was extended to the Omsk and Cimentrans mixing facilities;
- starting from 2016, a standard methodology for counting employees was adopted in all Buzzi Unicem companies in different countries.



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# GRI Content

## GENERAL STANDARD DISCLOSURES

GENERAL STANDARD DISCLOSURES	REFERENCE
<b>Strategy and Analysis</b>	
<b>G4.1</b> Letter to Stakeholders	Letter to Stakeholders
<b>Organizational Profile</b>	
<b>G4.3</b> Name of the organization	Vision
<b>G4.4</b> Services provided	Group profile - The group at a glance
<b>G4.5</b> Location of company headquarters	Group profile - The group at a glance - International presence
<b>G4.6</b> Countries where the organization operates	Group profile - The group at a glance - Cement plant locations
<b>G4.7</b> Ownership structure	Corporate sustainability - Corporate governance system
<b>G4.8</b> Markets served	Group profile - The group at a glance - Cement plant locations
<b>G4.9</b> Scale of the organization	Group profile - The group at a glance
<b>G4.10</b> Employees by type of contract, gender, geographic area, category	Performance Indicators - Social Performance: Charts and Tables
<b>G4.11</b> Employees covered by collective agreements	Performance Indicators - Social Performance: Charts and Tables
<b>G4.12</b> Supply chain of the organization	In 2016 the value of the goods and services purchased by the Group amounted to 1,668 million euro. Most of these purchases relate to fuels, electricity, raw materials, spare parts, logistics and services. We are fully aware that an effective sustainability approach requires the engagement also of our suppliers. We strive to manage our relationship with them not only on the basis of technical and economic considerations, but also on the basis of sharing fundamental ethical values, in particular those mentioned in our Code of Conduct. In 2016 we have continued the work begun in 2015, engaging a relevant percentage of suppliers in the monitoring of the issue of occupational safety.
<b>G4.13</b> Changes during the year in the organization or in the supply chain	Appendixes - Methodology note
<b>G4.14</b> Precautionary principle (risk management)	Website Buzzi Unicem - Sustainability > Methodology > Chart of values - Sustainability > Methodology > Guiding principles
<b>G4.15</b> Charters, principles or other external initiatives that the organization signs	Corporate sustainability - Corporate governance system - Code of conduct, internal control and risk management system
<b>G4.16</b> List of trade associations to which the organization adheres	The trade associations to which the Group participates to include: European Cement Federation - Cembureau, Associazione Italiana Tecnico Economica del Cemento - AITEC, European Concrete Platform, VDZ, Portland Cement Association, CANACEM (National Cement Chamber).

## GENERAL STANDARD DISCLOSURES

(continues)

GENERAL STANDARD DISCLOSURES	REFERENCE
<b>Identified material aspects and boundaries</b>	
<b>G4.17</b> Companies included in the consolidated financial statements and those not considered in the Sustainability Report	Appendixes - Methodology note - Reporting scope
<b>G4.18</b> Process for defining report content and scope	Appendixes - Methodology note - Reporting process
<b>G4.19</b> Material aspects identified in the process of defining content	Corporate sustainability - Materiality matrix
<b>G4.20</b> For each material aspect indicate the related scope within the organization	Appendixes - Methodology note - Reporting scope
<b>G4.21</b> For each material aspect indicate the related scope outside the organization	The material aspect whose reporting scope was extended outside the organization is the health and safety of supplier companies, due to its relevance for the sector and the Group.
<b>G4.22</b> Any "restatement" with respect to the previous report	Appendixes - Methodology note - Reporting scope
<b>G4.23</b> Any "restatement" with respect to the material aspects of the previous report	This Report, at its second version drafted in accordance to the GRI G4 Reporting Guidelines, does not provide restatements relating to the material aspects of the previous Sustainability Report.
<b>Stakeholder engagement</b>	
<b>G4.24</b> Group Stakeholders	Corporate sustainability - Stakeholder engagement
<b>G4.25</b> Identification process	Corporate sustainability - Stakeholder engagement
<b>G4.26</b> Engagement approach, including frequencies and types of activities	Corporate sustainability - Stakeholder engagement
<b>G4.27</b> Issues arising from stakeholder engagement	Corporate sustainability - Materiality matrix
<b>Report profile</b>	
<b>G4.28</b> Reporting period	Appendixes - Methodology note - Reporting scope
<b>G4.29</b> Date of last report published	The Sustainability Report 2015 was published in May 2016.
<b>G4.30</b> Reporting frequency (yearly, half-yearly, etc.)	The Sustainability Report is published annually.
<b>G4.31</b> Contacts for information regarding the report	Website Buzzi Unicem > Contact us
<b>G4.32</b> GRI Content Index	Appendixes - GRI Content
<b>G4.33</b> Assurance document	Appendixes - Auditors' report
<b>Governance</b>	
<b>G4.34</b> Governance structure of the organization	Corporate sustainability - Corporate governance system
<b>G4.54</b> Annual compensation	Performance Indicators - Social Performance: Charts and Tables
<b>Ethics and integrity</b>	
<b>G4.56</b> Mission, values, codes of conduct and principles	Corporate sustainability - Corporate governance system

## SPECIFIC STANDARD DISCLOSURES

MATERIAL ASPECTS	PAGE/REFERENCE	OMISSIONS
<b>Aspect: Economic performance</b>		
<b>G4.DMA</b> Disclosure on management approach	Performance Indicators - Economic Performance	
<b>G4.EC1</b> Direct economic value generated and distributed	Performance Indicators - Economic Performance - Direct economic value generated and distributed	
<b>G4.EC4</b> Significant financial assistance received from PA	Performance Indicators - Economic Performance - A breakdown of net value added	
<b>Aspect: Materials</b>		
<b>G4.DMA</b> Disclosure on management approach	Performance Indicators - Environmental Performance Performance Indicators - Environmental Performance - Environmental, health and safety management systems	
<b>G4.EN1</b> Raw materials used by weight or volume	Performance Indicators - Environmental Performance: Summary table A total of 39,463,521 t of raw materials were used of which: 35,492,135 t natural raw materials and 3,971,385 t non-natural raw materials.	
<b>G4.EN2</b> Percentage of materials used that derive from recycled materials	Performance Indicators - Environmental Performance - Natural resources	
<b>Aspect: Energia</b>		
<b>G4.DMA</b> Disclosure on management approach	Performance Indicators - Environmental Performance Performance Indicators - Environmental Performance - Environmental, health and safety management systems	
<b>G4.EN3</b> Energy consumption within the organization	Performance Indicators - Environmental Performance - Energy resources	
<b>G4.EN5</b> Indicators of energy intensity	Performance Indicators - Environmental Performance: Summary table	
<b>G4.EN6</b> Reduction of energy consumption	Performance Indicators - Environmental Performance - Energy resources	
<b>Aspect: Acqua</b>		
<b>G4.DMA</b> Disclosure on management approach	Performance Indicators - Environmental Performance - Water resources Performance Indicators - Environmental Performance - Environmental, health and safety management systems	
<b>G4.EN8</b> Total water withdrawal by source	Performance Indicators - Environmental Performance - Water resources	
<b>G4.EN9</b> Water sources significantly affected by withdrawal of water	The Company has used 7,693,935 cubic meters of water.	
<b>G4.EN10</b> Percentage and total volume of water recycled and reused	The Company has used 1,481,962 cubic meters of rainwater.	

## SPECIFIC STANDARD DISCLOSURES

(continues)

MATERIAL ASPECTS	PAGE/REFERENCE	OMISSIONS
<b>Aspect: Biodiversity</b>		
<b>G4.DMA</b> Disclosure on management approach		Performance Indicators - Environmental Performance - Biodiversity Performance Indicators - Environmental Performance - Environmental, health and safety management systems
<b>G4.EN11</b> Land owned, leased or managed in protected areas		Performance Indicators - Environmental Performance - Biodiversity
<b>Aspect: Emissions</b>		
<b>G4.DMA</b> Disclosure on management approach		Performance Indicators - Environmental Performance - Greenhouse gases Performance Indicators - Environmental Performance - Other atmospheric emissions Performance Indicators - Environmental Performance - Environmental, health and safety management systems
<b>G4.EN15</b> Direct GHG emissions (Scope 1)		Performance Indicators - Environmental Performance - Greenhouse gases
<b>G4.EN18</b> GHG emission intensity		Performance Indicators - Environmental Performance: Summary table
<b>G4.EN19</b> Initiatives to reduce GHG emissions		Performance Indicators - Environmental Performance - Greenhouse gases
<b>G4.EN21</b> NO <sub>x</sub> , SO <sub>x</sub> and other significant emissions		Performance Indicators - Environmental Performance - Other atmospheric emissions The company has emitted a total of 2,157 t of dust, 32,799 t of NO <sub>x</sub> , 5,467 t of SO <sub>2</sub> and 556 kg of Hg.
<b>Aspect: Effluents and waste</b>		
<b>G4.DMA</b> Disclosure on management approach		Performance Indicators - Environmental Performance - Waste management Performance Indicators - Environmental Performance - Environmental, health and safety management systems
<b>G4.EN23</b> Total weight of waste by type and disposal method		Performance Indicators - Environmental Performance - Waste management The company has produced a total of 96,369 t of waste in 2016 of which 59,402 t has been disposed of and 36,967 t has been reused.
<b>Aspect: Compliance</b>		
<b>G4.DMA</b> Disclosure on management approach		Corporate sustainability - Corporate governance system - Penalties
<b>G4.EN29</b> Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		Corporate sustainability - Corporate governance system - Penalties

## SOCIAL

MATERIAL ASPECTS	PAGE/REFERENCE	OMISSIONS
<b>Aspect: Employment</b>		
<b>G4.DMA</b> Disclosure on management approach	Performance Indicators - Social Performance	
<b>G4.LA1</b> Number of employees, hires and turnover rate	Performance Indicators - Social Performance: Charts and Tables	
<b>G4.LA2</b> Benefits provided to full-time employees	Performance Indicators - Social Performance - Work-Life Balance	
<b>Aspect: Labour/management relations</b>		
<b>G4.DMA</b> Disclosure on management approach	Performance Indicators - Social Performance - Collective bargaining	
<b>G4.LA4</b> Minimum notice period regarding operational changes	Performance Indicators - Social Performance: Charts and Tables	
<b>Aspect: Occupational health and safety</b>		
<b>G4.DMA</b> Disclosure on management approach	Performance Indicators - Social Performance - Occupational Health and Safety	
<b>G4.LA6</b> Occupational injuries and illnesses	Performance Indicators - Social Performance - Occupational Health and Safety	
<b>Aspect: Training and education</b>		
<b>G4.DMA</b> Disclosure on management approach	Performance Indicators - Social Performance	
<b>G4.LA9</b> Average annual hours of training per employee	Performance Indicators - Social Performance: Charts and Tables	
<b>G4.LA10</b> Programs for skills management	Performance Indicators - Social Performance - Training and professional development	
<b>G4.LA11</b> Evaluation of performance and development	Performance Indicators - Social Performance - Staff incentive programs	<i>The performance management process is described; the percentage of employees covered by incentive programs is not provided.</i>

## SOCIAL

(continues)

MATERIAL ASPECTS	PAGE/REFERENCE	OMISSIONS
<b>Aspect: Local communities</b>		
<b>G4.DMA</b> Disclosure on management approach	Corporate sustainability - Stakeholder engagement	
<b>G4.SO1</b> Activities with involvement by local communities	Corporate sustainability - Stakeholder engagement	
<b>Aspect: Anti corruption</b>		
<b>G4.DMA</b> Disclosure on management approach	Corporate sustainability - Corporate governance system - Transparency in the conduct of business	Corporate sustainability - Corporate governance system - Communication of policies relating to ethics and transparency
<b>G4.SO4</b> Communication and training on anti-corruption policies and procedures	Corporate sustainability - Corporate governance system - Anti-corruption	
<b>G4.SO5</b> Corruption cases reported and confirmed and related actions taken	In 2016 no corruption cases were identified within the activities of the Buzzi Unicem Group.	
<b>Aspect: Compliance</b>		
<b>G4.DMA</b> Disclosure on management approach	Corporate sustainability - Corporate governance system - Penalties	
<b>G4.SO8</b> Fines and non-monetary sanctions for non-compliance with laws and regulations	Corporate sustainability - Corporate governance system - Penalties	
<b>Aspect: Product and service labeling</b>		
<b>G4.DMA</b> Disclosure on management approach	Performance Indicators - Environmental Performance - Product Life Cycle	
<b>G4.PR3</b> Information required by procedures and percentage of significant products and services subject to such	Performance Indicators - Environmental Performance - Product Life Cycle  Website: Quality > Certifications > Certificate of Conformity for Cement Products  All types of cement produced in the EU area need to have the EC mark. The EC mark indicates that the cement is in compliance with an harmonized European standard (EN 197-1 law). It allows to meet the essential requirements established by the 89/106/CEE directive in regard to the works in which it is used.	
<b>Aspect: Compliance</b>		
<b>G4.DMA</b> Disclosure on management approach	Corporate sustainability - Corporate governance system - Penalties	
<b>G4.PR9</b> Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	Corporate sustainability - Corporate governance system - Penalties	



**BUZZI UNICEM SPA**

**INDEPENDENT REPORT ON THE LIMITED ASSURANCE  
ENGAGEMENT OF THE SUSTAINABILITY REPORT 2016**



## **INDEPENDENT REPORT ON THE LIMITED ASSURANCE ENGAGEMENT OF THE SUSTAINABILITY REPORT 2016**

To the Shareholders of  
Buzzi Unicem SpA

We have carried out a limited assurance engagement on the Sustainability Report (hereinafter the "Report") of the Buzzi Unicem Group (hereinafter the "Group") for the year ended 31 December 2016.

### **Responsibility of the Directors for the Report**

The Directors are responsible for preparing the report in compliance with the *G4 Sustainability Reporting Guidelines* defined in 2013 by the *GRI – Global Reporting Initiative*, as indicated in the chapter "Methodology note" of the Report, and for that part of internal control that they consider necessary to prepare Sustainability Report that is free from material misstatement, whether due to fraud or unintentional behaviours or events. The Directors are also responsible for defining the sustainability performance targets of the Buzzi Unicem Group, for reporting the sustainability results, as well as for identifying the stakeholders and the significant aspects to be reported.

### **Auditor's responsibility**

We are responsible for the preparation of this Report on the basis of the work performed. We conducted our engagement in accordance with *International Standard on Assurance Engagements 3000 (Revised) – Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000)*, issued by the IAASB (International Auditing and Assurance Standards Board) for limited assurance engagements. The standard requires that we comply with applicable ethical requirements, including professional independence, and that we plan and perform our work to obtain limited assurance that the Report is free from material misstatement. The procedures consisted in interviews, primarily of company personnel responsible for the preparation of the information presented in the Report, analysis of documents, recalculations and other verification procedures.

Our company applies the *International Standard on Quality Control 1 (ISQC (Italy) 1)* and, therefore, maintains an overall quality control system that includes directives and procedures on the compliance with the ethical principles, with the professional principles and with the applicable laws and regulations.

The procedures we performed consisted in verifying compliance of the Report with the principles for defining the content and the quality of a Sustainability Report set out in the *G4 Sustainability Reporting Guidelines*, and are summarised as follows:

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#### **PricewaterhouseCoopers Advisory SpA**

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Società soggetta all'attività di direzione e coordinamento della PricewaterhouseCoopers Italia Srl  
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- comparing the financial information reported in chapter “Economic Performance” of the Report with the information included in the Group’s consolidated financial statements as of 31 December 2016;
- analysing, through inquiries, the governance system and the process for managing the sustainability issues relating to the Group’s strategy and operations;
- analysing the process aimed at defining the significant reporting areas to be disclosed in the Report, with regard to the methods for their identification, in terms of priority for the various stakeholders, as well as the internal validation of the process findings;
- analysing the processes underlying the generation, recording and management of quantitative data included in the Report. In detail, we carried out:
  - meetings and interviews with the management of Buzzi Unicem SpA, OAO Sucholoshskzement and LLC Dyckerhoff Korkino Cement 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 submission of the information to the function responsible for the Report preparation;
  - a sample-based analysis of the documents supporting the preparation of the Report, in order to obtain evidence of the reliability of processes in place and of the internal control system underlying the treatment of the information relating to the objectives disclosed in the Report;
- analysing the internal consistency of the qualitative information described in the Report and its compliance with the guidelines identified in the preceding paragraph “Responsibility of the Directors for the Report”;
- analysing the engagement of stakeholders and its results through the existing documentation concerning the significant matters arisen during the Group dialogue initiatives;
- obtaining a representation letter, signed by the legal representative of Buzzi Unicem SpA, on the compliance of the Report with the guidelines identified in the paragraph “Responsibility of the Directors for the Report”, as well as the reliability and completeness of the disclosed information.

Our limited assurance work was less in scope than a reasonable assurance engagement performed in accordance with ISAE 3000 (*reasonable assurance engagement*) and, consequently, it does not provide us with a sufficient level of assurance necessary to become aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.



## **Conclusion**

Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report of Buzzi Unicem Group as of 31 December 2016 has not been prepared, in all material respects, in compliance with the *G4 Sustainability Reporting Guidelines* defined in 2013 by the *GRI - Global Reporting Initiative* as disclosed in the chapter “Methodology note” of the Report.

Turin, 28 April 2017

PricewaterhouseCoopers Advisory SpA

*Signed by*

Paolo Bersani  
(Partner)

*This report has been translated from the original, which was issued in Italian, solely for the convenience of international readers.*

This Sustainability Report appears in Italian (original version) and English (non-binding version)

**Editorial coordination**

SDWWG  
Milan

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Company Register of Alessandria no. 00930290044





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