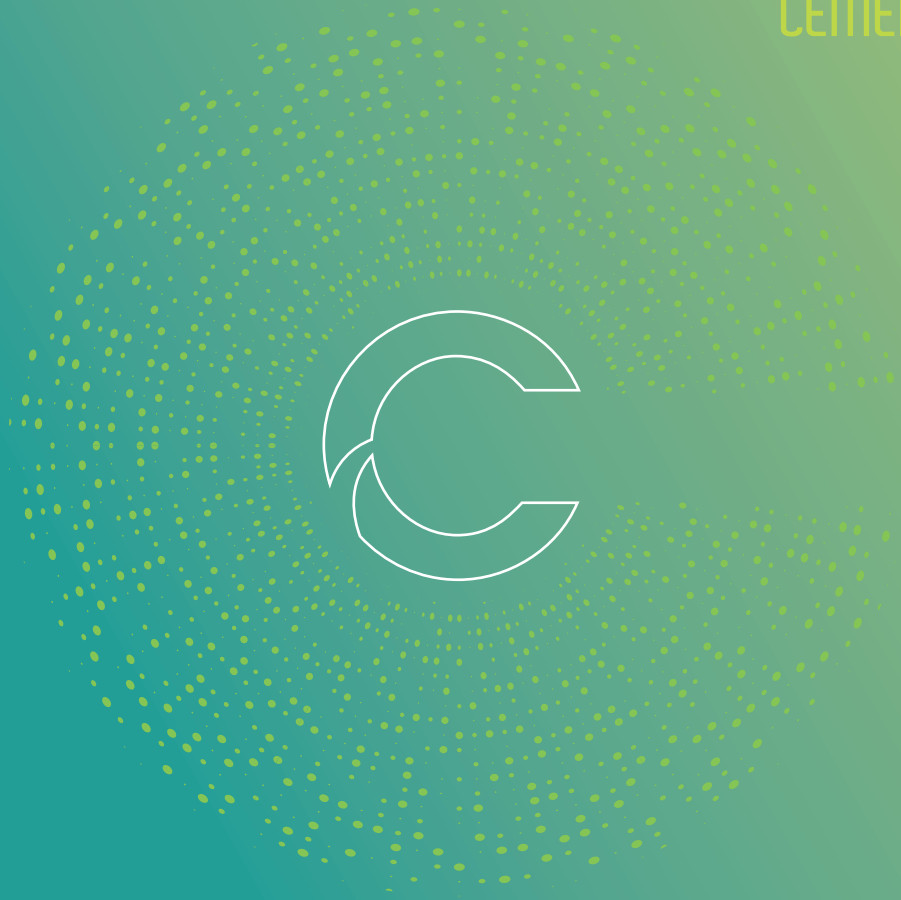
SUSTAINABILITY REPORT 2016

CEMENTIR GROUP



cementirholding
CALTAGIRONE GROUP

SUSTAINABILITY REPORT 2016

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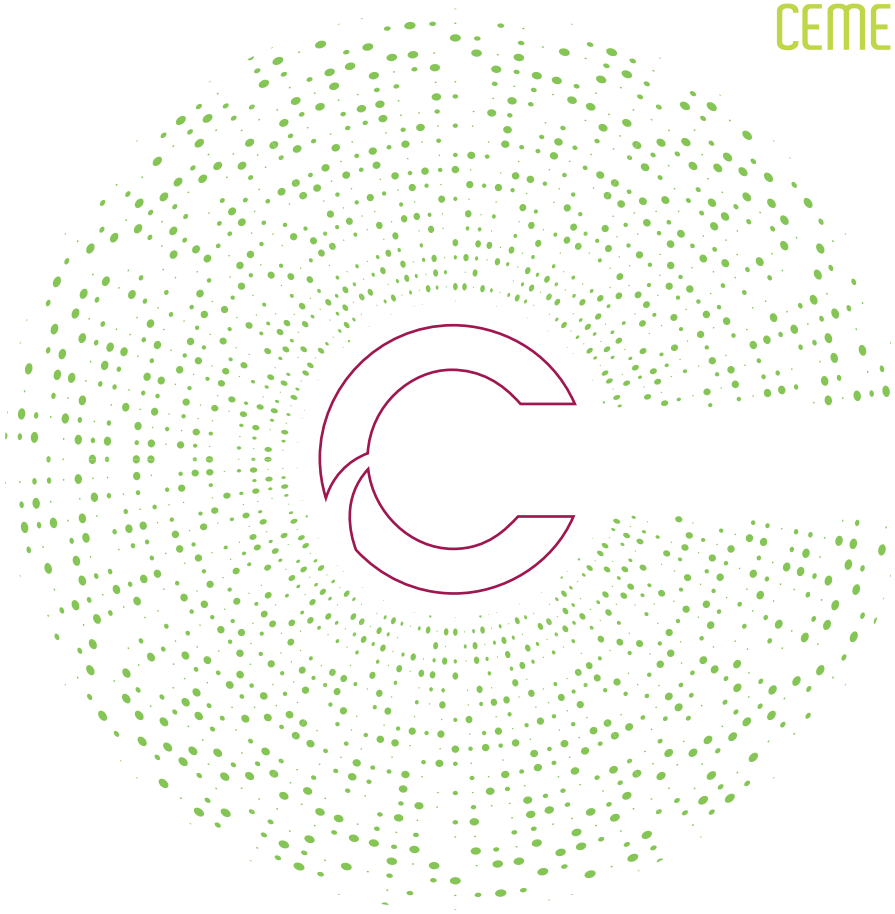

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CALTAGIRONE GROUP

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Letter to the Stakeholders

Dear Stakeholders,

We live in a period of profound changes that have a direct effect on our business. The creation of larger and larger urban conglomerates is so unstoppable that, according to the United Nations, the world's urban population is expected to increase by 84% in the next few decades, from 3.4 billion people in 2009 to 6.3 billion in 2050.

This rapid development means we must rethink how we live together in cities and requires our industry to do some extra work. On the one hand we must respond to rising demand for cement, while on the other we must do so while showing ever greater respect for the environment and the principles of sustainable development based around bringing together environmental, economic and social aspects.

THE CEMENT SECTOR, WHICH IS CURRENTLY RESPONSIBLE FOR 5% OF GLOBAL CO_2 EMISSIONS, MUST PLAY ITS PART THROUGH A SERIES OF NECESSARY INTERVENTIONS

The Paris climate conference 2016 concluded with a joint agreement signed by 195 countries which aims to limit global warming to 2°C – a target that is only achievable by reducing CO_2 emissions. The cement sector, which is currently responsible for 5% of global CO_2 emissions, must play its part through a series of necessary interventions. These include: reducing consumption of fossil fuels and replacing them with alternatives; limiting energy consumption in the

production cycle; replacing non-renewable raw materials with recycled materials; and lastly making cement with innovative combinations of raw materials with a lower environmental impact.

These are all strategic objectives that, in the near future, will no longer be seen within the limited scope of environmental sustainability, but will increasingly become a measure of the competitiveness of a company and its ability to innovate within its market.

Inspired by this challenge, we are delighted to present the first Sustainability Report of the Cementir Group, prepared according to the "Core Option" of the Global Reporting Initiative's international GRI-G4 guidelines.

The document follows on from the environmental reports published since 2008, adding for the first time an exercise in transparent reporting that embraces and integrates the environmental dimension with the economic and social dimension.

THE SUSTAINABILITY REPORT FOLLOWS ON FROM THE ENVIRONMENTAL REPORTS PUBLISHED SINCE 2008

The structure of the document is built around the four pillars that we have identified for the Group's sustainability strategy:

1. In waste, we see resources: we promote a circular economy
2. We respect the environment in all our operations
3. We value our people
4. We support our communities

These pillars will be translated into an action plan that will take account of the specific circumstances in each country. This is an important journey, with this first Sustainability Report marking the start of a long pathway that takes in the highs and lows that the Group traverses in its role as a global player.

As such the sustainable growth of our Group is a necessity in an industry like cement, which must face up to sometimes limited resources and a constant need for innovation. We are not unprepared for this challenge, having also started to integrate our traditional cement-related activities and the management and recycling of waste, exploiting the resulting economic and environmental synergies.

Bringing together apparently distant businesses, weaving them together, and finding therein new ways to do our work, is hugely satisfying for us because today it helps turn the Cementir Group into something unique on the market.

As we journey along this brand new path, we will find ourselves facing new and often complex challenges. We shall face these challenges together with you through a process of sharing and exchange, engagement and discussion.

This Sustainability Report not only strengthens that process but also offers a new starting point to look to the future.

Francesco Caltagirone Jr.
Chairman
and Chief Executive Officer

THE CEMENTIR GROUP

Sales volumes

7.9 million
tons of grey cement

2.2 million
tons of white cement

4.4 million
cubic metres of ready-mixed concrete

4.5 milioni
tons of aggregates

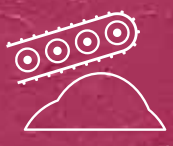
Plants

6
White cement plants

13
Grey cement plants

29
Terminals

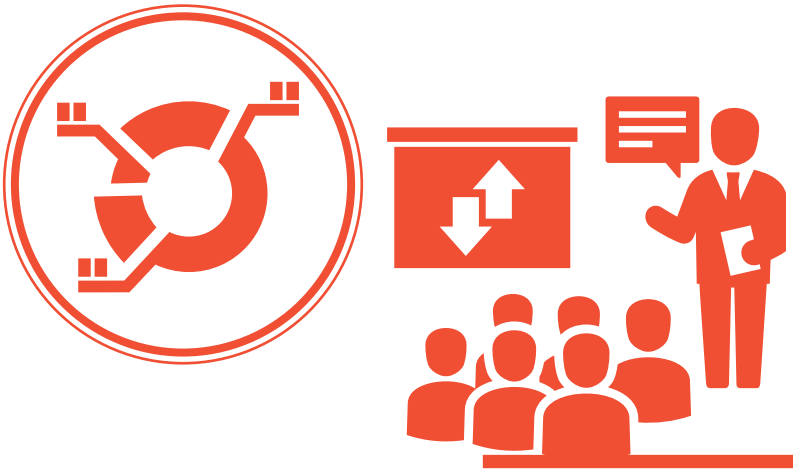
149
Ready-mixed concrete plants



11
Quarries

1
Cement product plant

3
Waste treatment and recycling plants



Cementir Holding is an Italian multinational company specialised in the production and distribution of grey and white cement, ready-mixed concrete, aggregates and concrete products. It is also active in the management of urban and industrial waste. The company was formed in Italy in 1947 and is part of the Caltagirone Group. It has been listed on the Milan Stock Exchange since 1955 and is currently in the STAR segment.

Over the years, the Cementir Group has grown through major investments and acquisitions throughout the world, becoming the absolute leader in the production of white cement. The Cementir Group is the only cement manufacturer in Denmark, the fourth-largest in Italy and one of the biggest in Turkey. It is also the leadinzg ready-mixed concrete manufacturer in Scandinavia.

Cementir is now present in 17 countries across 5 continents. Its strategy is aimed at increasing the integration of its business activities as well as geographical diversification.

The acquisitions made in 2016 in Italy and Europe are part of this international growth strategy. In Italy, Cementir Holding acquired the cement and ready-mixed concrete business division of Sacci, while in Belgium it concluded the acquisition of the company CCB – Compagnie des Ciments Belges, strengthening its production and commercial presence at the heart of Europe.

Starting 1 January 2016, the Group's operations are organised on a regional basis, divided into four Regions that represent the following geographical areas:

- Nordic & Baltic and USA
- Eastern Mediterranean
- Central Mediterranean
- Asia Pacific

1.1 OUR RESULTS

1.1.1 Business and financial results

In 2016 the Group has accomplished positive

Latest acquisitions

During the last eight months Cementir Holding has concluded two important acquisitions, growing its perimeter and redefining its strategic position on the market: the Group has strengthened its presence in Western Europe and Italy, both in the cement and in the aggregates industries.

On July 2016 the Group acquired the Sacci SpA, an Italian company specialised in the production of cement and ready-mixed concreate. Thanks to this operation, Cementir has gained three active plants located both in centre and in northern Italy (Testi-Greve in Chianti, Cagnano Amiterno and Tavernola Bergamasca), two inactive cement plants (Castelraimondo and Livorno), and three terminals (Manfredonia, Ravenna e Vasto). Sacci's integration also includes some important concrete plants (mostly located in centre Italy), a transport service for industrial activities, and shares of the Companies *Energy for Growth*, San Paolo, and of the Swiss Fenicem SA.

The second business operation has been finalized on October 2016: through the subsidiary Aalborg Portland Holding A/S, the Group acquired CCB – Compagnie des Ciments Belges, a Belgian company operating in the cement, aggregates and concrete sector. With CCB acquisition, Cementir Group now includes in its perimeter the largest cement factory in France-Benelux, equipped with cutting-edge technology and over 80 years of limestone reserves.

economic and financial results, with over one billion EUR of revenues, with an increase of 6% on 2015 obtained thanks to the two acquisitions finalized in 2016. At constant perimeter, the Group revenues remained stable, despite the impact of the depreciation of the major foreign currencies.

In particular, the Group ended the year with **revenue from sales and services** of **EUR 1,027.6 million**. This result mostly derives from both the strategy of developing the business internationally, and from the effects of the industrial consolidation, which resulted in an increase in revenue of around EUR 60.5 million (of which 21.8 million from Cementir Sacci and 38.7 million from the *Compagnie des Ciments Belges).*

The strong performance of operations in Scandinavian countries, with an increase in sales volumes of both cement and ready-mixed concrete, and in Malaysia (above all in export markets) offset the negative economic trend in Italy (where sales volumes have decreased), and the fall in revenue expressed in euros in Egypt, Turkey and China, where revenue in local currency increased.

THE GROUP ENDED THE YEAR WITH REVENUE FROM SALES AND SERVICES OF EUR 1,027.6 MILLION

Sales volumes of cement and clinker, equal to **10.1 million tons**, saw an increase of 7.9% with growth at constant perimeter of 1.3%, driven by strong performance in Denmark and China.

Sales volumes of ready-mixed concrete, equal to **4.4 million cubic metres**, rised up 17.9%; at constant perimeter, the increase in volume was 13.7%, driven by Turkey and Scandinavian countries.

In the aggregates sector,

FINANCIAL HIGHLIGHTS (millions of euros)	2016	2015	% Change
Revenue from sales and services	1027.6	969.0	6.0%
Total operating revenue	1068.4	995.4	7.3%
EBITDA	197.8	194.0	2.0%
EBITDA/Revenue from sales and services %	19.3%	20.0%	
EBIT	94.7	97.6	-3.1%
Net financial income (expense)	23.9	4.0	
Profit (loss) before taxes	118.6	101.6	16.7%
Profit (loss) for the year	85.3	75.1	13.6%
Group net profit (loss)	67.3	67.5	-0.3%

sales volumes were up by around **17%** thanks in particular to the contribution of *Compagnie des Ciments Belges*.. Net profit for the year totalled EUR 85.3 million, (EUR 75.1 million in 2015) after taxes amounting to EUR 33.2 million, up on the previous year (EUR 26.5 million).

Group net profit, once the shareholders' interests were accounted for, amounted to **EUR 67.3 million** (EUR 67.5 million in 2015). The increase in profit attributable to non-controlling interests (EUR 18.1 million compared to EUR 7.6 million in 2015) was mainly due to the increase in profits of the Egyptian company Sinai White Cement, of which the Group owns 57.14%.

IN THE AGGREGATES SECTOR, SALES VOLUMES WERE UP BY AROUND 17%

1.1.2 Economic value generated and distributed

Cementir Holding **redistributed part of the wealth generated to its shareholders and stakeholders**, including employees, suppliers, government and local communities.

The representation of this wealth is calculated through economic value generated and distributed, which takes account of the key factors for assessing the social role of a business in the area where it operates and for the people that are involved in its production processes.

For example, this calculation includes staff remuneration and costs; taxes paid in countries where the company operates (production excises, VAT, direct taxation) or payments to suppliers.

The analysis of the distribution of value-added is based on economic value generated, distributed and retained by the company, calculated by restating the items on the income statement of the Cementir Group's consolidated financial statements. This analysis produces a quantitative assessment of direct socio economic impact, by looking at the various items that comprise the wealth created and distributed in the form of costs.

GROUP NET PROFIT, AMOUNTED TO EUR 67.3 MILLION

CEMENTIR HOLDING REDISTRIBUTED PART OF THE WEALTH GENERATED TO ITS SHAREHOLDERS AND STAKEHOLDERS

ECONOMIC VALUE GENERATED AND DISTRIBUTED

Direct economic value generated	**1.109.268**	
Total operating revenue		1.068.399
Financial income		3.446
Foreign exchange rate gains (losses)		32.296
Share of net profits of equity-accounted investees		5.127
Economic value distributed	**-941.197**	
Operating costs	**-696.656**	
Raw materials costs		-432.711
Other operating costs		-263.945
Value distributed to employees	**- 166.986**	
Personnel costs	-	166.986
Value distributed to capital providers	**- 34.208**	
Financial expense		-16.933
Dividends		-17.275
Value distributed to government	**- 43.347**	
Current taxes (income taxes)		-36.169
Other non-income-related taxes		-7.178
Grants to local communities	**-247**	
Economic value retained	**165.525**	
Profit (loss) for the year		68.074
Amortisation and depreciation		-84.164
Provisions		-7.994
Impairment losses		-11.009
Deferred tax liabilities (assets)	5.716	

1.2 OUR PRODUCTS

Eastern Mediterranean

Turkey

Grey cement production capacity: 5.4 million t
Cement plants: 4
Ready-mixed concrete plants: 17
Waste management facilities: 2

Egypt

White cement production capacity: 1.1 million t
Cement plants: 1

SALES VOLUMES (million/t-m³)	2016	2015
Turkey		
Sales of grey cement	4.30	4.25
Sales of ready-mixed concrete	1.89	1.49
Egypt		
Sales of white cement	0.51	0.55

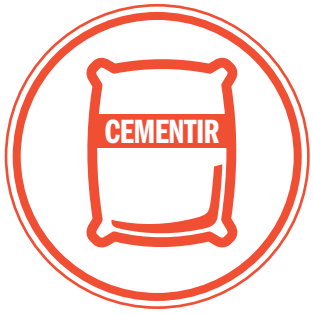
Central Mediterranean

ITALY

Grey cement production capacity: 6.3 million t
Cement plants: 7
Ready-mixed concrete plants: 45
Terminals: 6

SALES VOLUMES (million/t-m³)	2016	2015
Sales of grey cement	1.85 *	1.71
Sales of ready-mixed concrete	0.11 *	0.09
Sales of white cement	0.002	0.003

*Cementir Sacci included only 5 months



Asia Pacific

China

White cement production capacity: 0.7 million t
Cement plants: 1

Malaysia

White cement production capacity: 0.35 million t
Cement plants: 1

Australia

Terminals: 4

SALES VOLUMES (million/t-m³	2016	2015
China		
Sales of white cement	0.66	0.61
Malaysia		
Sales of white cement	0.31	0.30

Plants, production capacity and sales by COUNTRY

Nordic & Baltic and USA

Denmark
Grey cement production capacity: 2.1 million t
White cement production capacity: 0.85 million t
Cement plants: 1 (7 kilns)
Ready-mixed concrete plants: 37
Terminals: 9
Quarries: 3

Norvegia
Ready-mixed concrete plants: 31
Terminals: 1

Sweden
Ready-mixed concrete plants: 9
Quarries: 5

Belgium
Grey cement production capacity: 2.3 million t
Cement plants: 1
Ready-mixed concrete plants: 10
Quarries: 3

United Kingdom
Waste management facilities: 1

USA
White cement production capacity: 0.26 million t
Cement plants: 2 (24.5%-owned JV with Heidelberg and Cemex)
Cement product plants: 1
Terminals: 1

Germany
Terminals: 1

Iceland
Terminals: 3

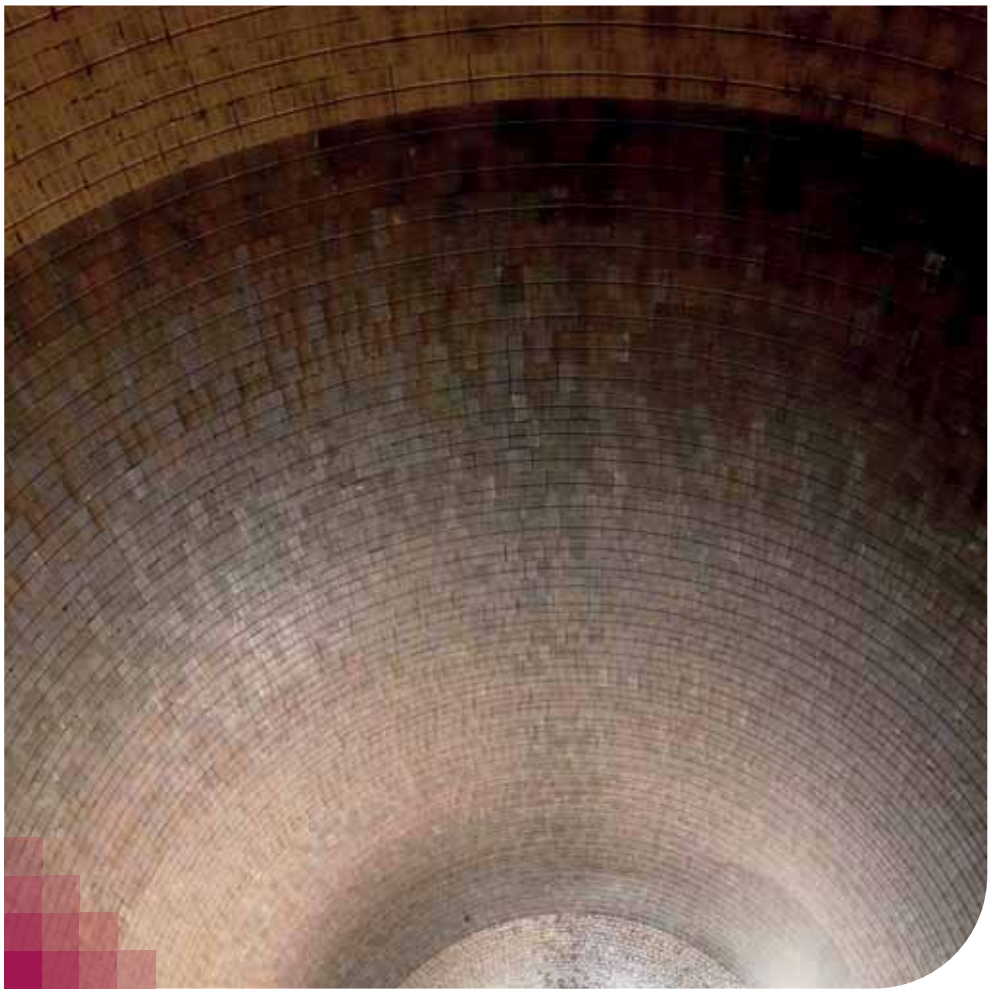
Netherlands
Terminals: 1

Poland
Terminals: 1

Russia
Terminals: 2

SALES VOLUMES (million/t-m³)	2016	2015
Denmark		
Sales of grey cement	1.52	1.39
Sales of white cement	0.70	0.61
Sales of ready-mixed concrete	1.16	1.17
Sales of aggregates	0.67	0.74
Belgium		
Sales of grey cement	0.25 *	-
Sales of ready-mixed concrete	0.14 *	-
Sales of aggregates	0.86 *	-
Norway		
Sales of ready-mixed concrete	0.91	0.82
Sweden		
Sales of ready-mixed concrete	0.21	0.18
Sales of aggregates	2.93	3.08

*Compagnie des Ciments Belges only included from October 25 2016



1.2.1 How cement is made

Cementir Holding's main area of operations is the production of cement. The process, which has been refined over the centuries, from the mortars of the Ancient Egyptians to early 19th century industrial models, starts with natural raw materials such as limestone, gypsum and clay extracted from natural quarries and crushed. This is then dosed, mixed with other elements and ground to obtain the "raw meal".

CEMENTIR HOLDING'S MAIN AREA OF OPERATIONS IS THE PRODUCTION OF CEMENT

The raw meal is cooked at very high temperatures in special kilns, which are fuelled mainly by fossil fuels, in order to obtain a semi-finished product known as "clinker", cement's main component. Once cooled, clinker undergoes a process to grind and mix it with gypsum and other admixtures (slag, fly ash, limestone, pozzolana) to obtain the various types of cement.

Thanks to its strong industrial capacity and a comprehensive presence on international markets, **in 2016 Cementir Holding distributed worldwide around 7,9 million tons of grey cement and over 2.2 million tonnes of white cement of various types and classes**, produced in 18 plants located in Italy, Denmark, Belgium, Malaysia, Egypt, China, Turkey and USA.

To reach these levels of production, the Group's main purchases were for the raw materials used in the mixture to make

IN 2016 CEMENTIR HOLDING DISTRIBUTED WORLDWIDE AROUND 7.9 MILLION TONS OF GREY CEMENT AND OVER 2.2 MILLION TONNES OF WHITE CEMENT

cement, as well as fossil and alternative fuels, and electricity. These types of purchases represented around 60 to 65% of total spending. Aside from raw materials, other purchases that had a significant waiting in the Cementir Group's supply chain related to transport of the materials in and out of its production facilities.

Raw materials and product logistics

Transport is one of the most complicated aspects of the production cycle involving the Group's plants. **There are two types of transport: one within the plant; the other outside the plant, for incoming materials and fuels and for outgoing products.**

Due to the distances involved, external transport is without doubt the activity with the greatest impact depending to a large extent on the location of the plants and available infrastructure in surrounding areas.

External transport involves motor vehicles, trains, ships and conveyor belts, which inevitably have an impact on the environment in terms of emissions and traffic generated.

In 2016, incoming materials and outgoing products were transported mainly by motor vehicles. The plants in Aalborg, Izmir, Ipoh, Anqing and Taranto, and Unicon's ready-mixed concrete production plant in Norway, also used transport by ship.

Due to their complexity, the entire logistics cycle carries a cost both for the Group and for the environment. That is the reason why the Group pursues a strategy developed through a series of drivers:

- Combining incoming and outgoing activities using the same lorries;
- Optimising the network of logistics services performed by third parties;
- Using lorries to transport a higher volume of products;
- Upgrading the fleet of vehicles used in logistics to replace the most outdated ones;
- Identifying alternative and/or intermodal methods of transport.

The Cementir Group is the world's leading manufacturer and exporter of white cement

1.2.2 Leader in white cement

The Cementir Group is the world's leading manufacturer and exporter of white cement. Its production facilities, located in four continents, have an annual production capacity of over 3 million tons and serve 70 markets. White cement is a particular strength for Cementir Holding, recognised through the global trademark AALBORG WHITE®, which applies to the product made at the sites in Denmark, Egypt, Malaysia, China and made in partnership with a number of companies active in the United States. In addition, **the Group has the largest production facility in the world based in El-Arish, Egypt**, owned by the subsidiary Sinai White Portland Cement Co.

Reaching a point of producing what is now considered the best white cement on the market is a huge achievement, made possible through constant investment in innovation of industrial processes and care over raw materials.

Cementir Holding's production facilities benefit from being located close to natural resources such as high-purity limestone and other raw materials needed for the production of white cement. The characteristics of the sites make it possible to produce white cement with a high chemical consistency, uniform white colour, high mechanical resistance and mouldable plastic properties.

AALBORG WHITE® cement, produced at the site in Aalborg (Denmark), is also characterised by a low alkali content and high resistance to sulphates (SR5 certification) that make it perfectly suited to high-performance products.

As well as the superior quality of its product, Cementir Holding supports its partners by providing them with value-added services in the customer supply chain, brought technical support and potential collaboration for the development of new white cement applications.

THE GROUP HAS THE LARGEST PRODUCTION FACILITY IN THE WORLD BASED IN EL-ARISH, EGYPT

The 'In White' project

To improve the quality of the product and response to customer requirements, Cementir Holding launched the "In White" project in 2016, bringing together all the Group's initiatives regarding innovation, integrating them and creating strategic synergies.

At the heart of the project is the **Aalborg research centre**, a leading and internationally renowned laboratory that analyses the most innovative technologies involving white cement, alongside new trends such as customisation, the circular economy and highly energy-efficient solutions.

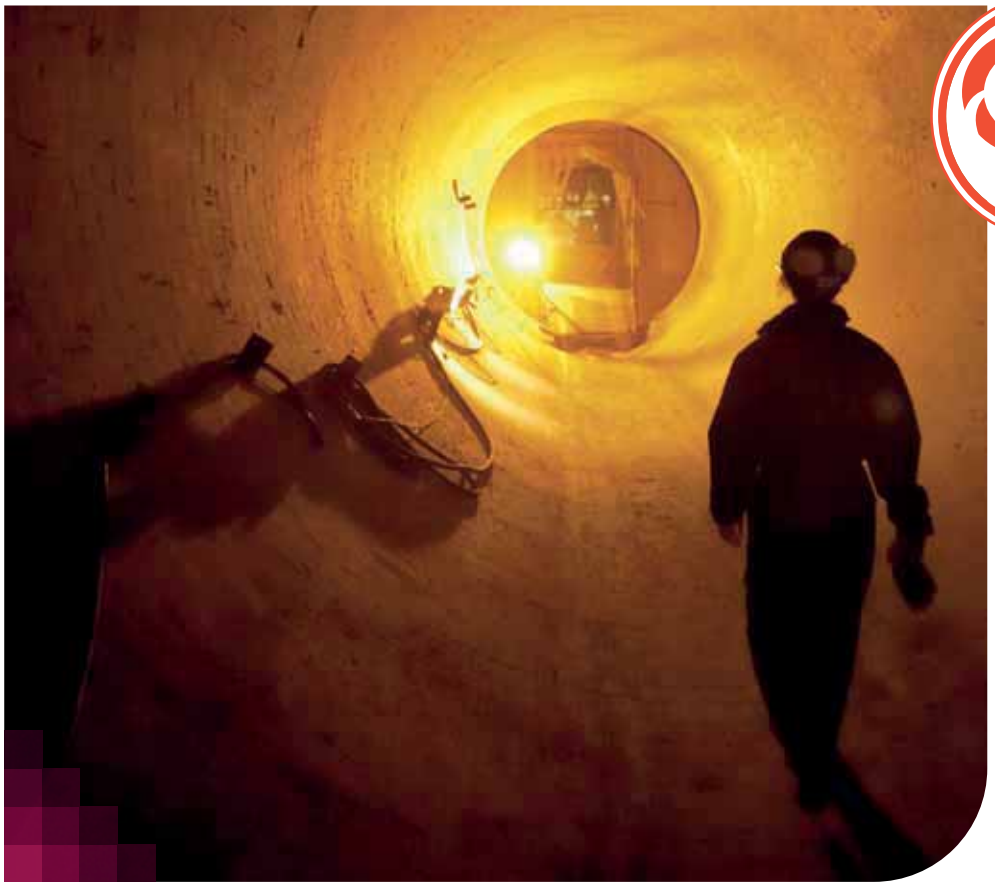
Among the most important initiatives that the Group is concentrating on include new solutions based on high-value technologies such as UHPC (Ultra High Performance Concrete) and GRC (Glass Fiber Reinforced Concrete), developed in collaboration with the International GRC Association.

The sustainable applications of AALBORG WHITE cement

This white cement's technical characteristics make it unique on the market. **AALBORG WHITE®, for example, is used for many applications whose main requirements is for it to be white**, such as dry-mix products, tiles, artificial stones, precast concrete elements, terraces, etc.

Indeed the whiteness of the cement is an added

AALBORG WHITE®, FOR EXAMPLE, IS USED FOR MANY APPLICATIONS WHOSE MAIN REQUIREMENTS IS FOR IT TO BE WHITE



value that has repercussions in many areas, from the thermal comfort of homes to energy-saving. It is no accident that tunnels made in ready-mixed concrete produced using white cement require less energy for lighting and therefore lower use of artificial light, thanks to its reflective qualities.

In addition, the reflective properties of white cement are particularly useful in the production of curbs, horizontal signage, tunnel ramps, pavement and road barriers, and also helps reduce the risk of accidents. Its light-coloured surface improves its visibility and therefore safety compares to barriers made with steel or painted grey cement, and remains brighter even in unfavourable conditions such as rain or darkness. The street applications of white cement can therefore contribute to reducing the average costs that the public pays you to road traffic accidents, which in Denmark alone amount to around 4000 per year at an annual cost of around EUR 320 million.[1]

Some emerging but rapidly expanding applications for AALBORG WHITE® cement are related to the chemical purity and excellent mechanical properties of ready-mixed concrete made with advanced production technologies. AALBORG WHITE® cement can be used to make products such as insulating panels that are highly resistant and durable, with the following characteristics:

- Low specific weight per m^2;
- reduced thickness to enable more efficient use of the interior spaces of the building;
- surfaces produced in a single process in order to avoid additional treatments;
- modular and combinable for reuse of materials.

Grey cement

Cementir Holding produces and distributes all types of grey cement, which are classified by type (based on the composition of clinker and other substances such as blast furnace slag, microsilicas, pozzolana, ash, calcined shales, limestones and secondary constituents) and by class based on mechanical resistance to

[1] COWI _Public expenses by traffic accidents 2013

compression. There is a particular focus on the production of cements with a low tricalcium aluminate content, high granulated blast furnace slag and pozzolana content, which are characterised by high sulphate resistance, low hydration heat and resistance to rainwater.

water are added to obtain specific results or performances, for example greater fluidity or rapid setting.

Ready-mixed concrete is made and pre-packed in plants known as concrete mixing plants where the mixture is dosed in special equipment. The mixing stage may take

IN 2016, CEMENTIR HOLDING PRODUCED AND DISTRIBUTED 4.4 MILLION CUBIC METRES OF READY-MIXED CONCRETE

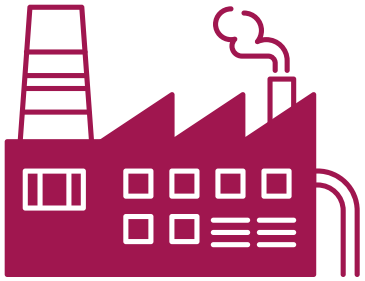
Production of ready-mixed concrete

In 2016, Cementir Holding produced and distributed 4.4 million cubic metres of ready-mixed concrete of all types and classes at the Group's 149 production plants. Concrete is a widely-used material in construction and is obtained by mixing cement (around 36%) with aggregates such as inert materials, sand and gravel (around 32%), water and any additives (around 3%): The aggregates serve as bulk, while the cement, reacting chemically with water, serves to bond the other elements. In some cases, admixtures of various kinds diluted in

place directly at the plant (thanks to premixers) or during transport by special vehicles (mixer trucks) that continuously mix the product so that it maintains its fluidity, which is essential for building work. When the ready-mixed concrete reaches the building site it is ready for use, i.e. the "pouring" phase. Often, before being "poured", the ready-mixed concrete is subjected to a special process known as "pumping". This consists of a second transport phase through piping, which makes it much easier to reach particular heights to form floor slabs, tunnels, etc.

Aggregates and cement products

Cementir Holding produces concrete products at Vianini Pipe Inc plants in the USA, Portugal (JV with Secil) and in Poland. **These pre-stressed cement products consist of structural components for the building and transport industries**, and include pipelines, jack pipes, blocks, tiles, railway sleepers, etc., obtained using mechanical and hydraulic technologies with cement as a raw material. In Scandinavia (Sweden, Norway and Denmark), Cementir Holding is also active in the production and distribution to third parties of aggregates. **Aggregates are rocky materials such as gravel, sand and chalk extracted from quarries and from the shores of rivers** which are crushed and then used with hydraulic binders such as cement and lime in order to create concrete, mortar and other types of plaster. In many cases they are also used as structural elements in construction work.



CEMENTIR HOLDING PRODUCES CONCRETE PRODUCTS AT VIANINI PIPE INC PLANTS IN THE USA, PORTUGAL (JV WITH SECIL) AND IN POLAND.

IN SCANDINAVIA CEMENTIR HOLDING IS ALSO ACTIVE IN THE PRODUCTION AND DISTRIBUTION TO THIRD PARTIES OF AGGREGATES

Since 2009 has been operating in the renewable energy and urban and industrial waste management and processing sector

1.2.3 Waste management and recycling

Waste is not only a source of recyclable material, but also of alternative fuels with a high calorific value. **Using alternative fuel derived from industrial and solid urban waste has major environmental advantages**, both because it reduces the use of fossil fuels and because it offers a solution to the problems of storage and disposal of urban waste.

Cementir Holding has been one of the leading industrial players to capitalise on these changes and **since 2009 has been operating in the renewable energy and urban and industrial waste management and processing sector.** These operations are conducted through two companies: Recydia, which owns the Hereko and Sureko businesses in Turkey, and Neales Waste in England, where in addition to its waste treatment plant the company manages a landfill that allows the production of renewable energy by transforming food waste into biogas.

Hereko is engaged in the management of solid urban waste and has signed a contract with the City of Istanbul lasting 25 years (until 2036). Its integrated mechanical-biological treatment plant in Kömürcüoda, in the Sile area (Istanbul), is the largest in Europe, the only one of its type in Turkey, and can handle 2,000 tonnes of solid urban waste per day.

Through its modern facility located to the west of the city of Izmir, **Sureko** is engaged in the management of industrial and hazardous waste and the production of alternative fuels that are also used by one of the Group's plants for cement production.

Neales Waste Management is one of the leading providers of hazardous and non-hazardous waste treatment, recycling and disposal services in the North West of England. In 2016, the business has handled around 90,000 tons of waste.

The Group's plants use the most advanced biological technologies to produce alternative fuels and thermal energy, minimising landfill waste and contributing to the reduction of greenhouse gas emissions.

Storage of urban waste releases methane, a greenhouse gas with a polluting effect 21 times

USING ALTERNATIVE FUEL DERIVED FROM INDUSTRIAL AND SOLID URBAN WASTE HAS MAJOR ENVIRONMENTAL ADVANTAGES

greater than that of carbon dioxide.

Therefore, using urban waste as alternative fuel in cement plants is fundamentally important because it contributes to the sustainable disposal of waste and reducing the negative effects of greenhouse gases. Moreover, unlike the process in waste-to-energy plants, use of waste as alternative fuel in cement plants does not produce residues as the ash deriving from combustion is recycled in cement production.

To achieve these results, the Cementir Group uses applicable and well-tried integrated solutions, and has invested for years in the development and the widespread use of innovative technologies for waste management and fuels from waste, such as for example sorting, recycling and biodrying.

Performance

In 2016 the Group's plants collected and processed 593,000 tons of waste including 442,878 tons of solid urban waste and 150,122 tons of industrial waste. Of the latter, 88,262 tons were collected by Neales Waste and 61,860 tons were collected by the Sureko plant, an increase of 3% compared to 2015.

WASTE PROCESSED	Units	2016	2015	2014
Solid urban waste	tons	442,878	469,990	578,025
Industrial waste	tons	150,122	107,357	94,839
Total	**tons**	**593,000**	**577,347**	**672,864**

64,120 TONS OF RECYCLED PRODUCTS IN THE LAST THREE YEARS

In 2016, 21,400 tons of material were recycled at the Group's plants using mechanical selection and processing – a 28% decrease compared to 2015.

RECYCLED MATERIAL PRODUCED	Units	2016	2015	2014
Ferrous material	tons	4,286	3,862	2,547
Plastica	t	4.856	19.640	7.714
Aluminium	tons	889	831	495
Other materials	tons	11,369	5,424	2,207
Total recycled material produced	**tons**	**21,400**	**29,757**	**12,963**

RECYCLED MATERIAL PRODUCED		2016
Ferrous materials	%	20%
Plastic	%	23%
Aluminium	%	4%
Other	%	53%

ALTERNATIVE FUEL PRODUCED	Units	2016	2015	2014
Refuse-derived fuel	tons	27,878	24,905	21,158
Solid recovered fuel	tons	68,567	83,341	40,197

Through biomechanical and drying processes, the Cementir Group's treatment plants produced a total of 96,445 tons of fuel from waste in 2016 – a decrease of 11% compared to 2015. Of these, 27,878 tons were refuse-derived fuel (RDF) and 68,567 tons were solid recovered fuel (SRF).

1.3 OUR PRINCIPLES

1.3.1 Integrity and transparency

The **Corporate Governance system** adopted by the Cementir Group is in line with the principles and rules of application set out in the corporate governance code of Italian listed companies issued by Borsa Italiana. It Is based on the essential role of the Board of Directors (as the highest body responsible for managing the Company in the interest of its shareholders), on transparency in the company's decision-making processes and on an effective network of internal controls. The system was implemented by the Group by preparing and adopting codes, standards, rules and procedures that govern and regulate the conduct of the activities of all organisational and operating units of the Group.

The Shareholders' Meeting is responsible for passing ordinary and extraordinary resolutions on the matters reserved to the Meeting by law or by the Articles of Association.

THE BOARD OF DIRECTORS IS VESTED WITH THE BROADEST POWERS OF ORDINARY AND EXTRAORDINARY ADMINISTRATION

The **Board of Directors** is vested with the broadest powers of ordinary and extraordinary administration, with the exception of those exclusively reserved to the Shareholders' Meeting by law and by the Articles of Association. The Board elects a Chairman and the Chief Executive Officer from among its members and it may elect a Deputy Chairman to replace the Chairman in case of absence or disability. The Board has established three committees from within its ranks to provide advice and submit proposals: the Executive Committee, the Control and Risks Committee and the Appointment and Remuneration Committee.

The **Board of Statutory Auditors** not only monitors compliance with the law and the Articles of Association as well as with the principles of correct administration in the conduct of Company business, but also the effectiveness of the internal control, internal audit and risk management system as well as the financial reporting and statutory account auditing process and the independence of the external auditor.

The annual Corporate Governance Report is also available for consultation on the company website www.cementirholding.it in the Investor Relations section.

Organisation, Management and Control Model pursuant to Legislative Decree 231/2001

In 2008 the Cementir Group adopted an **Organisation, Management and Control Model** in accordance with Legislative Decree 231/2001, drafted both on the basis of the instructions contained in the Confindustria Guidelines, and existing best practice in this field in Italy. The Model was created after analysing the risks associated with the Group's nature as a

holding company in the cement and cement derivatives industry, and with its basic organisational structure.

Based on an analysis of the risks and the consequent assessment of the existing internal control system, procedures were developed to cover the risks of criminal conduct relating to sensitive, key activities covered in the aforementioned legislative decree.

The Model reflects the company's rigour and sense of responsibility in internal and external relationships and also offers shareholders adequate guarantees of efficient and proper management.

The Model also contains a list of procedures developed to cover the risks of criminal conduct relating to sensitive, key activities set out in the aforementioned legislative decree.

Internal control and risk management system

The Group's **internal control and risk management system** consists of a set of rules, procedures and organisational structures established to ensure, through the appropriate identification, measurement and management of major risks, the sound management of the Company in a manner consistent with its objectives.

The Board of Directors has ultimate responsibility for the Internal Control and Risk Management System and with the aid of the Control and Risks Committee it updated the System, which was approved at the meeting on 29 July 2015.

The Code of Ethics

Cementir Holding has adopted a **Code of Ethics** endorsing the **business**

CEMENTIR HOLDING HAS ADOPTED A CODE OF ETHICS ENDORSING THE BUSINESS PRINCIPLES

principles that all company officers and employees, and anyone working with the company in any capacity, are required to comply with, in pursuing company business.

The Code, which has been distributed to all staff and is available for consultation on the website www.cementirholding.it, covers respect for ethical and behavioural principles, and the protection of health, safety and the environment.

The Code of Ethics also provides that the Group's operations must compete on the market in accordance with the law and regulations of relevant countries, in a spirit of integrity, propriety and confidentiality. To achieve this goal, the Cementir Group requires its employees to adhere to the highest standards of conduct in business, as set out in the Code and in the procedures to which it refers.

The Group protects employees if they report violations of the Code and applies fair and proportional sanctions equally to all categories of employees, in accordance with laws, contracts and domestic regulations applicable in the various jurisdictions.

Cementir Holding's Supervisory Body is responsible for monitoring compliance with the Code of Ethics through a series of actions. It:

- monitors dissemination of the Code and suggests possible training and informational initiatives;
- reports to the Board of Directors on the status of the process of implementing the Code, describing the programs and initiatives undertaken to achieve the company's goals, any changes required to ensure its effectiveness and about updates to the Code including in response to legal developments;
- provides support with the interpretation of the Code;
- verifies violations;
- follows up on any reports of infringements; and
- prepares an annual report for the Board of Directors.

1.3.2 Commitment to combating corruption

Promoting corruption is one of the world's major challenges, not only for governments and individual citizens, but also for companies, as it basically undermines fair competition and business efficiency.

The Cementir Group is active in the fight against corruption. In its Code of Ethics it expressly prohibits "Bribes, illegitimate favours, collusion, requests, directly and/or through third parties, for personal or career benefits for oneself or for others".

Since 2015 the company has stepped up its efforts to combat corruption through a written policy that defines roles, responsibilities, operating

THE CEMENTIR GROUP IS ACTIVE IN THE FIGHT AGAINST CORRUPTION. IN ITS CODE OF ETHICS IT EXPRESSLY PROHIBITS BRIBES

methods and behavioural rules. All Group companies, employees and everyone acting in the name and on behalf of subsidiaries must comply with this collection of behavioural rules in the performance of their responsibilities. According to the standards on corruption, especially to the UK Bribery Act, in 2016 a Compliance programme has been carried on. It relates to the anti-corruption policies, to bribes, and to the corruption risk assessment on a due diligence on a third-party of the Company, and it is developed through training and workshops. The project started in the Company's subsidiaries in Turkey, where in 2016 a specific training programme was launched for around 200 people at the Turkish subsidiaries Çimentaş and Recydia. The anti-corruption programme is going to be extended to employees in China and Italy, and it will be gradually rolled out to all companies of the Cementir Group.

Anticorruption training courses involve specially designed classroom-based workshops for professionals who are particularly exposed to the risk of corruption in the performance of their work. These include executives and managers involved in the purchasing functions and the legal (contracts) office, as well as other functions including Finance. Each employee will also have the possibility to attend an online training about corruption, available in English and in the most spoken languages of the Group.

The training initiative to be extended to employees working in joint ventures or "mixed" companies will also cover subjects such as national and international laws, directives, relevant regulations and associated standards. It will also involve in-depth examination of the key aspects of the Code of Ethics, anticorruption laws and regulations and third-party due diligence.

The classroom-based courses are complemented by ad hoc internal communications including the use of posters on the relevant noticeboards, distribution to all staff of informational material, the use of company intranet, and e-learning activities.

THE 4 PILLARS THAT GUIDE OUR ACTIONS

For the Cementir Group, sustainable growth is both a responsibility and a requirement for continuing to work in the cement sector, which more than most has to deal with a world where resources are limited. For this reason, our business model must strike the right balance between the creation of economic value, the protection and conservation of the environment and a sense of responsibility towards people and communities. Strengthened by this conviction, the Group has identified 4 pillars that represent the benchmark principles that have inspired this Report and the company's defined sustainability strategy, which will be translated into an action plan that will take account of the specific nature of each country.

PILLAR 1

We ensure that waste and secondary products are turned into resources, adopting an increasingly integrated approach to cement production and establishing partnerships with other industry players and public authorities.

PILLAR 2

We adopt all necessary measures and the most innovative technological solutions to minimise the impact of our business on the environment

PILLAR 3

We attract talent and ensure a safe and stimulating working environment for our people, our most valuable resource

PILLAR 4

We create value for local communities, listening to their needs and concerns and basing our relationships with them on transparency and accountability

THIS CIRCULAR ECONOMY APPROACH ALLOWS RESOURCES TO REMAIN IN USE FOR LONGER PERIODS, EXTRACTING MAXIMUM VALUE FROM THEM

2.1 In waste, we see resources: we promote a circular economye

PILLAR 1: We ensure that waste and secondary products are turned into resources, adopting an increasingly integrated approach to cement production and establishing partnerships with other industry players and public authorities.

Price volatility in conventional fuel markets, coupled with the need to reach increasingly stringent emissions targets, is driving companies with high energy needs to adapt their production cycles to more sustainable business models. The Cementir Group is a pioneer in the use of raw materials and alternative fuels originating from urban and industrial waste and by-products. This circular economy approach allows resources to remain in use for longer periods, extracting maximum value from them. In addition, reuse and recycling contribute to environmental footprint reduction by helping to improve sustainability within the cement value chain.

2.1.1 In waste, we see resources: alternative fuel

The thermal energy produced at Cementir Group plants is generated by the combustion of fossil fuels (fuel oil, petroleum coke, coal, natural gas) and, in part, by alternative fuels. The reduced consumption of non-renewable fossil fuels and the resulting

11.8%
alternative fuel
used for energy production in place of non-renewable fossil fuels

10.8%
alternative raw materials used in the mix for cement production (+40% compared to 2015)

96,000
tons
of Refuse-Derived Fuel (RDF) and Solid Recovered Fuel (SRF) generated by Group waste treatment facilities in 2016

increased use of alternative fuels is a primary aim for reducing environmental impact, particularly associated with emissions. Cementir supports such use in line with local authority permits and with the applicable legislation in the various countries where the Group operates. Over the last three years, the fossil fuel replacement rate has been growing. Specifically, **in 2016, 11.8% of the thermal energy required for cement production was generated by the Group using alternative fuels**, an increasing value compared to 2015. About 70% of the alternative fuel used by the Cementir Group is Refuse-Derived Fuel (RDF).

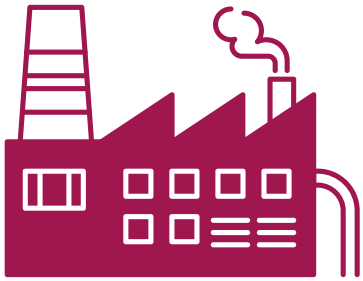
FOSSIL FUEL CONSUMPTION FOR CEMENT PRODUCTION

TYPE	Units	2016	2015	2014
Coal	GJ	2,814,130	2,504,089	3,263,375
Petroleum coke	GJ	24,039,154	21,176,513	19,053,980
Fuel oil	GJ	1,427,121	2,332,872	1,683,104
Lignite	GJ	452,072	414,259	965,001
Natural gas	GJ	145,487	38,642	444,445
Gas oil	GJ	144,536	124,578	20,806
Diesel	GJ	58,287	33,037	22,318
Total consumption	**GJ**	**29,080,785**	**26,623,989**	**25,453,029**

ALTERNATIVE FUEL CONSUMPTION FOR CEMENT PRODUCTION

TYPE	Units	2016	2015	2014
Used oil	GJ	145,959	176,644	297,708
Rubbers and plastics	GJ	-	-	87,074
Tyres	GJ	-	-	21,414
Paper/cardboard/wood	GJ	-	-	8,229
Meat and bone meal	GJ	245,854	240,637	220,207
Dry sewage sludge	GJ	251,387	144,989	101,821
Refuse-Derived Fuel (RDF)	GJ	2,769,681	2,317,311	1,618,979
Other	GJ	479,191	530,626	231,326
Total consumption	**GJ**	**3,892,073**	**3,410,208**	**2,586,759**

	Units	2016	2015	2014
% of fossil fuel replacement	%	11.8%	11.4%	9.2%



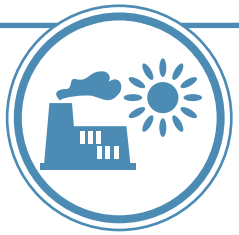
IN 2016 GROUP WASTE TREATMENT PLANTS PRODUCED APPROXIMATELY 96,000 TONS OF ALTERNATIVE FUEL

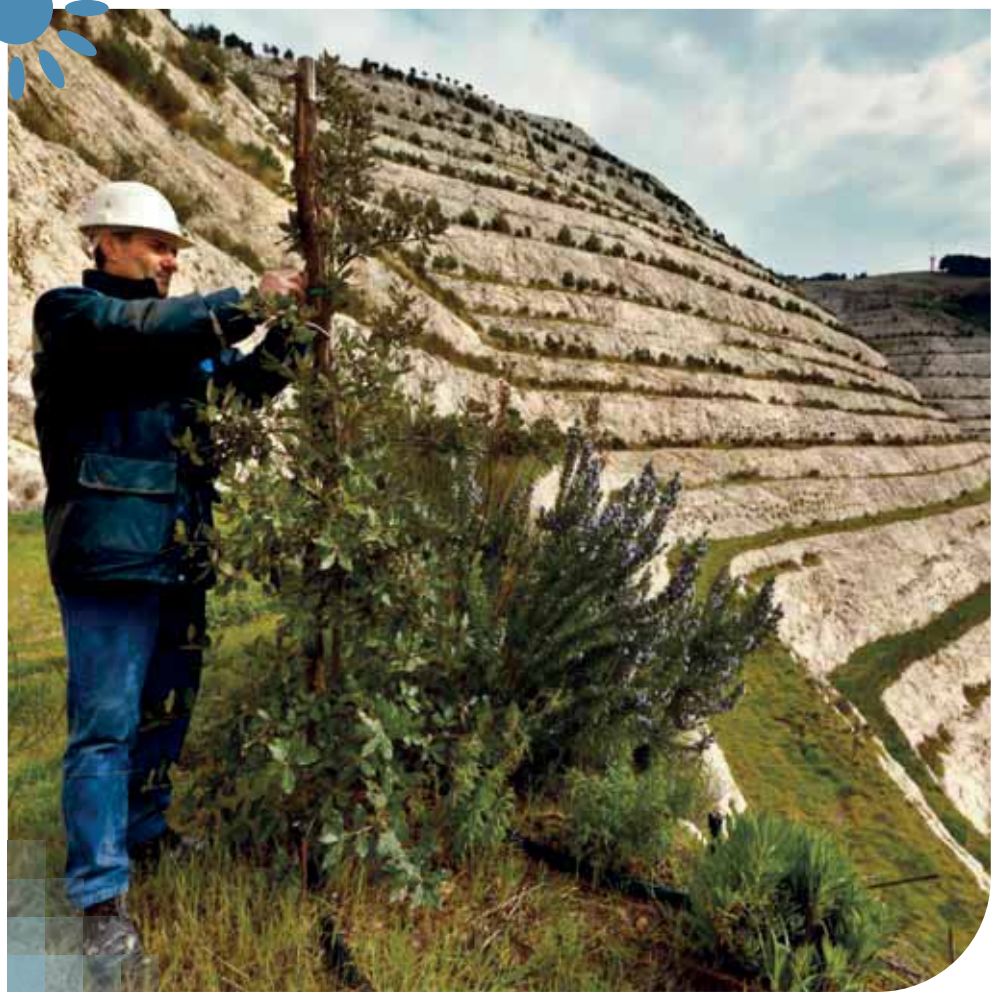
Group synergies

The majority of Cementir Holding's use of alternative fuels takes place at the plants in Aalborg in Denmark and Edirne in Turkey, which alone process 24% of the total fuel used by the Group.

This is because, in some countries (Turkey and Scandinavian countries), **the Group integrates the operations of its cement business with those of the management and recycling of waste**. The two plants have cutting-edge technologies for harnessing alternative fuels, and make use of a part of the waste recovered at the Neales Waste and Hereko company plants. In Kömürcüoda, Istanbul, the Cementir Group carried out a major investment to provide Hereko with equipment to generate fuel from municipal solid waste for use at its cement plant in Izmir and other local cement plants, as well as providing a sustainable solution to the problem of municipal solid waste in a big city like Istanbul. Bio-mechanical processes and drying generate Refuse-Derived Fuel (RDF) and Solid Recovered Fuel (SRF). **In 2016, Group waste treatment plants produced approximately 96,000 tons of alternative fuel**, of which approximately 29% was Refuse Derived Fuel (RDF) and 71% was Solid Recovered Fuel (SRF). In the last three years, the Edirne cement plant has more than doubled the alternative energy generated by recycling waste, increasing from 223.381 GJ in 2014 to 543.461 in 2016. The Group recently made

THE MAJORITY OF CEMENTIR HOLDING'S USE OF ALTERNATIVE FUELS TAKES PLACE AT THE PLANTS IN AALBORG IN DENMARK AND EDIRNE IN TURKEY





investments in the power systems at the cement production plants in Izmir and Edirne with the aim of using dried sludge derived from the sewerage systems of municipalities adjacent to the plants. The recent completion of the dried sewage sludge automatic feeding system has now enabled the Izmir plant to harness about 5% (7,000 GJ) of the energy required for production using sewage sludge collected in different areas of the city.

The Introduction of SRF in Italy

The use of unconventional fuels in cement plants is strongly promoted by the European Union, which recognises it as a Best Available Technique (BAT) for its importance in reducing the wasting of resources and in recovering materials and energy. Cementir Italia and CementirSacci are working closely with local institutions on a project to introduce Solid Recovered Fuel (SRF) at its plants to replace part of the fossil fuels used in the production process. **Over the next three years, the aim is to replace about 10% of the energy requirements of the plants in Italy that receive authorisation** (currently two out of five). SRF is the end product of the municipal waste treatment and conversion process. SRF generation and combustion are recognized as industrial activities that are both sustainable and of social benefit as they continue and supplement the municipal waste recycling process.

The main environmental benefits are:

- a reduction in the consumption of natural resources and non-renewable energy sources (1 kg of SRF cuts fossil fuel consumption by about 0.6 kg);
- a reduction in carbon dioxide emissions (the study conducted by major Italian technical institutes estimates a 1.5 kg reduction in CO_2 per 1 kg of SRF used in place of traditional fossil fuels such as petroleum coke);

- the containment of dust emissions in the production unit:
  1. SRF is loaded directly into the process without emissions escaping or circulating;
  2. combustion takes place in direct contact with the raw materials, and part of the SRF ash, which in other combustion processes would end up in the exhaust gases, is, in this case, incorporated into the final product without altering its properties;
- the containment of emissions of nitrogen oxides (NO_X), as the use of SRF enables a reduction in the kiln burner flame temperature and in the process temperature;
- no production waste is generated by SRF use in the cement plant, such as "ash", normally produced in any other fuel combustion process.

2.1.2 Alternative raw materials

Cement production requires large quantities of natural raw materials, such as limestone, clay and gypsum, extracted from natural quarries using various methods. These are initially mixed to produce the meal from which the clinker is made, and subsequently added to the clinker and deposited in the mills to obtain different types of cement. **The Cementir Group is particularly focused on the environmental aspects associated with its operations with the aim of limiting their impact on ecosystems and on the areas concerned**. In this sense, it continues its commitment to reduce the use of non-renewable raw materials, promoting the use of alternative raw materials, so defined because they do not originate from quarries but from other production processes. **In 2016, Cementir Group cement production plants used a total of 15.1 million tons of raw materials, an 11% increase compared to the previous year. Of the total raw materials used**, 10.8% were alternative

raw materials, an increase compared to 2015 (7.1%). The main types of alternative materials used in the mix for cement production are fly ash, microsilica, synthetic gypsums (FGD) and incinerator slag.

The Elazig plant (Turkey) was the Group plant with the largest increase in the use of alternative raw materials, so improving its environmental performance.

The consumption of iron oxides at the plant rose from 18,648 tons in 2015 to 487,085 in 2016.

In 2016, Cementir Group plants producing ready-mixed concrete used a total of 8.3 million tons of raw materials, an increase of 6% compared to 2015. 3% of the total raw materials used were alternative raw materials, a 1% increase compared to 2015. The main type of alternative raw materials used were fly ash and microsilica.

RAW MATERIALS USED IN CEMENT PRODUCTION

	Units	2016	2015	2014
Non-renewable raw materials	t	13,507,189	12,707,751	13,306,733
Renewable raw materials	t	1,633,840	970,744	1,024,019
Total	**t**	**15,141,028**	**13,678,496**	**14,330,752**
Renewable raw materials as a percentage of total raw materials used	%	10.8	7.1	7.1

NON-RENEWABLE RAW MATERIALS

	Units	2016	2015	2014
Limestone	t	10,396,175	9,694,095	10,106,056
Clay	t	1,103,648	1,310,898	1,415,581
Gypsum	t	350,688	328,852	334,441
Marl	t	514,298	543,195	653,206
Sand	t	269,894	257,750	214,659
Pozzolana	t	206,474	217,836	176,081
Admixtures	t	65,512	20,691	66,421
Auxiliaries	t	261,668	31,804	29,600
Other	t	338,832	302,631	310,688
Total	**t**	**13,507,189**	**12,707,751**	**13,306,733**

RENEWABLE RAW MATERIALS

	Units	2016	2015	2014
Fly ash	t	488,608	457,975	462,542
FGD gypsum	t	73,571	71,716	67,257
Iron oxide	t	568,256	84,293	72,152
Slag	t	310,452	214,482	251,829
Other	t	192,954	142,278	170,239
Total	**t**	**1,633,840**	**970,744**	**1,024,019**

RAW MATERIALS USED IN THE PRODUCTION OF READY-MIXED CONCRETE

	Units	2016	2015	2014
Non-renewable raw materials	t	8,160,764	7,708,150	7,279,580
Renewable raw materials	t	213,817	180,736	137,519
Total	**t**	**8,374,581**	**7,888,886**	**7,417,100**
Renewable raw materials as a percentage of total raw materials used	%	3%	2%	2%

NON-RENEWABLE RAW MATERIALS

	Units	2016	2015	2014
Sand	t	2,152,108	2,057,798	1,960,3800
Admixtures	t	20,188	231,119	16,293
Cement	t	1,188,713	1,207,481	1,106,886
Crushed stone	t	4,799,755	4,211,752	4,196,022
Total	**t**	**8,160,764**	**7,708,150**	**7,279,580**

RENEWABLE RAW MATERIALS

	Units	2016	2015	2014
Fly ash	t	200,583	163,412	126,2688
Microsilica	t	13,234	17,324	11,251
Total	**t**	**213,817**	**180,736**	**137,519**

Recycling and reusing raw materials in cement production

An additional strategy that Cementir Group plants adopt to reduce the use of non-renewable raw materials is the reuse of materials within plants.

Dust captured by filters, gypsum, clinker and cement are reused in the production process and, in 2016, 856,733 tons of materials were recovered within plants, in line with 2015.

MATERIALS RECOVERED INTERNALLY

TYPE	Units	2016	2015	2014
Dust	t	599,179	604,736	665,680
Gypsum	t	33,012	27,591	28,439
Clinker	t	151,852	153,024	151,680
Cement	t	72,570	71,719	76,771
Other	t	119	-	-
Total	**t**	**856,733**	**857,069**	**922,5700**

IN 2016, 856,000 TONS OF MATERIALS WERE RECOVERED WITHIN PLANTS

Waste producedi

The cement production process does not in itself generate waste; the quantities of waste produced in the plants can be attributed to secondary activities, such as maintenance, warehouse and office activities, which generate waste in the same way as every production plant. Management of waste produced in Cementir Group plants is governed by the regulations in force in the countries where the Group operates, favouring the reuse and recovery of materials.

CEMENT PLANTS WASTE GENERATED BY DESTINATION	Units	2016	2015	2014
Total waste		**177,968**	**143,968**	**139,060**
of which, sent to:				
Recycling	t	137,723	88,952	37,355
Incineration	t	455	1,171	341
Landfill	t	34,626	50,409	98,742
Chemical treatment	t	97	51	266

READY-MIXED CONCRETE PLANTS WASTE GENERATED BY DESTINATION	Units	2016	2015	2014
Total waste*	**t**	**166,805**	**186,330**	**181,123**
of which, sent to:				
Recycling	t	133,704	145,585	136,415
Incineration	t	401	325	326
Landfill	t	32,694	40,415	44,430
Chemical treatment	t	11	8	13

Water consumption

The impact of the cement and ready-mixed concrete production process on water resources mainly relates to consumption, albeit limited, since the discharge of water is not significant either with regard to quantity or the concentration of pollutants. In dry cement production processes, water is used principally to cool the systems and for the conditioning of the kiln gases; in wet and semi-wet production processes, on the other hand, the specific consumption of water resources is higher in that the water is vaporised during the production process.

WATER CONSUPTION	Units	2016	2015	2014
Surface water	m^3	349,173	426,626	373,150
Ground water	m^3	3,339,715	3,155,596	2,873,167
Rain water	m^3	20,000	20,000	-
Other sources	m^3	2,272,870	2,390,094	2,346,258
Total	**m^3**	**5,981,758**	**5,992,317**	**5,592,576**

READY-MIXED CONCRETE PLANTS	Units	2016	2015	2014
Surface water	litres	-	-	-
Ground water	litres	240,021,634	224,396,999	211,217,406
Rain water	litres	-	-	-
Other sources	litres	109,452,336	36,189,942	38,608,991
Internal recycling				
Water recycled internally		127,562,621	46,017,900	43,151,597

Managing Quarrying Activities

The important aspects in the management of quarrying are its impact on the ecosystem, the efficient use of resources and soil, noise control, the control of dust and the consumption of water resources used for washing materials. Group policy is to minimize the impact of these aspects through sophisticated engineering techniques and the ongoing involvement of the authorities and stakeholders of local communities. Activities are organised according to the various countries' regional characteristics.

Biodiversity rehabilitation and recovery programmes are planned for all sites due for closure; for quarry sites located in the areas of greatest importance for wildlife, these are approved and undersigned by the competent authorities before activities start.

2.2 We respect the environment in all our operations

PILLAR 2: We adopt all necessary measures and the most innovative technological solutions to minimise the impact of our business on the environment

2.2.1 Our commitment to tackling climate change

Cement production has one of the highest levels of energy consumption and GHG (Greenhouse Gas) emissions of all industrial processes, and is responsible for 5% of global GHG emissions.

The Cementir Group is striving to find economically sustainable solutions to limit GHG emissions from the combustion of raw materials (responsible for approximately 40% of CO_2 emissions). This mainly involves the use of alternative fuels with a high calorific value to replace fossil fuels.

Early-stage experimental projects are also ongoing to reduce CO_2 emissions that are defined as process emissions because they are associated with limestone decarbonation; this chemical reaction is responsible for about 60% of cement production emissions, which are difficult to curtail with current technology.

To curb this latter aspect, cement mixes are being studied to partly replace the clinker, the

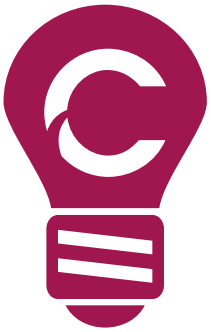
fundamental component of cement production, with innovative materials with a lower environmental impact, without altering product quality.

The main risks associated with climate change concern the regulatory framework.

While governments are focusing more on this topic, and not only in Europe, it continues to create uncertainty among some European countries covered by the emissions trading system (ETS), linked to the allocation of CO_2 allowances (emissions allowances available on the market), and to their price set by supply and demand.

Opportunities for the Group are affected by possible changes to the regulatory framework in Turkey regarding waste management, which would present a chance to increase the volumes of managed waste to be sent for treatment and an increased production of Refuse-Derived Fuel (RDF) by companies operating in the recycling management sector.

THE GROUP'S CAPACITY FOR INNOVATION IS ASSISTED BY CLOSE COOPERATION WITH CUSTOMERS AND KEY STAKEHOLDERS



STRATEGIES FOR INNOVATION ARE DEFINED AND SUPPORTED BY AN INNOVATION COMMITTEE

Innovation, Research and Development

Cementir Holding considers innovation, research and development as strategic activities, essential for improving product quality and environmental sustainability and for lowering production process costs.

To this end, **the Research Centre in Aalborg (Denmark) is a centre of excellence**, equipped with advanced machinery and staffed by highly qualified personnel, including civil and chemical engineers, geologists and experts on product life cycle analysis. The Aalborg Centre collaborates with an extensive network of European universities and research centres, but it is not the Group's only centre for science. **Product development is also studied at the Research and Quality Centre in Spoleto (Italy) and at the plant in Izmir (Turkey)**.

The two centres conduct tests on cement and on the various types of products derived from it, fuels, raw and semi-finished materials used in the various stages of production, and waste, which is increasingly recycled in the production of cement and ready-mixed concrete.

Strategies for innovation are defined and supported by an *Innovation Committee*, chaired by Cementir Holding's Chairman and made up of senior Group management. The Committee monitors product quality and development, taking account of the relevant macro trends. The Group's capacity for innovation is assisted by close cooperation with customers and key stakeholders, both in the traditional cement and ready-mixed concrete sectors and in the recycling management sector.

Cement with Low Environmental Impact

The Cementir Group is developing a new type of cement responsible for fewer CO_2 emissions, based on a technology that makes use of the interactions between natural raw materials used in the mix for cement production.

The new technology has been tested with innovative solutions in the production of ready-mixed concrete in the Danish project Green Concrete II, with the building of structures used for testing new technologies in real-life conditions. In 2016, a demonstration was carried out featuring a low CO_2 emissions road bridge. **The experiments have shown that CO_2 emissions can be reduced by at least 20-30% compared to conventional ready-mixed concrete.**

The Cementir Group is now at the forefront in developing cements for the future with low CO_2 emissions.

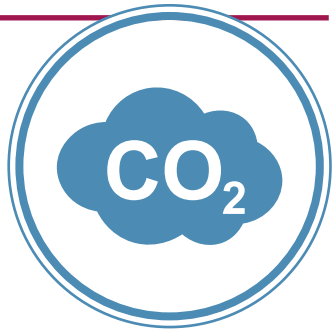
In Turkey, the Çimentaş subsidiary produced a sulphate-resistant cement for highly durable structures.

This type of cement uses certain types of volcanic ash and its environmental impact is less because the combustion of certain components in the cement is reduced, while durability remains high.

To improve sustainability, it is essential to understand the exact environmental impact of the fuels and raw materials used, of production processes and

THE CEMENTIR GROUP IS DEVELOPING A NEW TYPE OF CEMENT RESPONSIBLE FOR FEWER CO_2

THE CO_2 EMISSIONS CAN BE REDUCED BY AT LEAST 20-30% COMPARED TO CONVENTIONAL READY-MIXED CONCRETE.



of product performance during the life cycle of cement and ready-mixed concrete. For this reason, the Cementir Group is investing in enhancing its expertise on the life cycle analysis of its products, and has introduced, together with the University of Aalborg, an Environmental Product Declaration (EPD) for its cements that enables customers to be informed about the alternatives available for improving sustainability performance.

The life cycle analysis and EPD make it possible to quantify the environmental benefits of using alternative fuels. This type of study has been performed, for example, on the benefits of the alternative fuels that the Neales Waste Group (specializing in waste management) supplies to the cement production plant at Aalborg Portland (Denmark). The same type of study will be also conducted in Italy to calculate the environmental benefits of using waste in the form of Solid Recovered Fuel (SRF), an alternative in cement production to disposing of waste in landfills.

2.2.2 Energy consumption

Cement production requires considerable levels of energy consumption in its various processes because of the high temperatures that must be reached in the kiln (1500°C), the electricity required to grind the product and the quantity of material used. Thermal energy is used in the start-up and operation of the kilns and the operation of the burners or boilers required to increase production efficiency and optimise the production process (for example, to dry raw materials and fuels). Electricity, on the other hand, is mainly used to operate the mills that

The ISO 14001 management system

The Cementir Group has adopted environmental management systems compliant with the UNI EN ISO 14001 standard at 14 of its 16[2] production sites, and has adopted a specific procedures policy. The Group provides staff training and analyses the environmental risks of its operations, involving management to ensure compliance with current regulations, best environmental standards and Best Available Techniques (BAT).

GROUP PLANTS ISO 14001 CERTIFIED

Cement	
Aalborg	x
Anqing	
Ipoh	x
Edirne	x
Elazig	
Izmir	x
Kars	x
Arquata Scrivia	x
Maddaloni	x
Spoleto	x
Taranto	x
Ready-mixed concrete	
Unicon Denmark	
Unicon Norway	x
Recycling management	
Sureko	x
Hereko	x
Neales Waste Management	x

grind the raw materials, clinker and fuels.
The intensity coefficients for the environmental performance indicators are calculated using Total Cement Equivalent (TCE), an indicator linked to the plant's production of clinker, based on the production of clinker and on the plant's average clinker/cement ratio. This choice was made because **the production of clinker, the main constituent of cements, is the phase of production where the environmental impacts are greatest**.

[2]As with environmental data, the data for certifications does not include the plants of companies acquired in 2016: CCB (Compagnie des Ciments Belges) and Sacci SpA

In 2016, the cement production plants used about 32,972,858 GJ of thermal energy and 3,737,258 GJ of electricity, with the coefficient for total energy consumption over tons of cement produced equal to 3.87 GJ /tTCE, slightly higher but broadly in line with 2015.

The ready-mixed concrete production plants, which have a negligible energy requirement compared to cement plants, used about 59,600 GJ of electricity, in line with 2015 (54,060 GJ), and 63,980 GJ of thermal energy (awaiting data for Betontir).

ENERGY CONSUMPTION

TYPE	Units	2016	2015	2014
Thermal energy	GJ	32,972,858	30,034,197	28,039,789
Thermal energy produced by alternative sources per t of Total Cement Equivalent	GJ/tTCE	0.41	0.37	0.27
Thermal energy per t of Total Cement Equivalent	GJ/tTCE	3.48	3.29	2.93
Electricity	GJ	3,737,258	3,557,602	3,630,380
Electricity per t of Total Cement Equivalent	GJ/tTCE	0.39	0.39	0.38
Total energy	**GJ**	**36,710,116**	**33,591,799**	**31,670,169**
Total energy per t of Total Cement Equivalent	**GJ/tTCE**	**3.87**	**3.68**	**3.31**

ENERGY CONSUMPTION	Units	2016	2015	2014
Electricity consumption	GJ	59,634	54,058	49,557
Fuel consumption for heating (Diesel and gas oil)	GJ	63,980	50,948	31,004
Total consumption	**GJ**	**123,613**	**105,006**	**80,561**

CO_2 emissions

Data on CO_2 emissions from energy consumption comprises direct emissions (Scope 1) and indirect emissions (Scope 2). The former covers emissions from sources controlled directly by the company, i.e. fuels; the latter covers emissions mainly associated with the purchase of electricity used in production.

In 2016, Cementir Group CO_2 emissions totalled 7.28 million tons. The emission coefficient per ton of cement produced in 2016 was 768.2 kilograms per ton of Total Cement Equivalent (Kg/TCE), a slight rise although still broadly in line with the two previous years.

CO_2 EMISSIONS	Units	2016	2015	2014
CO_2 emissions (Scope 1)	Kg	6,753,750,282	6,249,975,197	6,701,645,647
Coefficient for CO_2 emissions (Scope 1)	Kg/tTCE	712.70	685.01	699.37
CO_2 emissions (Scope 2)	Kg	525,832,967	513,521,924	580,900,088
Coefficient for CO_2 emissions (Scope 2)	Kg/tTCE	55.49	56.28	60.62
Total CO_2 emissions	**Kg**	**7,279,583,249**	**6,763,497,121**	**7,282,545,735**
Coefficient for total CO_2 emissions	**Kg/tTCE**	**768.19**	**741.30**	**759.99**

IN 2016, HEAT RECOVERY WAS APPROXIMATELY 0.54 GJ PER TTCE PRODUCED, GENERATING 1.176.950 GJ OF ENERGY

Energy reduction and recovery at the Aalborg plant

The plant in Aalborg, Denmark reduced its coefficient for electricity consumption over total cement equivalent produced from 0.50 GJ/TCE to 0.48 GJ/TCE.

Most of the electricity is consumed in the grinding of raw materials and cement at the plant's mills: this makes their optimization a priority, in order to improve the plant's performances. In 2016, the grinding mills 8 and 9 have been set up to solve a problem related to the cement thickness.

The solution, consisting in doubling the length of the first mill and in the installation of a new CPB diaphragm, enables the production of cement of the required fineness, increases mill capacity and brings to a notable reduction in the specific consumption equal to 3,630 MWh.

At the Aalborg plant, part of the heat used in production is recovered from the exhaust gases and used for domestic heating in the nearby town.

In 2016, heat recovery was approximately 0.54 GJ per tTCE produced, generating 1.176.950 Gj of energy, enough to meet the energy needs of about 25,000 families.

2.2.3 Other air emissions

The environmental impact of cement production also involves other air emissions, mainly sulphur oxides (SO_2) and nitrogen oxides (NO_x). These are associated with combustion in the firing of raw meal that is obtained from processing raw materials and from dust that is generated when grinding the clinker with gypsum and other ingredients to produce cement.

In 2016, NO_x emissions from Group Cementir plants totalled 11,759 t, with an emissions index per ton of cement (kg/t TCE) of 1.24, a 15% increase on 2015.

Again in 2016, **SO_2**

emissions, originating from sulphur in the fuels and raw materials used in Group plants, were 1,153 t, with an emissions index per ton of cement (g/t TCE) of 121.7, an increase on 2015 (100.4 g/tTCE). Finally, dust emissions reached 696 t with a dust emissions index per ton of cement (g/t TCE) of 73.43. To lower their impact, some plants have introduced specific air emissions reduction systems.

AIR EMISSIONS	Units	2016	2015	2014
NO_x	t	11,759	9,885	10,501
SO_2	t	1,153	916	764
Dust	t	696	460	498

AIR EMISSIONS COEFFICIENT	Units	2016	2015	2014
NO_x emissions coefficient	Kg/tTCE	1.24	1.08	1.10
SO_2 emissions coefficient	g/tTCE	121.70	100.40	79.77
Dust emissions coefficient	g/tTCE	73.43	50.46	51.96

NO_X reduction at the Anqing plant

In 2015, China launched a much stricter policy to tackle pollution with a set of standards that set limits to polluting emissions and allow local authorities to sanction companies that exceed the national limits for various pollutants, including NO_x.

On the other hand, the system also envisages incentives for companies that implement low environmental impact technologies.

Responding pre-emptively, the subsidiary Aalborg Portland Anqing successfully implemented a number of initiatives to reduce nitrogen oxide (NO_x) emissions, for which the limit in China is 400 mg/Nm^3, far more stringent than the limits applied in many European countries.

This result was due to the installation of an SNCR (Selective Non-Catalytic Reduction) system and to the reduction in ammonia sent in counter flow within a wet abatement plant. The Anqing plant thus managed to halve total NO_x emissions, compared with 2014, to 325.84 t (602.31 t in 2014 and 540.57 t in 2015), while maintaining production levels constant.

2.3 We value our people

PILLAR 3: We attract talent and ensure a safe and stimulating working environment for our people, our most valuable resource.

2.3.1 Workforce number and composition

The Cementir Group workforce comprises 3,667 employees, spread across 18 countries and 5 continents, as well as 747 people not directly employed, which means employees of contractors who perform some of the production operations at the cement plants, ready-mixed concrete plants and the company's own quarries.

The Group workforce mostly comprises male employees (90% of the total) on permanent full-time contracts.

More than 60% of the Group's employees are covered by trade union collective agreements, but certain countries where the Group operates are excluded, such as China and Egypt, as the labour market does not provide for this type of agreement.

The company's strong global presence and business model have in recent years required a commitment to the ever greater integration of its personnel, and the strengthening of its organisational structure.

From January 2016, there was a consolidation of existing Areas – in particular the Eastern Mediterranean Area, which includes the companies operating in Turkey and Egypt – and the establishment of the Central Mediterranean Area, which oversees the companies operating in Italy.

Since the acquisitions, the new subsidiary Cementir Sacci has been incorporated into the new Central Mediterranean Area, while the integration process has begun for the Compagnie des Ciments Belges, which, at the end of the integration period will be incorporated into the Region Nordic & Baltic and USA.

The Group's workforce grew by 635 compared to 2015 as a result of the acquisitions of Sacci (303 employees) **in Italy and** Compagnie des Ciments Belges (457 employees) **in Belgium**, but the Group also had to initiate a restructuring process that resulted in redundancies in Italy and Turkey.

In Turkey, there was a more extensive restructuring at Hereko, a Company that manages the treatment of Istanbul's municipal waste at the plant in Komurcuoda.

In Italy, the reasons for workforce restructuring and the reorganization of operations were different and originated some years ago.

The construction industry has been affected by the financial and manufacturing crisis since 2008.

The crux of the problem, therefore, is to deal with the unsustainable overcapacity at Group plants and the actual market demand.

The company envisages a general response that will have a structural impact on surplus personnel and on plant efficiency.

THE CEMENTIR GROUP WORKFORCE COMPRISES 3,667 EMPLOYEES, SPREAD ACROSS 18 COUNTRIES AND 5 CONTINENTS

TOTAL WORKFORCE BY COUNTRY AND TYPE	Unit	2016 MEN	2016 WOMEN	2016 TOTAL	2015 MEN	2015 WOMEN	2015 TOTAL	2014 MEN	2014 WOMEN	2014 TOTAL
Turkey	n.	892	59	951	1098	65	1163	1121	68	1189
Employees	n.	744	59	803	871	65	936	876	68	944
Contractors	n.	148	0	148	227	0	227	245	0	245
China	n.	162	46	208	162	45	207	153	44	197
Employees	n.	162	46	208	162	45	207	153	44	197
Contractors	n.	0	0	0	0	0	0	0	0	0
Malaysia	**n.**	**141**	**37**	**177**	**137**	**38**	**175**	**126**	**36**	**162**
Employees	n.	141	37	177	137	38	175	126	36	162
Contractors	n.	0	0	0	0	0	0	0	0	0
Italy*	n.	708	59	767	414	35	449	433	39	472
Employees	n.	690	59	749	414	35	449	433	39	472
Contractors	n.	18	0	18	0	0	0	0	0	0
Denmark	n.	659	79	738	641	77	718	608	77	685
Employees	n.	643	77	720	626	75	701	597	73	670
Contractors	n.	16	2	18	15	2	17	11	4	15
Egypt	n.	448	7	455	447	7	454	443	6	449
Employees	n.	64	7	70	63	7	70	63	6	69
Contractors	n.	384	0	384	384	0	384	380	0	380
Norway	n.	293	17	310	289	16	305	303	16	319
Employees	n.	133	16	149	129	15	144	133	15	148
Contractors	n.	160	1	161	160	1	161	170	1	171
Great Britain	n.	118	18	136	92	20	112	115	24	139
Employees	n.	98	18	116	92	20	112	115	24	139
Contractors	n.	18	0	18	0	0	0	0	0	0
Belgium**	n.	405	52	457	0	0	0	0	0	0
Employees	n.	405	52	457	0	0	0	0	0	0
Contractors	n.	0	0	0	0	0	0	0	0	0
Sweden***	n.	126	6	132	n.d	n.d	n.d	n.d	n.d	n.d
Employees	n.	126	6	132	n.d	n.d	n.d	n.d	n.d	n.d
Contractors	n.	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d
USA****	n.	60	3	63	n.d	n.d	n.d	n.d	n.d	0
Employees	n.	60	3	63	n.d	n.d	n.d	n.d	n.d	0
Contractors	n.	0	0	0	n.d	n.d	n.d	n.d	n.d	0
Australia	n.	3	0	3	3	0	0	3	0	3
Employees	n.	3	0	3	3	0	0	3	0	3
Contractors	n.	0	0	0	0	0	0	0	0	0
Iceland	n.	9	0	9	8	0	8	8	0	8
Employees	n.	9	0	9	8	0	8	8	0	8
Contractors	n.	0	0	0	0	0	0	0	0	0

continued

continued

TOTAL WORKFORCE BY COUNTRY AND TYPE	Unit	2016 MEN	2016 WOMEN	2016 TOTAL	2015 MEN	2015 WOMEN	2015 TOTAL	2014 MEN	2014 WOMEN	2014 TOTAL
Germany	n.	1	0	1	1	0	1	1	0	1
Employees	n.	1	0	1	1	0	1	1	0	1
Contractors	n.	0	0	0	0	0	0	0	0	0
Russia	n.	2	0	2	2	0	2	2	0	2
Employees	n.	2	0	2	2	0	2	2	0	2
Contractors	n.	0	0	0	0	0	0	0	0	0
France	n.	1	0	1	1	0	1	0	0	0
Employees	n.	1	0	1	1	0	1	0	0	0
Contractors	n.	0	0	0	0	0	0	0	0	0
Poland	n.	7	0	7	7	0	7	7	0	7
Employees	n.	7	0	7	7	0	7	7	0	7
Contractors	n.	0	0	0	0	0	0	0	0	0
Total	n.	4.035	383	4.414	3302	303	3602	3323	310	3633
Employees	n.	3.289	380	3.667	2516	300	2813	2517	305	2822
Contractors	n.	744	3	747	786	3	789	806	5	811

*The Italian value has grown thanks to the acquisition of Sacci SpA
** New acquisition of CCB – Compagnie des Ciments Belges in 2016
*** Gender division of the employees of the Swedish AB Sydstem – in joint-venture - is not available. Numbers shown in the table have been calculated following the Group's average
**** USA data for 2014 and 2015 not available

2.3.2 Employee development

The Cementir Group is committed to encouraging talent, which it sees as essential to strengthening a business strategy focused on innovation and the ability to respond to market needs in a faster and more modern way.

Almost all Group companies have adopted a personnel evaluation process, with the aim of:

- spreading a high performance culture throughout the company;
- rewarding people both for their performance and their potential for growth;
- managing and developing employees' talent and attitudes to ensure the right combination of skills to grow the company;
- planning development and career paths consistent with people's potential and with business needs;
- supporting the development of personnel succession plans.

Following these objectives, the performance of both individuals and work teams is annually evaluated, discussed and communicated openly and transparently, on the one hand to ensure the achievement of challenging shared goals and, at the same time, to improve performance, fuelling the continued development of human capital and employees' skills. The performance and talent management process has been extended to an increasing number of executives and managers and Group companies.

In the fourth quarter of 2016, the company worked on the definition of a Group Leadership Model, a single competency model for all businesses, which will act as the starting point for all personnel assessment and development processes, beginning with the evaluation of their potential and performance.

The aim in general terms is to gradually increase the Enterprise Contribution, i.e. the virtuous interdependence of individual contributions and efforts with those of the relevant team, to help increase individual and overall company performance. The model is aimed at the entire company ("shared leadership") and is

EMPLOYEE DEVELOPMENT IS ALSO SUPPORTED THROUGH INTERNAL AND EXTERNAL TRAINING COURSES

consistent with the Group's strategic objectives. In 2017, after an internal and external validation process, the Model will be duly adopted and communicated to the workforce.

In the same quarter, the new Group Talent Management system was defined, which includes the process for identifying managerial talent (Talent ID), i.e. those people with the critical skills and competencies to achieve company objectives and with the potential for development into managers or, if already in management positions, to take on more complex management roles (Leadership Pool).

The process was launched at the end of the year and will be implemented in the first half of 2017, followed by a phase of preparing and implementing appropriate development programmes (Talent Development).

A Talent Management system ensures business continuity for the company, beginning with coverage of critical roles over time and the building and development of a portfolio of successors for such roles.

Employee development is also supported through **internal and external training courses** (18 hours on average per person in 2016), which are accompanied by a series of other initiatives such as the mentoring of young talent by expert personnel, participation in work projects involving multiple departments and, in some cases, work experience abroad at Group companies worldwide.

The factors that guide the annual training programme are:

- descriptions of the roles required for the performance of tasks;
- specific analysis to identify whether the skills existing in the company are sufficient to meet the needs arising from new corporate strategic plans;
- employee performance evaluations.

In addition, to monitor the attendance, degree of satisfaction and growth

CEMENTIR CONSIDERS THE HEALTH AND SAFETY OF ITS EMPLOYEES AT WORK AS FUNDAMENTAL

path of Group personnel, most companies carry out regular assessments of employee engagement.

2.3.3 Safety first

Cementir considers the health and safety of its employees at work as fundamental. That is why it continues to invest resources to provide all the tools and professional training required to create a strong safety culture.

The main Group plants have in fact adopted an occupational health and safety management system certified with the OHSAS 18001 international standard by accredited external parties.

The main activities to ensure compliance with laws, regulations and directives applicable to EU countries and to minimize accidents are:

- the assessment and continual updating of all health and safety risks and hazards related to each task carried out in Group plants and offices;
- the proper management, updating and communication of internal policies and procedures drawn up and approved by senior management for the correct performance of work activities in terms of accident prevention;
- the investment in and expenditure on safety equipment (both individual and plant) and machinery to maintain an advanced standard of technology; internal audits carried out by Cementir HSE functions; specific intensive training on preventing the occupational risks identified and on technical expertise for the correct use of machinery; information and engagement campaigns to increase the accountability of all employees at all levels;
- the continuous improvement of the occupational health and safety management system by defining measurable indicators monitored according to predetermined implementation programmes.

In 2016, an average of 24,411 hours of health and safety training were provided, with an average of 8 hours per employee. The Cementir Group's commitment to health and safety is also demonstrated by its total investment of EUR 1.6 million.

In 2016, there was a slight improvement in the accident frequency rate at

GROUP PLANTS OHSAS 18001 CERTIFIED

Cement	
Aalborg	X
Anqing	
Ipoh	
Edirne	X
Elazig	X
Izmir	X
Kars	X
Arquata Scrivia	
Maddaloni	
Spoleto	
Taranto	
Ready-mixed concrete	
Unicon Denmark	
Unicon Norway	
Recycling management	
Sureko	X
Hereko	X
Neales Waste Management	X

Group cement plants, ready-mixed concrete plants and waste generation facilities, but a worsening in the average severity with more days lost per injury. The tables below show the data on Group health and safety and the performance in the four Group regions: Nordic & Baltic and USA, Central Mediterranean, Eastern Mediterranean and Asia Pacific.

2.3.4 The LOTOTO system

The LOTOTO System (Lock Out, Tag Out, Try Out) is **one of the most effective tools for ensuring health**

ACCIDENT RATES GROUP DATA	Units	2016 MEN	2016 WOMEN	2016 TOTAL	2015 MEN	2015 WOMEN	2015 TOTAL	2014 MEN	2014 WOMEN	2014 TOTAL
Total accidents	no.	84	0	84	83	2	85	73	0	73
Frequency rate*		5.94	0.00	5.41	5.85	1.45	5.46	5.12	0.00	4.66
Severity rate**		124.24	0.00	113.32	113.35	2.17	103.48	100.30	0.00	91.37

ACCIDENT RATES BY REGION	Units	2016 MEN	2016 WOMEN	2016 TOTAL	2015 MEN	2015 WOMEN	2015 TOTAL	2014 MEN	2014 WOMEN	2014 TOTAL
Nordic & Baltic and USA										
Accidents	no.	39	0	39	38	0	38	40	0	40
Frequency rate		4.82	0.00	4.56	4.66	0.00	4.38	4.88	0.00	4.59
Severity rate		63.98	0.00	60.52	60.07	0.00	56.53	52.74	0.00	49.57
Central Mediterranean										
Accidents	no.	14	0	14	14	0	14	14	0	14
Frequency rate		6.32	0.00	6.26	6.51	0.00	6.46	6.29	0.00	6.25
Severity rate		211.24	0.00	209.11	280.91	0.00	278.82	319.91	0.00	317.65
Eastern Mediterranean										
Accidents	no.	24	0	24	19	0	19	15	0	15
Frequency rate		33.56	0.00	31.33	22.85	0.00	21.38	18.88	0.00	17.57
Severity rate		605.51	0.00	565.17	329.55	0.00	308.25	289.48	0.00	269.37
Asia Pacific										
Accidents	no.	7	0	7	12	2	14	4	0	4
Frequency rate		2.24	0.00	1.77	3.93	2.50	3.63	1.31	0.00	1.04
Severity rate		108.55	0.00	85.81	78.86	3.76	63.30	18.38	0.00	14.58

*The frequency rate is calculated by dividing the total number of accidents by hours worked*200,000
**The severity rate is calculated by dividing days lost through accident by hours worked*200,000

and safety in the cement industry, and is based on a risk assessment model mainly developed on the use of dangerous machinery.

The system, already implemented at the cement plant in Izmir, will be improved to become an example of best practice in the cement sector. With this objective in mind, a simulation campaign for the implementation of LOTOTO was launched, attended by senior management, plant managers and all employees. The system has been included in health and safety training courses.

2.4 we support our communities

G4 –24; G4-25; G4-26;-G4-27

PILLAR 4: We create value for local communities, listening to their needs and concerns and basing our relationships with them on transparency and accountability.

The Cementir Group is engaged in the search for technical solutions that reduce its environmental impact and balance the interests of the company with those of local communities.

For this reason, **dialogue with the institutions, communities and associations affected by plant operations is essential for the continuity and preservation of the business.**

The company maintains relationships with institutions at all levels, opinion groups and trade union representatives, and has set up communication channels to deal with any claims or complaints from the local community.

2.4.1 Dialogue

Against this backdrop, the topics most debated with local stakeholders in 2016 mainly concerned permits for the use of quarries and for the introduction of alternative fuels, the rationalization and, where possible, reduction of incoming and outgoing traffic transporting raw materials and fuel at plants, dust levels and polluting emissions.

The focus regarding members of the community was, in certain cases, to organise meetings with groups of residents to provide them with detailed information on the work and operations taking place at Group sites.

2.4.2 Donations

Some Group companies, particularly those whose plants are located in areas of greater social marginalization, have made donations to local communities. These were both in the form of cash donations (approximately EUR 247,000 used to promote school activities and purchase water and food) and goods (**over 1,300 tons of cement, mainly allocated for the restoration and renovation of schools and public infrastructure**).

2.4.3 Çimentaş Education and Health Foundation

In Turkey, the Cementir Group maintains close ties with the most vulnerable groups through the Çimentaş Education and Health Foundation, **established in 1986 and committed to providing financial assistance and educational materials to families and schools**.

Since its establishment, the Foundation has sponsored over **500 scholarships** for senior school and university students, and has contributed to the renovation of various school buildings near the plant in Elazig, Turkey.

Over the past three years, total donations have exceeded EUR 200,000 (net of those of the Group Companies).

In 1998, thanks to the Foundation's financial support, the **Işıkkent High School** was founded, a senior school recognized for its innovative approach to education and research, and able to accommodate up to 765 students a year.

APPENDIX

3.1 The basis of this report G4-17; G4-18-G4-19

The first Group-wide Cementir Sustainability Report presents the results achieved in financial year 2016 (from 1 January 2016 to 31 December 2016), compared where possible with figures from the last three years (2014-2016).

Please note that within this document the terms "company", "group" or Cementir Group are used to indicate Cementir Holding. This Report has been prepared in line with the principles for defining report content and quality, as set out in the GRI Sustainability Guidelines, version GRI-G4, according to the "In Accordance – Core" option.

The Sustainability Report is prepared annually to illustrate Cementir's sustainability strategies and associated performance at all the Group's premises.

For figures relating to income, headcount and assets, the reporting boundary is the same as for the Group Consolidated Financial Statements.

The reporting boundary does not include qualitative and quantitative information relating to the social and environmental aspects of the companies Sacci SpA and *Compagnie des Ciments Belges*, which were acquired during the second half of 2016.

The content and indicators used in the report were selected based on the results of the materiality analysis performed in 2016, in which management participated in an assessment of the material environmental, economic and social aspects for the company and its stakeholders.

Where figures have been generated using estimates, this is duly reported within the document.

As required by the GRI G4 Guidelines, Cementir conducted a materiality analysis to identify significant issues for the company and its stakeholders, i.e. all aspects that have a direct or indirect impact on Cementir's ability to create, preserve or damage the

THE SUSTAINABILITY REPORT FOLLOWS THE PRINCIPLES OF THE GRI G-4 SUSTAINABILITY GUIDELINES

value of the Group. The materiality analysis, which was part of a wider assessment of Cementir's sustainability performance that traced out a strategy to be followed over the coming years, served to identify the aspects around which this first Group Sustainability Report has been built. The materiality matrix included in the Report is the result of a broad, multiphase process, which saw the top management of the Cementir Group define the company's priorities and identify and analyse stakeholder needs.

A broad set of material aspects for the sector was identified through analysis of industry documents and benchmarks, which were subsequently checked through interviews conducted

THE MATERIALITY MATRIX

individually with Cementir top management.
The interviews identified the priority aspects for Cementir and those that are of greatest interest to its stakeholders. As such, it was possible to define the company's internal priorities and bring together the information collected on what is important to stakeholders through the industry analysis, benchmarks and the opinions of Cementir top management.
This process resulted in the 10 themes around which this Sustainability Report is built, including the shared priorities of Cementir and its stakeholders, priority issues for Cementir and priority issues for stakeholders.

3.2 Material aspects and boundaries
G4-19; G4-20; G4-21

MATERIAL ASPECTS AND BOUNDARIES MATERIAL ASPECTS FOR CEMENTIR	LINK WITH G4 ASPECTS	INTERNAL RELEVANCE FOR THE ORGANISATION	EXTERNAL RELEVANCE FOR THE ORGANISATION
	Category: Economic		
VALUE CREATION	Economic Performance	X	
	Category: Environmental		
ALTERNATIVE MATERIALS AND FUEL	Materials Energy	X	
CLIMATE CHANGE	Energy Emissions	X	
EMISSIONS	Emissions	X	
ETHICAL COMPLIANCE & GOVERNANCE	Environmental compliance	X	
	Category: Social		
MANAGEMENT AND DEVELOPMENT OF HUMAN RESOURCES	Training and Development of human resources		
HEALTH AND SAFETY	Health and safety at work	X	X
	Category: Company		
COMMUNITY ENGAGEMENT	Local Communities	X	
ETHICAL COMPLIANCE & GOVERNANCE	Anti-Corruption Anti-Competitive Behaviour	X	
	Marketing Communications	X	

3.3 GRI Content Index
G4-19; G4-24; G4-25 G4-26 G4-27
General Standard Disclosures

General Standard Disclosures	Page	Description of indicator
Strategy and Analysis		
G4 -1	Letter to the stakeholders Page 4-5	Statement from the most senior decision-maker of the organisation (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organisation and the organisation's strategy.
G4 - 2		Description of key impacts, risks, and opportunities.
Organisational profile		
G4 - 3	The basis of this report Page 55	Name of the organisation
G4 - 4	Our products Page 12	Primary brands, products, and services
G4 - 5	The basis of this report Page 55	Location of the organisation's headquarters
G4 - 6	The Cementir Group Page 6	Number of countries where the organisation operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report
G4 - 7	The Cementir Groupr Page 6	Nature of ownership and legal form
G4 - 8	The Cementir Groupr Page 6	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)
G4 - 9	The Cementir Groupr Page 6	Scale of the organisation, including: number of employees; number of operations; Ÿnet sales (for private sector organisations) or net revenue (for public sector organisations); total capitalisation broken down in terms of debt and equity (for private sector organisations); quantity of products or services provided
G4 - 10	Workforce number and composition Page 47	**a)** Report the total number of employees by employment contract and gender **b)** Report the total number of permanent employees by employment type and gender **c)** Report the total workforce by employees and supervised workers and by gender **d)** Report the total workforce by region and gender **e)** Report whether a substantial portion of the organisation's work is performed by workers who are legally recognised as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors

continued

continued

General Standard Disclosures	Page	Description of indicator
Organisational profile		
G4 - 10	Workforce number and composition Page 47	**f)** Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).
G4 - 11	Workforce number and composition Page 47	Report the percentage of total employees covered by collective bargaining agreements
G4 - 12	Our products Page 12	Describe the organisation's supply chain Describe the main elements of the supply chain in relation to the organisation's primary activities, products and services
G4 - 13	The Cementir Group Page 6 Economic value generated and distributed Page 10	Significant changes during the reporting period regarding the organisation's size, structure Changes in the location of, or changes in, operations, including facility openings, closings, and expansions Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organisations) Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination
G4 - 14	The basis of this report Page 55	Report whether and how the precautionary approach or principle is addressed by the organisation
G4 - 15	Integrity and transparency Page 24	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses
G4 - 16	The Company is member of several national and international associations related to its business, in almost all the Countries where its market develops	Memberships of associations (such as industry associations) and national or international advocacy organisations in which the organisation: Holds a position on the governance body Participates in projects or committees Provides substantive funding beyond routine membership dues Views membership as strategic
Identified material aspects and boundaries		
G4 - 17	The basis of this report Page 55	List all entities included in the organisation's consolidated financial statements or equivalent documents Report whether any entity included in the organisation's consolidated financial statements or equivalent documents is not covered by the report

continued

continued

General Standard Disclosures	Page	Description of indicator
Identificazione degli aspetti materiali e perimetro		
G4 -18	The basis of this report Page 55	Explain the process for defining the report content and how the organisation has implemented the Reporting Principles
G4 - 19	The basis of this report Page 55 Material aspects and boundaries Page 57	List all the material aspects identified in the process for defining report content
G4 - 20	Material aspects and boundaries Page 57	For each material aspect, report the aspect boundary within the organisation
G4 - 21	Material aspects and boundaries Page 57	For each material aspect, report the aspect boundary outside the organisation
G4 - 22	Not applicable; first-time publication of the report	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements (e.g. mergers/acquisitions, change in calculation period, nature of business, measurement method)
G4 - 23	Not applicable; first-time publication of the report	Report significant changes from previous reporting periods in the objective, scope or measurement methods used in the report
Stakeholder engagement		
G4 -24	Supporting our communities / Dialogue	Provide a list of stakeholder groups engaged by the organisation
G4 -25	Supporting our communities / Dialogue Page 53	Report the basis for identification and selection of stakeholders with whom to engage
G4 -26	Supporting our communities / Donations Page 53	Report the organisation's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group
G4 -27	Supporting our communities Page 53	Report the stakeholder groups that raised each of the key topics and concern

continued

continued

General Standard Disclosures	Page	Description of indicator
Report Profile		
G4 - 28	The basis of this report Page 55	Reporting period (such as fiscal or calendar year) for information provided
G4 - 29	The basis of this report Page 55	Date of most recent previous report (if any)
G4 - 30	The basis of this report Page 55	Reporting cycle (such as annual, biennial)
G4 - 31	The basis of this report Page 55	Provide the contact point for questions regarding the report or its contents
G4 - 32	Material aspects and boundaries Page 58	Explanatory table of the report's content
G4 - 33	This report was not externally audited	Report the organisation's policy and current practice with regard to seeking external assurance for the report
Governance		
G4 - 34	The Cementir Groupr Page 6	Report the governance structure of the organisation, including committees of the highest governance body
Ethics and Integrity		
G4 - 56	Integrity and transparency Page 24	Describe the organisation's values, principles, standards and norms such as codes of conduct and codes of ethics

3.3.1 Material aspects and reconciliation with aspects and indicators of the GRI-G4 guidelines; G4-20; G4-21; G4-32

This table reconciles the findings of the materiality analysis (including the scope), the necessary indicators for the "In Accordance – Core" option of the "G4 Sustainability Reporting Guidelines", and the content of the Company Sustainability Report.
Specific Standard Disclosures

					BOUNDARY	
DMA and GRI Indicators	**Page**	**Omissions**	**Description of indicator**	**Cementir material aspects**	**Internal relevance**	**External relevance**
Category: Economic						
Material Aspect: Economic Performance						
G4-DMA	Business and financial results					
G4-EC1	Business and financial results Page 8		Direct economic value generated and distributed (EVG&D), including the revenue, operating costs, employee wages and benefits, community investments, retained earnings, payments to providers of capital, payments to government	VALUE CREATION	Cementir	Customers
Category: Environmental						
Material Aspect: Materials						
G4-DMA						
G4-EN1	Alternative raw materials Page 34		Raw materials used by weight or volume	ALTERNATIVE MATERIALS AND FUEL		

continued

continued

					BOUNDARY	
DMA and GRI Indicators	**Page**	**Omissions**	**Description of indicator**	**Cementir material aspects**	**Internal relevance**	**External relevance**
Category: Environmental						
Material Aspect: Materials						
G4-EN2	Alternative raw materials Page 34		Percentage of materials used that are recycled input materials	ALTERNATIVE MATERIALS AND FUEL		
Material Aspect: Energy						
G4-DMA						
G4-EN 3	Energy consumption Page 42		Energy consumption within the organisation	CLIMATE CHANGE		
G4-EN 5	Energy consumption Page 42		Energy intensity	ALTERNATIVE MATERIALS AND FUEL		
Material Aspect: Emissions						
G4-DMA						
G4-EN 15	Energy consumption Page 42		Direct greenhouse gas (GHG) emissions (Scope 1)	CLIMATE CHANGE ALTERNATIVE MATERIALS AND FUEL		
G4-EN 16	Energy consumption Page 42		Indirect greenhouse gas (GHG) emissions (Scope 2)	CLIMATE CHANGE		
G4-EN 18	Energy consumption Page 42		Greenhouse gas (GHG) emissions intensity	CLIMATE CHANGE		
G4-EN 21	Other air emissions Page 45		NO_X, SO_X and other significant air emissions	EMISSIONS		

continued

continued

DMA and GRI Indicators	Page	Omissions	Description of indicator	Cementir material aspects	BOUNDARY: Internal relevance	BOUNDARY: External relevance
Category: Economic						
Material Aspect: Compliance						
G4-DMA						
G4-EN 29	We note a fine of EUR 27,000 for a leaked emission of dust at the Chinese plant in Anqing		Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	ETHICAL COMPLIANCE & GOVERNANCE		
Category: Social						
Sub-category: Labour practices and decent work						
Material Aspect: Training and Development of human resources						
G4-DMA						
G4-LA9	Employee development Page 49		Average hours of training per year per employee by gender	TRAINING AND DEVELOPMENT OF HUMAN RESOURCES		
G4-LA10	Employee development Page 49		Programs for skills management and lifelong learning that support the continued employability of employees	FORMAZIONE E SVILUPPO DEL PERSONALE		
G4-LA11	Employee development Page 49		Percentage of employees receiving regular performance and career development reviews	TRAINING AND DEVELOPMENT OF HUMAN RESOURCES		

continued

continued

					BOUNDARY	
DMA and GRI Indicators	**Page**	**Omissions**	**Description of indicator**	**Cementir material aspects**	**Internal relevance**	**External relevance**
Material Aspect: Health and safety at work						
G4-DMA						
G4-LA5	Safety first Page 51		Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs	HEALTH AND SAFETY		
G4-LA6	Safety first Page 51		Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	HEALTH AND SAFETY		
G4-LA7	Safety first Page 51		Workers with high incidence or high risk of diseases related to their occupation	HEALTH AND SAFETY		

continued

					BOUNDARY	
DMA and GRI Indicators	**Page**	**Omissions**	**Description of indicator**	**Cementir materi-al aspects**	**Internal relevance**	**External relevance**
Sub-category: Company						
Material Aspect: Local Communities						
G4-DMA						
G4-SO1	Supporting our communities Page 53		Percentage of operations with implemented local community engagement, impact assessments, and development programs	COMMUNITY ENGAGEMENT		
G4-SO_2	Supporting our communities Page 53		Operations with significant actual and potential negative impacts on local communities	COMMUNITY ENGAGEMENT		
Material Aspect: Anti-Corruption						
G4-DMA	Commitment to combating corruption Page 26					
G4-SO3	Commitment to combating corruption Page 26		Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	ETHICAL COMPLIANCE & GOVERNANCE		
G4-SO4	Commitment to combating corruption Page 26		Communication and training on anti-corruption policies and procedures	ETHICAL COMPLIANCE & GOVERNANCE		
G4-SO5	There are no confirmed incidents of corruption to report		Confirmed incidents of corruption and actions taken	ETHICAL COMPLIANCE & GOVERNANCE		

continued

continued

DMA and GRI Indicators	Page	Omissions	Description of indicator	Cementir material aspects	BOUNDARY: Internal relevance	BOUNDARY: External relevance
Material Aspect: Anti-Competitive Behaviour						
G4-DMA						
G4-SO7	There are no legal actions or outcomes for anti-competitive behaviour, anti-trust, and monopoly practices to report		Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	ETHICAL COMPLIANCE & GOVERNANCE		
Material Aspect: Anti-Competitive Behaviour						
G4-DMA	Integrity and transparency Page 24					
G4-SO8	There are no significant fines for non-compliance with laws and regulations to report		Monetary value of significant fines for non-compliance with laws and regulations	ETHICAL COMPLIANCE & GOVERNANCE		
Category: Product responsibility						
Material Aspect: Marketing Communications						
G4-PR7	There are no significant fines to report for non-compliance with laws and regulations concerning the provision and use of products and services		Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	ETHICAL COMPLIANCE & GOVERNANCE		

3.4 Glossary

Cement equivalent (Total Cement Equivalent - TCE): an indicator related to the plant's production of clinker, calculated based on the clinker produced and the average clinker/cement ratio for the year.

CO_2: Carbon dioxide is an oxide acid (anhydride) formed by a carbon atom bonded to two oxygen atoms. It is an essential substance in the vital processes of plants and animals but is also responsible for the rise in global warming.

EPD® (Environmental Product Declaration): An audited and recorded document that communicates transparent and comparable information on the life cycle and environmental impact of a product.

g/ tTCE: grams per ton of cement equivalent.

Joule: the unit of measurement of energy (one joule is the work required to exert a force of one newton for a distance of one metre). A gigajoule (Gj) is equal to 1*109 joules, while a terajoule (TJ) is equal to 1*1012 joules.

Frequency Rate: the rate used to calculate the level of accidents; it is the number of accidents that have occurred in a year divided by the hours worked in the same year. The rate is multiplied by 200,000, as required by OSHA and adopted by GRI-G4 Guidelines.

Severity Rate: the rate used to calculate the extent of injury (that is the severity of the consequences of accidents at work); it is the number of days of work lost due to accidents divided by the number of hours worked in the same year. The rate is multiplied by 200,000, as required by OSHA and adopted by GRI-G4 Guidelines.

Accident: an accidental event that occurs during work and that has caused a temporary and/or permanent physical or psychological injury or the death of the worker.

RDF (Refuse-Derived Fuel): a solid dry shredded fuel obtained by the processing of solid urban waste, generally collected in cylindrical blocks known as waste bales.

SRF (Solid Recovered Fuel): a solid dry shredded fuel obtained by the processing of solid urban waste compliant to European standard EN 15359.

ISO 14001: a voluntary international standard, establishing the requirements that an efficient environmental management system must have. The ISO 14001 standard is a certifiable standard, meaning that certification of compliance with the requirements contained in it may be obtained from an accredited certification agency operating within given rules. ISO 14001 certification is not mandatory, but is the result of a voluntary choice by the company/organisation which decides to establish/implement/maintain/improve its environmental management system. Using the ISO 14001 standard allows an organisation to identify and monitor the impact of its activities on the environment, and improve its environmental performance by implementing a systematic approach that involves definition and achievement of specific environmental goals.

OHSAS 18001: the international standard that sets the requirements for developing a system for the management and protection the health and safety of workers (OHSAS means Occupational Health and Safety Assessment Series). OHSAS certification verifies the voluntary application, within an organisation, of a system that guarantees sufficient control of occupational health and safety, as well as compliance with the mandatory regulations.

ISO 50001: a voluntary international standard that specifies the requirements for creating, implementing, maintaining and improving an energy management

system. The aim of this system is to make it possible for an organisation to use a systematic approach to continuously improve its energy performance, including energy efficiency as well as energy consumption and use.

(EMAS) Eco-Management and Audit Scheme: a voluntary scheme created by the European Community which can be joined voluntarily by organisations (companies, public bodies, etc.) to assess and improve their environmental performance and provide the public and other interested parties with information on their environmental management. The main aim of EMAS is to help to create sustainable economic development, highlighting the role and responsibilities of enterprises. To obtain (and maintain) EMAS certification (registration), organisations must subject their environmental management system to a compliance assessment by an Accredited Auditor, and have the same auditor validate their Environmental Report (and its updates, which are usually annual).

ISO 9001: a voluntary international standard published in 1987 by the International Organization for Standardization, regarding the requirements of Quality Management Systems for organisations in any sector and of any size.

OSHA (Occupational Safety and Health Administration): agency of the US Department of Labor, which introduced standards on safety at work.

SNCR (selective non catalytic reduction): a method to lessen nitrogen oxide emissions.

l/t: Litres per ton.

m^3: Cubic metre.

NO: Nitrogen oxide.

NO_2: Nitrogen dioxide.

NO_x: Nitrogen oxides (NO and NO_2).

SO_2: Sulphur dioxide.

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