

# **2017 Sustainability Report**

## ***Consolidated Non-Financial Statement***

(in accordance with Italian Legislative Decree 254 of 30 December 2016)

(Translation from the Italian original which remains the definitive version)

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Independent Auditor’s Report on the Consolidated Non-Financial Statement

## Letter to the Stakeholders

Dear Stakeholders,

As you know, last year the Cementir Group voluntarily published its first Sustainability Report according to GRI-G4 guidelines, while also setting out a sustainability strategy for all its operating companies. As part of this process, we defined our positioning against the main operators in the industry, which involved carrying out a benchmark analysis and setting some general targets - especially as regards the environment.

For 2017, the Group has produced its Sustainability Report according to the Global Reporting Initiative's new Sustainability Reporting Standards and, first and foremost, in accordance with the requirements of Italian Legislative Decree 254/2016. The Report retains a transparent, analytical approach to the collection of data and information on the sustainability initiatives and performance of all Group companies, including the Belgium-based CCB group, which is in the reporting scope for the first time. The companies of Cementir Italian group are also included. However, in view of the corporate developments that led to the sale of all operations on Italian soil, the figures relating to Cementir Italia group have been reported separately, allowing for a better understanding of what, today, is the current scope of the Group.

The face of Cementir has changed significantly over recent years, with the focal point of its international presence shifting from the Mediterranean area to Central Europe, even as it has consolidated its long-term strategy of leadership in the white cement sector.

This change reflects developments during 2017 in the main international markets where we operate, which have continued to enjoy widespread economic growth, while the geopolitical tensions in emerging countries have eased, positively influencing the economy trend.

We are increasingly aiming to adopt an integrated production approach in our businesses. Indeed, 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 us to keep resources in use for longer periods, extracting maximum value from them. In addition, reuse and recycling helps us to reduce our environmental footprint, by helping to improve sustainability within the cement value chain.

This Report describes important projects to improve processes and production efficiencies. The outcomes of these included a rise in the fossil fuel replacement rate, an increase in the proportion of renewable raw materials out of total raw materials used, and a decrease in the emission coefficient per ton of cement produced.

We continue to invest resources to provide our employees and collaborators all the tools and professional training required to create a strong safety culture through information campaign and ongoing updating and analysis of all health and safety risks.

Numerous initiatives to improve our Corporate Social Responsibility are provided, such as the Aalborg district heating system that from many years supply heat requirements of about 36,000 households of the city: during 2017 the heat recovered increased by 20%. Since 1986, thanks to the Çimentaş Education and Health Foundation, we are committed to providing financial assistance, educational materials and scholarships to families, students and local schools.

The Group has also continued on managing its quarrying activities, with all our sites having recovery and biodiversity rehabilitation programmes, such as the Life project at the Gaurain Ramecroix quarry in Belgium.

Our commitment to you and to all our partners is to continue to build on these foundations, to promote sustainability throughout the value chain.

Rome, 8 March 2018

Chairman of the Board of Directors

Francesco Caltagirone Jr.

(signed on the original)

## THE CEMENTIR GROUP

3,620 people

EUR 1,288 million in revenue (EUR 1,140 million euros counting the discontinued operations in Italy)

18 countries

### Sales volumes

10.5 million tons of grey cement

2.3 million tons of white cement

5.1 million cubic metres of ready-mixed concrete

9.3 million tons of aggregates

### Plants

6 White cement plants

13 Grey cement plants

30 Terminals

151 Ready-mixed concrete plants

10 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 third-largest in Belgium and one of the biggest in Turkey. It is also the leading ready-mixed concrete manufacturer in Scandinavia.

Cementir is now present in 18 countries across 5 continents. Its strategy is aimed at increasing the integration of its business activities as well as geographical diversification.

This international growth strategy has been driven by the acquisitions made over the years, including of CCB - Compagnie des Ciments Belges in 2016, which strengthened Cementir's production and commercial presence in Central Europe, and of Sacci's Italian business in July 2016. In September 2017, an agreement was reached for the sale of all the Italian operations of the Cementir Italia group, finalised on 2 January 2018.

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

1. Nordic & Baltic and USA
2. Eastern Mediterranean
3. Central Mediterranean
4. Asia Pacific

During 2017 a trading company called Spartan Hive SpA was incorporated.

#### **The sale of the operations of Cementir Italia S.p.A.**

On 2 January 2018, Cementir Holding S.p.A. finalised the sale of 100% of the share capital of Cementir Italia S.p.A., including its wholly-owned subsidiaries Cementir Sacci S.p.A. and Betontir S.p.A., to Italcementi S.p.A., a wholly-owned subsidiary of HeidelbergCement AG.

The deal, announced on 19 September 2017, was subject to approval by the Italian Antitrust Authority, which took place on 20 November 2017.

Cementir Italia's assets include 5 full-cycle cement plants and 2 cement mills, as well as a network of terminals and ready-mixed concrete plants in Italy.

The enterprise value of the transaction was EUR 315 million on a cash and debt-free basis and the amount was received in full on 2 January 2018.

## 2017 AT A GLANCE

### Earnings and financial results<sup>1</sup>

In 2017, the Group achieved positive earnings and financial results, with revenue in excess of EUR 1.1 billion, an increase of 11% over 2016, made possible by the full consolidation of the acquisitions completed during the previous year and despite the heavily negative impact of exchange rates.

In particular, the Group ended the year with **revenue from sales and services** of EUR **1,140.0 million**, driven by the change in the scope of consolidation: in 2017, the revenue of the *Compagnie des Ciments Belges* group amounted to EUR 233.6 million (EUR 38.7 million in 2016, consolidated as of 25 October 2016).

On a like-for-like basis, revenue increased 1.7% compared to 2016, despite the negative impact of exchange rates, above all in Turkey and Egypt. The strong performance of operations in Denmark, Norway and Sweden, with an increase in sales volumes of cement, ready-mixed concrete and aggregates, and in China (above all due to higher sales prices on the local market) offset the fall in revenue expressed in Euro in Turkey and Egypt.

Sales volumes of cement and clinker, equal to **10.3 million tons**, saw an increase of 1.7%, thanks to the change in the Belgian scope of consolidation and the good performance in Denmark, Turkey, Egypt and Malaysia.

Sales volumes of ready-mixed concrete, equal to **4.9 million cubic metres**, were up 11.9% due to the acquisitions in 2016 and to strong performance in Denmark, Norway and Sweden, despite the fall in sales in Turkey.

In the aggregates segment, sales volumes amounted to **9.3 million tons**, up by over 109% thanks to the contribution of *Compagnie des Ciments Belges* and good performance in Sweden and Denmark.

**Profit from continuing operations** totalled EUR 110.3 million (EUR 118.9 million in 2016) after taxes amounting to EUR 16.4 million, down on the previous year (EUR 40.9 million).

**Profit attributable to the owners of the parent**, once non-controlling interests were accounted for, amounted to EUR 71.5 million (EUR 67.3 million in 2016). The decrease in profit attributable to non-controlling interests (EUR 5.7 million compared to

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<sup>1</sup>The results of the Cementir Italia Group have been recognised in 2017 as “discontinued operations”. The 2017 figures also include the contribution of the *Compagnie des Ciments Belges* group (CCB), acquired on 25 October 2016. The 2016 figures have been restated following the reclassification of the amounts relating to the Italian operating companies held for sale under “Profit (loss) from discontinued operations”.



EUR 18.1 million in 2016) was mainly due to the decrease in profits of the Egyptian company Sinai White Portland Cement, of which the Group owns 66.4%.

#### Financial highlights

(millions of euros)	2017	2016	% Change
Revenue from sales and services	1,140.0	925.8	23.1%
Total operating revenue	1,170.0	958.8	22.0%
EBITDA	222.7	208.5	6.8%
EBITDA/Revenue from sales and services %	19.5%	22.5%	
EBIT	140.6	135.6	3.7%
Net financial income (expense)	(13.9)	24.3	n.m.
Profit (loss) before taxes	126.7	159.8	-20.7%
Profit (loss) from continuing operations	110.3	118.9	-7.2%
Profit (loss) from discontinued operations, net of tax	(33.1)	(33.6)	
Profit (loss) for the year	77.2	85.3	-9.6%
Profit attributable to the owners of the parent	71.5	67.3	6.2%

### Economic value generated and distributed<sup>2</sup>

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

<sup>2</sup>The results of the Cementir Italia Group have been recognised in 2017 as “discontinued operations”. The 2017 figures also include the contribution of the *Compagnie des Ciments Belges* group (CCB), acquired on 25 October 2016. The 2016 figures have been restated following the reclassification of the amounts relating to the Italian operating companies held for sale under “Profit (loss) from discontinued operations”.

at the various items that comprise the wealth created and distributed in the form of costs.

Direct economic value generated <sup>3</sup>	2017 (with Cementir Italia counted as Discontinued Operations)	2016 (with Cementir Italia counted as Discontinued Operations)	2016	2015
	1,183,048	999,402	1,109,268	1,012,602
Total operating revenue	1,170,044	958,847	1,068,399	995,361
Financial income	13,468	3,412	3,446	9,533
Foreign exchange rate gains (losses)	(5,249)	32,016	32,296	2,643
Share of net profits of equity-accounted investees	4,785	5,127	5,127	5,065
<b>Economic value distributed</b>	<b>(1,030,300)</b>	<b>(821,057)</b>	<b>(940,950)</b>	<b>(863,297)</b>
<b>Operating costs</b>	<b>(763,567)</b>	<b>(605,429)</b>	<b>(696,409)</b>	<b>(646,241)</b>
Raw materials costs	(444,161)	(369,611)	(432,711)	(409,743)
Other operating costs	(319,406)	(235,818)	(263,698)	(236,498)
<b>Value distributed to employees</b>	<b>(174,748)</b>	<b>(139,619)</b>	<b>(166,986)</b>	<b>(149,714)</b>
Personnel costs	(174,748)	(139,619)	(166,986)	(149,714)
<b>Value distributed to capital providers</b>	<b>(44,072)</b>	<b>(33,564)</b>	<b>(34,208)</b>	<b>(30,786)</b>
Financial expense	(26,916)	(16,289)	(16,933)	(13,243)
Dividends	(17,156)	(17,275)	(17,275)	(17,543)
<b>Grants to local communities</b>				
<b>Value distributed to government</b>	<b>(47,913)</b>	<b>(42,445)</b>	<b>(42,445)</b>	<b>(36,556)</b>
Current taxes (income taxes)	(38,881)	(35,267)	(35,267)	(31,186)
Other non-income-related taxes	(9,032)	(7,178)	(7,178)	(5,370)
<b>Economic value retained</b>	<b>153,023</b>	<b>174,584</b>	<b>165,525</b>	<b>149,742</b>
Profit (loss) for the year, of which:	60,010	68,074	68,074	57,558
Profit (loss) from discontinued operations	(33,094)	(33,592)		
Amortisation and depreciation	(72,590)	(62,094)	(84,164)	(82,133)
Provisions	(3,865)	(3,158)	(7,994)	(2,647)
Impairment losses	(5,677)	(7,684)	(11,009)	(11,611)
Deferred tax liabilities (assets)	22,213	18	5,716	4,207

<sup>3</sup> The economic value retained is not the exact difference between the economic value generated and distributed. Such difference is due to cash flow effect, related to dividend distributed and taxes.

## The Group's products

### 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: 36  
 Terminals: 9  
 Quarries: 3

##### Norway

Ready-mixed concrete plants: 29  
 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: 2

##### France

Ready-mixed concrete plants: 5  
 Terminals: 1

##### United Kingdom

Waste management facilities: 1  
 Terminals: 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

##### Latvia

Terminals: 1

##### Iceland

Terminals: 3

##### Netherlands

Terminals: 1

##### Poland

Terminals: 1

Sales volumes (million/t-m <sup>3</sup> )	2017	2016	2015
<b>Denmark</b>			
Grey cement sales	1.59	1.52	1.39
White cement sales	0.77	0.70	0.61
Ready-mixed concrete sales	1.18	1.16	1.17
Aggregate sales	0.85	0.67	0.74
<b>Belgium / France</b>			
Grey cement sales	1.90	0.25	-
Ready-mixed concrete sales	0.97	0.14	-
Aggregate sales	5.18	0.86	-
<b>Norway</b>			
Ready-mixed concrete sales	1.00	0.91	0.82
<b>Sweden</b>			
Ready-mixed concrete sales	0.24	0.21	0.18
Aggregate sales	3.30	2.93	3.08

## 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-m <sup>3</sup> )	2017	2016	2015
<b>Turkey</b>			
Grey cement sales	4.50	4.30	4.25
Ready-mixed concrete sales	1.56	1.89	1.49
<b>Egypt</b>			
White cement sales	0.54	0.51	0.55

## 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)	2017	2016	2015
<b>China</b>			
White cement sales	0.65	0.66	0.61
<b>Malaysia</b>			
White cement sales	0.32	0.31	0.30

## Central Mediterranean

### Italy<sup>4</sup>

Grey cement production capacity: 6.3 million t

Cement plants: 7

Ready-mixed concrete plants: 45

Terminals: 6

Sales volumes (million/t-m <sup>3</sup> )	2017	2016	2015
Grey cement sales	2.51	1.85	1.71
Ready-mixed concrete sales	0.13	0.11	0.09
White cement sales	0.001	0.002	0.003

<sup>4</sup>The figures include the Italian companies of the Cementir Italia Group, which were sold on 2 January 2018.

## How cement is made

Cementir Group'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".

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 2017 Cementir Holding distributed worldwide around 10.5 million tons of grey cement and over 2.3 million tonnes of white cement of various types and classes, produced in 18 plants located in Denmark, Belgium, Italy, Turkey, Egypt, China and Malaysia.

To reach these levels of production, the Group's main purchases were for the raw materials used in the mixture to make 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 and ships, which inevitably have an impact on the environment in terms of emissions and traffic generated.

In 2017, incoming materials and outgoing products were transported mainly by motor vehicles. However, the plants in Aalborg, Guarain, Al Arish, Izmir, Ipoh, Anqing and Taranto, and a Unicon ready-mixed concrete production plant in Norway, also used transport by ship, capitalising on their location near to ports.

Due to its 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:

1. Combining incoming and outgoing activities using the same lorries;
2. optimising the network of logistics services performed by third parties, including by using modern shipping technologies;
3. optimising the use of lorries to transport a higher volume of products, as has taken place in the ready-mixed concrete sector;
4. upgrading the fleet of vehicles used in logistics to replace the most outdated ones, with the aim of reducing consumption;
5. Identifying alternative and/or intermodal methods of transport.

## Leader in white cement

The Cementir Group is the world's leading producer and exporter of white cement, with production facilities located on four continents and a production capacity of over 3 million tons.

The Group markets its white cements in more than 70 countries worldwide under the global product brand AALBORG WHITE. Production plants are located in Denmark, Egypt, Malaysia, China and the United States (in partnership with other companies). The Group also owns the largest white cement production facility in the world based in Egypt.

Constant investment in innovation of industrial processes and raw materials of the finest quality, have contributed to the current positioning of the Group as the global leading player in white cement. Cementir Group's production facilities benefit from being located close to large resources of high-purity limestone and other key raw materials needed for the special production of white cement. The state-of-the-art plants enable the Group to produce with consistent chemical features, uniform white colour and high mechanical performance.

In addition to the consistency and high performance of the products, Cementir Group supports its partners by providing value-adding services into the customers' supply chain, extensive technical and customer support, and potential cooperation in developing new applications using white cement.

The Management has clearly identified the need to strengthen its leadership and further develop white cement as a key strategic pillar in the current 2017-2019 business plan, leveraging on a unique competitive position with its global widespread. By being directly present in key markets, Cementir benefits from a diversified customer base in terms of size, business, culture, tradition and technological levels.

### **Pursuing innovation: the ‘In White’ project**

The Group aims at differentiating its value proposition on white cement globally, by re-defining and developing sustainable solutions that will support the growth of its clients’ business through customized services, knowhow sharing, advisory and strategic partnering. Assessing mega trends in the Society and specifically in the construction industry, as well as understanding the “Voice of Customer” and the “Jobs to be Done”, Cementir wants to challenge the traditional way of looking at white cement as mainly an aesthetic and architectural building material. There is an untapped potential to further develop the customers’ business with white cement that, as a global leader, Cementir has to make available to its partners.

Cementir Group has established a global innovation engine for white cement, InWhite, with the purpose of generating a prioritized and actionable pipeline of high potential customer value proposition global initiatives, bringing new solutions for well-known applications, or completely new applications for white cement based products.

InWhite benefits from the Group’s global knowledge on both well-established and emerging applications for white cement and technical knowhow of its internationally acclaimed Research and Quality Centre located at Aalborg, Denmark. It is aligned to megatrends detected in the society, such as customization, circular economy and high-energy efficient and sustainable solutions.

### **The sustainable applications of AALBORG WHITE cement**

The technical characteristics of the white cements in the Cementir Group are unique on the market. AALBORG WHITE® is already used for many applications like dry mix products, tiles, artificial stones, precast concrete elements, terraces, etc.

Some emerging, but rapidly expanding applications for AALBORG WHITE® cement, are related to the chemical purity and excellent mechanical properties of concrete made with advanced production technologies, like e.g. UHPC (Ultrahigh performance concrete) and GRC (Glass Fibre Reinforced Concrete).

Such technologies are fully supporting the megatrends in society, including:

- Low specific weight per m<sup>2</sup>;
- Reduced thickness to enable more efficient use of the interior spaces of the building;
- Surfaces produced in a single process to avoid additional treatments;
- Modular and combinable for reuse of materials.

AALBORG WHITE® is also here reinforcing its leading position, enabling the best-in-class performance of the finished concrete products.

The whiteness of the cement provides further value-adding contributions to the Society, such as thermal comfort of homes and energy saving. Light-coloured surfaces reflect the sunlight more efficiently than dark ones. Providing more reflective surfaces (such as light-coloured roofs, walls and pavements) will result in more energy reflected and consequently lower the temperature in buildings, reducing the need of artificial cooling. High reflection surfaces as e.g. obtained by white cement plasters, panels and floorings, will also reduce the need for artificial lighting in tunnels, industrial warehouses, etc., contributing thereby to energy saving. Cement plaster or panels reduce the need for artificial lighting in tunnels, contributing therefore in energy saving.

The light-reflecting property of white concrete integrated in the road environment as kerbs, tunnel ramps, pavement and road barriers has also proven to increase traffic safety. The white surface of road barriers increases visibility and improves safety compared to barriers made with steel or painted grey cement, because these white barriers maintain a bright colour under wet and dark conditions.

### **Developing UHPC (Ultra-High Performance Concrete)**

The use of the term UHPC without any further clarification could become misleading. Many acronyms are used to categorise cement-based composites with very high compressive strength. Originally, the term UHPC was introduced to differentiate from high performance concrete (HPC), thereby introducing a compressive strength higher than 140-150 MPa. Most of such concrete includes fibre to add ductility, and are therefore usually characterized as UHPFRC (ultrahigh performance fibre reinforced concrete).

In real life, most UHPC or UHPFRC based products and commercially available premixes (both with and without fibres) have a compressive strength level of around 110 MPa or higher (Eurocode cylinder). Higher compressive strengths are rarely needed, as high tensile capacity, high durability, low water permeability and high workability, etc. become more decisive parameters.



Providing significantly higher strengths than this will result in the use of special aggregates not available locally, adding high costs on the production. Although UHPFRC, in its strict definition, may be required for some special applications will be well-covered by compressive strength levels of approximately 110 MPa or higher.

A global tendency that has been observed, and is aligned with the earlier mentioned megatrends in society, is the development of new market possibilities during recent years based on advanced aesthetic UHPC based cladding/rain-screen systems and integrated prefabricated façade panels. In terms of volume growth, these types of application are expected to lead the development of global consumption of UHPC.

The Research and Quality Centre in Aalborg, Denmark is intensively designing, testing and documenting new binder formulations to meet requirements and challenges revealed through our global reach and strong customer relations. This represents some of the first steps towards a further global spread on the use of UHPC and UHPFRC exploiting AALBORG WHITE® within InWhite.

### **Supporting GRC (Glass-Fibre Reinforced Concrete)**

Glass Fibre Reinforced Concrete is one of the most versatile building materials available to architects and engineers. Composed primarily of cement, sand and special alkali resistant (AR) glass fibres, GRC is a thin (down to 10-15 mm), high strength and environmentally friendly composite with many applications in construction. It has a flexible ability to meet performance, appearance and cost parameters.

The technology was developed in the seventies. However, the global low focus on architectonic value of buildings in the period from 1970-2000 limited its use to markets with very low costs of labour. The material and the technology around it, has now matured into a great potential to serve very high and complex requirements in society, that by far outweigh the relatively higher production costs, following the high extent of craftsmanship.

The Group, among other memberships, has joined the International GRC Association from 2016, to co-lead and play an active role in supporting the future development of this technology. This membership is coherent with the strategic intent to focus on developing market/customer driven technologies and applications for AALBORG WHITE®.

During the last year, and as part of an ongoing activity within InWhite, Cementir Group has initiated an extensive global study on the challenges and possibilities for the use of this technology through, among others, interviews and visits to customers and decision makers globally, to reveal key focus areas for the further expansion of the use GRC.

Furthermore, the Group started extensive innovation programs in the Research and Quality Centre in Aalborg, Denmark to further develop the technology itself and its

application, with the purpose of providing knowledge and assistance to the customers globally, facilitating and supporting thereby their growth.

## The Group's other products

### 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 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.

### Production of ready-mixed concrete

**In 2017, Cementir Holding produced and distributed 4.9 million cubic metres of ready-mixed concrete** of all types and classes. Ready-mixed concrete is a widely-used material in construction and is obtained by mixing cement (around 36%) with aggregates such as sand and gravel (around 32%), water and any admixtures (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 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 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 Belgium and Scandinavia, Cementir Holding is also active in the production and distribution to third parties of aggregates. **Aggregates are rocky materials such as gravel, sand and crushed rock 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.

## Customer management

### Towards direct relationship-building

The Group has developed its own more direct, closer and more "local" business model, to improve customer support and understanding of their needs, and to build stable relationships so that the Group can better understand needs, business opportunities and innovation. The Group continues to grow internationally but remains focused on individual customer needs in local and regional markets around the world.

The strategic intention of having direct engagement with customers is well established in Europe and in most of the national markets in other regions (including Egypt, China, Australia, Malaysia), where the Group is working and partnering with industrial customers.

Close proximity and a synergistic approach - aimed at managing customers through various coordinated contact points (sales and marketing, supply chain, customer service, technical service, laboratory, etc.) - improves the Group's visibility in the customer value chain.

All of this is essential to allow the Group to offer a differentiated and tailor-made value proposition, ranging from products to value-added services (complete logistics management, online software tools, web-ordering, dedicated testing programs, etc.), as well as co-development and innovation initiatives.

Targeting industrial users and the main decision-makers in the construction sector, the Group has developed services and mobilised resources and expertise to provide a holistic view of both cost and environmental impact, thereby enabling customers to identify how best to optimise performance. Cementir values these close and reciprocal relationships, which are based on a common desire to find the most sustainable and cost-effective solutions to solve complex challenges in material production and construction.

The Group exports to over 70 markets and is trying to further develop its direct approach with white cement customers so as to further enhance the Group's stable and sustainable position on the market. This strategic roadmap was launched in recent years, with the aim of exploiting the full potential of structured and direct customer management. The Group has developed a comprehensive local sales and logistics network in more than 20 countries.

### **A new perspective: hearing the Voice of Customers and measuring performance**

While operating in a fairly traditional sector, the Group has moved towards a more customer-centric approach. The process started internally as a complex change management initiative, for which management and teams received extensive training and were rewarded based on customer-driven goals and initiatives using "lean" tools.

Customer Relationship Management (CRM) models and systems have been fully implemented in the Europe and Asia-Pacific regions. Today, most sales and marketing teams use CRM worldwide to track, measure and develop the quality and results of each individual customer relationship, including to anticipate their needs and business opportunities.

Listening to and understanding the Voice of Customers is a fundamental approach that begins with day-to-day customer management through each product delivery and extends into more sophisticated and customised activities. The approach aims to respond effectively and quickly to customers' needs and the problems that arise from feedback throughout the relationship with the customer; its further objective is to integrate the understanding of customer needs into business processes and to use their feedback to build long-term strategies, inspire business decisions and promote continuous improvement.

In addition to some transactional surveys and "informal" monitoring of relationships as part of the entire Group's day-to-day business, in Europe, Malaysia and China, the Group also conducted a Customer Survey (annually or biennially depending on the business and market) to investigate a number of issues from an external point of view, including: product quality, services, innovation, relationships, sales processes, after-sales service and technical support. The results of this Survey enable the Group to focus

even more on the customer in commercial operations. The Group uses these important results to develop plans to optimise its value proposition and to further improve customer satisfaction. The Survey also identifies areas to be improved and oriented towards strategic inter-functional, inter-company and inter-regional initiatives, some of which are incorporated in the Strategic Project Portfolio in the three-year Business Plan.

Among other indicators, Cementir has started to apply the Net Promoter Score (NPS) methodology in Europe from 2014 and it will be developed in the Asia-Pacific Region in 2018. This methodology allows direct dialogue with customers in order to continuously improve customer experience and to strengthen their loyalty. The latest results for 2017 show an NPS of 58 for the export of white cement to Europe (with a slight improvement compared to the previous 53), rising to 65 in Denmark (showing a good progression compared to the previous 60).

### 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 seize this opportunity and **since 2009 has been operating in the renewable energy and urban and industrial waste management and processing sector**. These operations are conducted through the company Recydia, which owns the Hereko and Sureko businesses in Turkey, and Neales Waste Management 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 tons 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 used at the Izmir plant.

**NWM Holding**, through its subsidiaries Neales Waste Management Ltd and Quercia, is one of the leading providers of hazardous and non-hazardous waste treatment, recycling and disposal services in the North West of England.

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 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.

### Waste processed in 2017

In 2017 the Group's plants collected and processed 387 thousand tons of waste: 48% solid urban waste and 52% industrial waste. The majority of industrial waste was collected by the British companies Neales Waste Management and Quercia; the municipal waste was mainly collected by the Turkish companies Hereko and Sureko.

Waste processed	Units	2017	2016	2015
Solid urban waste	t	184,551	442,878	462,182
Industrial waste	t	202,880	151,803	117,596
<b>Total</b>	<b>t</b>	<b>387,431</b>	<b>594,681</b>	<b>579,778</b>

In 2017, around 10,000 tons of material were recycled at the Group's plants using mechanical selection and processing - a 52% decrease compared to 2016. This contraction is linked to the decrease in the amount of solid urban waste collected.

Recycled material produced		2017	2016	2015
	Units			
Ferrous material	t	2,853	4,294	3,862
Plastic	t	3,839	4,948	19,640
Aluminium	t	857	902	831
Other materials	t	2,672	11,369	5,424
<b>Total recycled material produced</b>	<b>t</b>	<b>10,221</b>	<b>21,513</b>	<b>29,757</b>

Through biomechanical and drying processes, the Cementir Group's treatment plants produced a total of 88,000 tons of fuel from waste in 2017 - a decrease of 8% compared to 2016. Of this, 24% was Refuse Derived Fuel (RDF) and 76% was Solid Recovered Fuel (SRF).

Alternative fuel produced	Units	2017	2016	2015
Refuse-derived fuel	t	21,266	27,878	24,905
Solid recovered fuel	t	67,565	68,566	83,341
<b>Total alternative fuel produced</b>	<b>t</b>	<b>88,831</b>	<b>96,444</b>	<b>108,246</b>



## Our principles

### The Corporate Governance system

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, 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](http://www.cementirholding.it) in the Investor Relations section.

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

In 2008 the Cementir Group adopted an **Organisation, Management and Control Model** in accordance with Italian 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.

### **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, with the support of the Control and Risks Committee, has adopted and periodically updates the Guidelines for the Internal Control and Risk Management System and the Risk Management Policy.

The Risk Management Policy covers the identification, assessment and management of the main business risks for all group companies. As such, it has established a consistent method for managing risk across the Group by ensuring that:

- significant risks are identified, understood and visible to management throughout the Group, as well as to the Board of Directors;
- these risks are assessed by identifying their impact and their probability according to standard and uniform criteria;
- reasonable measures are taken - including in terms of the cost/benefit ratio - to control risks that could threaten the organisation's assets, ability to generate income or the achievement of operational objectives.

Risk management roles and responsibilities have been defined, starting from the company's Board of Directors which defines the strategy, policy and risk appetite, supported by the Control and Risks Committee, and involving the management of the group companies who are responsible for risk management within their area of responsibility. The Risk and Compliance department is responsible for the development and maintenance of the risk management system, coordinates group-level risk management and is responsible for reporting to the management and Boards of Directors of Group companies.

The Internal Audit department is responsible for independent auditing of the risk management system and providing an annual opinion on its effectiveness.

All Group companies have implemented the aforementioned risk-management methodology by identifying, evaluating and managing the main risks. Management periodically updates and monitors risk, including associated with basic assumptions and new emerging risks, in order to promptly identify exposures.

## The Code of Ethics

Cementir Holding has adopted a **Code of Ethics**<sup>5</sup> endorsing the **business 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](http://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.

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<sup>5</sup> To download the document, use the following [http://www.cementirholding.it/fileutente/Cementir-Group\\_Code-of-Ethics\\_English-cda-26-07-2013.pdf](http://www.cementirholding.it/fileutente/Cementir-Group_Code-of-Ethics_English-cda-26-07-2013.pdf)

## Integrity and competition

The Cementir Group sees integrity and competition as fundamental principles, especially in view of the specific risks that characterise the cement and ready-mixed concrete production sector. The Group's Code of Ethics is the reference document that sets out the rules of conduct that everyone at the Group and who works with it must follow. The Legal Department - also through the Risk and Compliance Function - implements targeted programmes with guidelines, procedures and training to ensure compliance with the relevant regulations.

Alongside the Code of Ethics, within the individual regions specific programmes and procedures have been adopted to ensure that these risks are mitigated and that companies operate correctly. Training programmes are periodically conducted, which the Group organises to maintain a constantly high level of focus on this matter.

### Cementir Holding antitrust programme

The Antitrust Code of Conduct - to which Company management attaches great importance - is part of a wider antitrust compliance programme and reflects the corporate culture and principles that have always characterised the activities of the Company and the Cementir Group. The Company firmly believes that a competitive market is important for businesses and consumers, and has always been committed to operating independently from its competitors, relying on its skills and expertise - and on the high quality of its products.

By adopting the antitrust compliance programme, the Company aims to inform all employees and executives about its values and respect for competition law and all regulations applicable to its activities, and also commits to organising specific training events on the subject.

The antitrust compliance programme - and in particular the "Antitrust Code of Conduct" - focuses on monitoring and periodic audit procedures to ensure constant oversight of adequacy and correct implementation, as well as updating of the programme, in order to take into account regulatory and/or legal developments.

On 7 August 2017, upon completion of an investigation, the Italian Antitrust Authority ("Authority") served the subsidiary Cementir Italia its final decision, imposing an administrative fine of EUR 5,090,000. The Authority found that the parties involved in the proceedings had a single, complex and ongoing arrangement to coordinate cement sales prices across Italy, also supported by a survey of the trend in their respective market shares that was carried out through an exchange of sensitive information facilitated by the industry association AITEC.

Cementir Italia submitted an appeal on 6 October 2017 to the Regional Administrative Court (TAR) of Lazio for the suspension and subsequent cancellation of the final decision of the Authority, claiming it to be without foundation and illogical, in particular because it attributes a series of alleged unlawful actions to the Company without adequate supporting evidence or in some cases total absence of evidence, and because the Authority has not justified its rejection of the detailed explanations given by the Company. On 11 November 2017, the Lazio Regional Administrative Court did not allow the suspension and set the hearing on the merit of the appeal for June 2018.

During 2017, another claim was made against Cimbeton, a subsidiary of Cimentas, which did not result in any fine being imposed.

With reference to a dispute between the Turkish stock exchange's regulatory and supervisory body (Capital Market Board - CMB) and the Turkish company Cimentas AS, indirect subsidiary of Cementir Holding SpA, over the intragroup sale price of an equity investment in 2009, in which the CMB called on Cimentas AS to demand Cementir Holding SpA and any other companies involved in the Cementir group to pay back around EUR 100 million Turkish Lira (now equal to around EUR 27 million), we note that the request for a suspension of the decision challenged by Cimentas, which was accepted by Ankara Administrative Court on 26 May 2015, was subsequently rejected by Ankara Regional Administrative Court on 6 August 2015 for entirely procedural reasons. A decision on the action for dismissal brought by Cimentas AS is still pending on the merits. On 29 January 2017, CMB served a summons to Cementir Holding to appear before the Court of Izmir, requesting that the company be ordered to pay to Cimentas AS an amount provisionally set at approximately 1 million Turkish Lira. Cementir Holding SpA duly appeared in court, arguing the total lack of foundation of the plaintiff's argument, both procedurally and on merit, and in any case has requested that the civil proceedings be suspended until the administrative proceedings are settled. In the unlikely event that this administrative action is rejected, the issue would in any case solely be relevant between companies of the Cementir group.

## Commitment to combating corruption

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 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. Disciplinary measures, sanctions and other consequences also apply in the case of non-compliance with the policy.

The main objective of the internal policy is to provide a consistent approach to the fight against corruption throughout the Group, in order to ensure that companies operate according to Group values, so as to preserve the reputation of individual companies and ensure compliance with applicable laws.

A compliance programme on corruption laws and in particular the UK Bribery Act was established during 2016. As well as covering the anti-corruption policy, the programme also sets out a procedure regulating gifts and hospitality, an assessment of corruption risk, due diligence on third parties and a training and education plan. The programme was rolled out beginning with the subsidiaries in Turkey in 2016 and extended during 2017 to various group companies, including Aalborg Portland Anqing, Aalborg Portland Malaysia, Sinai White Cement and CCB. The project is currently being implemented in the Nordic and Baltic region and will be extended to Cementir Holding in 2018.

Anti-corruption 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 online training about corruption, available in English and in the most spoken languages of the Group.

This training initiative is to be extended to employees working in joint ventures or "mixed" companies and will also cover subjects such as national and international laws, directives, relevant regulations and associated standards. The aim is to enable participants to identify and manage the operational risk that corruption poses to the Group. The courses also involve in-depth examination of the key aspects of the Code of Ethics, anti-corruption 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.

A Whistleblowing system has been in place since 2013, which can be used to report violations of the principles and rules set out in the Code of Ethics, Model 231, and the policies adopted by the Group, or simply to report non-compliance with laws and regulations. Cementir Holding's Head of Internal Audit receives the reports, analyses them and initiates checks. Complaints must be properly detailed so as to identify the persons involved and their violations. They can be submitted by post, email or by calling the dedicated line (operated by an independent third-party operator).

During 2017, there were no incidents of corruption involving the Cementir Group.

## 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, the Group's 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 document 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.

- 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**

## **In waste, we see resources: we promote a circular economy**

*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.*

### **Risk analysis and pursued policies**

Price volatility in traditional fuel markets - combined with the theoretical risk of unavailability of these fuels and the need to reach increasingly stringent emission targets - are the main risks that the Group sees with regard to energy supply. In view of these risks, companies with high energy needs such as those operating in the cement production sector, are driven to adapt their production cycle to more sustainable business models. The depletion of resources is not just a risk solely for the supply of fuels for the production process, but also with respect to the use of non-renewable raw materials such as limestone, clay and aggregates used as materials in the production of cement and ready-mixed concrete.

The Cementir Group is a pioneer in the use of raw materials and alternative fuels originating from urban and industrial waste and by-products, within the limits set by laws and technical regulations on the production of cement and ready-mixed concrete.

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.

### **Use of alternative fuels**

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 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.



**16.8% alternative fuel**

Used for thermal energy production in place of non-renewable fossil fuels

**10.6%**

Alternative raw materials used in the mix for cement production

**88,000 tons**

Refuse-Derived Fuel (RDF) and Solid Recovered Fuel (SRF) generated by Group waste treatment facilities in 2017

In the last year, the replacement rate of fossil fuels has grown in line with the last three years, so that now almost 17%<sup>6</sup> of the thermal energy **needed in the cement production process is generated from alternative fuel**. About 70% of the alternative fuel used by the Cementir Group is RDF and SRF. The increase in fuel consumption - whether fossil or alternative - is due to the addition of the Belgian to the reporting boundary and to the increase in production recorded during 2017.

Fossil fuel consumption for cement production					Cementir Italia
Type	Units	2017	2016	2015	2017
Coal	GJ	5,949,966	2,850,913	2,504,089	217,675
Petroleum coke	GJ	22,175,005	20,787,274	17,917,221	5,598,397
Fuel oil	GJ	575,372	1,473,827	2,438,170	38,514
Lignite	GJ	815,670	428,666	414,259	-
Natural gas	GJ	-	-	-	126,831
Gas oil	GJ	83,718	64,449	55,689	-
<b>Total consumption</b>	<b>GJ</b>	<b>29,599,731</b>	<b>25,605,128</b>	<b>23,329,428</b>	<b>5,981,418</b>

<sup>6</sup> This percentage also includes data on plants in Belgium that were acquired in 2016 and were not included in the reporting boundary of the previous Sustainability Report. Excluding the contribution from Belgium, this percentage would be 13.8%. These figures do not include the results of Italian plants sold during the year, so that the information can be presented on like-for-like basis in the next reporting cycle. The figures on the Cementir Italia plants are, in any case, representative.

Alternative fuel consumption for cement production					Cementir Italia
Type	Units	2017	2016	2015	2017
Used oil	GJ	235,233	145,959	176,644	-
Rubbers and plastics	GJ	28,436	-	-	-
Tyres	GJ	8,848	-	-	-
Paper/cardboard/wood	GJ	289,946	-	-	-
Meat and bone meal	GJ	802,175	245,854	240,637	-
Dry sewage sludge	GJ	262,277	251,388	144,989	-
RDF and SRF	GJ	4,284,410	3,244,605	2,842,911	69,428
Seeds	GJ	86,209	0	0	-
<b>Total consumption</b>	<b>GJ</b>	<b>5,997,533</b>	<b>3,887,806</b>	<b>3,405,181</b>	<b>69,428</b>

Over the last year, the fossil fuel replacement index has benefited from the addition of CCB to the Group; the increase is also linked to the lower thermal energy needed to produce cement.

Fossil fuel replacement index	Units	2017	2016	2015
% of fossil fuel replacement	%	<b>16.8</b>	<b>13.2</b>	<b>12.7</b>

## Group synergies

The majority of Cementir Holding's use of alternative fuels takes place at the plants in Aalborg in Denmark and Trakya and Izmir in Turkey, which alone use 71% of the total alternative fuel used by the Group. This is because, in some countries (Turkey and United Kingdom), the **Group integrates the operations of its cement business with those of the management and recycling of waste**. These plants have cutting-edge technologies for harnessing alternative fuels, and make use of a part of the waste recovered at the Neales Waste Management and Hereko company plants. In Kömürcüoda, Istanbul, the Cementir Group made a major investment to provide Hereko with equipment to generate fuel from municipal solid waste for use at its cement plant in Trakya 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). This investment has enabled a constant increase in the use of alternative fuel in the production of thermal energy in the plants in Turkey, while at the same time reducing the use of traditional fuels (in both the main cement production plants in Turkey, Izmir and Trakya, the use of alternative fuel, partly derived from waste, has grown by 3% over the last three years).

### 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 milled 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 2017, the Cementir Group's cement production plants used a total of around 16 million tons of materials for cement production, a slight increase compared to the previous year, not considering operations in Belgium. In this reporting boundary, around 7.2% of the materials used are of recycled origin. Including the plants in Belgium, the amount of materials used increases significantly, but the percentage of recycled materials used rises to about 10.6%.** The main types of alternative materials used in the mix for cement production are fly ash, blast-furnace slag and other sub-products deriving from the quarrying activities at the CCB plant in Belgium. In all cement production plants, there was an increase in the use of recycled materials in production.

Raw materials used in cement production	Units	2017	2016	2015	Cementir Italia 2017
Non-renewable raw materials	t	14,495,156.76	11,935,165.34	11,008,537.15	3,153,801
Renewable raw materials	t	1,535,045.84	815,446.94	713,291.59	305,969
<b>Total</b>	t	<b>16,030,202.60</b>	<b>12,750,612.27</b>	<b>11,721,828.74</b>	<b>3,459,770</b>
Renewable raw materials as a percentage of total raw materials used	%	<b>10.6</b>	<b>6.8</b>	<b>6.5</b>	<b>9.7</b>

<b>Non-renewable raw materials Cement production</b>	<b>Units</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>Cementir Italia 2017</b>
Limestone	t	11,985,887	9,495,304	8,568,211	1,706,600
Clay	t	1,073,574	1,027,463	1,003,271	305,335
Gypsum	t	346,553	296,090	272,009	43,272
Marl	t	558,755	514,298	543,195	1,035,876
Sand	t	294,247	270,082	258,441	-
Trass/pozzolan	t	158,954	193,521	200,375	53,648
Additives	t	16,853	15,103	14,279	9,070
Auxiliaries	t	782	85	68	-
Calcium fluoride	t	3,834	3,761	3,691	-
Bauxite	t	7,229	14,889	19,061	-
Iron ore	t	48,490	104,570	125,937	-
<b>Total</b>	<b>t</b>	<b>14,495,157</b>	<b>11,935,165</b>	<b>11,008,537</b>	<b>3,153,801</b>

<b>Renewable materials Cement production</b>	<b>Units</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>Cementir Italia 2017</b>
Fly ash	t	596,325	488,608	451,019	5,138
FGD gypsum	t	90,672	73,683	71,716	55,854
Iron oxide	t	123,958	70,114	65,410	34,991
Slag	t	290,908	4,976	5,140	161,346
Recovered limestone	t	225,397	52,899	57,479	-
Waste Excavated Soil (clay)	t	121,555	26,187	11,868	-
Other materials	t	86,231	98,980	50,659	48,640
<b>Total</b>	<b>t</b>	<b>1,535,046</b>	<b>815,447</b>	<b>713,292</b>	<b>305,969</b>

In 2017, Cementir Group plants producing ready-mixed concrete used a total of 10 million tons of raw materials. Of these, 2% of the total raw materials used were alternative raw materials. The main type of alternative raw materials used were fly ash and microsilica.

Raw materials used in the production of ready-mixed concrete	Units	2017	2016	2015	Cementir Italia 2017
Non-renewable raw materials	t	9,884,071	8,429,100	7,831,965	272,690
Renewable raw materials	t	172,944	219,154	184,618	-
<b>Total</b>	<b>t</b>	<b>10,057,016</b>	<b>8,864,254</b>	<b>8,016,583</b>	<b>272,690</b>
Renewable raw materials as a percentage of total raw materials used	%	2%	3%	2%	0%

Non-renewable raw materials Ready-mixed concrete production	Units	2017	2016	2015	Cementir Italia 2017
Limestone	t	2,054	1,222	1,005	
Sand	t	3,177,284	2,254,385	2,150,838	-
Additives	t	20,430	21,494	17,983	78
Auxiliaries	t	1,852	0	0	-
Cement	t	1,424,517	1,232,698	1,242,320	37,653
Stones	t	5,257,934	4,919,301	4,419,819	-
Clay	t	-	-	-	44
Aggregates	t	-	-	-	234,915
<b>Total</b>	<b>t</b>	<b>9,884,071</b>	<b>8,429,100</b>	<b>7,831,965</b>	<b>272,690</b>

Renewable materials Ready-mixed concrete production	Units	2017	2016	2015	Cementir Italia 2017
Fly ash	t	159,000	205,921	167,294	-
Microsilica	t	13,944	13,233	17,324	-
Other materials	t	-	-	-	-
<b>Total</b>	<b>t</b>	<b>172,944</b>	<b>219,154</b>	<b>184,618</b>	<b>-</b>

Finally, there are the raw materials used for the Group's other production activities (mainly manufacture of aggregates and prefabricated products). Consumption of raw materials and materials is far lower than in the rest of the business (about 5 million tons) and there are no activities involving the use of recycled materials, except for the production of aggregates by CCB, which use a certain amount (1,630 tons) of fly ash.

Non-renewable raw materials Other production operations	Units	2017	2016	2015
Limestone	t	5,025,899	0	0
Sand	t	47,225	21,858	29,320
Additives	t			
Auxiliaries	t	11	0	0
Cement	t	12,376	7,354	9,714
Stones	t	23,044	16,772	22,036
Steel	t	1,877	1,510	2,531
<b>Total</b>	<b>t</b>	<b>5,110,432</b>	<b>47,494</b>	<b>63,601</b>

### 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 minimise 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.

### Life in Quarries Project<sup>7</sup>

Exploiting a quarry leads to the creation of environments which have become rare in Belgium, such as cliffs, rocky or sandy surfaces, rock slides, temporary stretches of water, chalk landscapes or permanent grasslands. These habitats, generated by mining activity, are deemed of major interest for ecosystem and enable the development of populations of pioneer species with a high biological value. Quarries can play a fundamental role in regulating green infrastructure in landscapes. In particular, when they are located in areas near urban centres, they can constitute important green corridors that animal species can use as transition zones (especially in the case of migratory species).

The objective of the Life in Quarries project is to develop a methodology that makes it possible to optimise the biodiversity hosting capacity of quarries in Belgium. The project aims to implement biodiversity management measures during quarrying through dynamic management, and to rehabilitate the quarry at the end of extraction in order to stabilise the habitat.

The Life in Quarries project is led by FEDIEX, the Belgian Mining Industry Federation, in collaboration with the Department of Nature and Forests of the Walloon Region, the University of Liège - Gembloux Agro-Bio Tech, the Natagora Association and the Pianure de l'Escaut Natural Park.

<sup>7</sup> <http://www.lifeinquarries.eu/en/project>

It is funded by the European Commission (56%) through the Life programme, the Walloon Region (20%), the quarry sector (21%) and partners (3%), with a total budget of EUR 5 million. The co-financing is essential for the implementation of the various actions spread over 4 years and several quarry sites in the project, including the CCB sites in Guarain (cement production plant and quarry) and Clypot (quarry).

### Waste produced

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.

Waste generated by destination Cement production	Units	2017	2016	2015	Cementir Italia
Non-hazardous					
Recycling	t	120,152.9	136,221.4	89,019.1	16,762.0
Incineration	t	1,021.1	471.3	1,177.5	
Landfill	t	94,659.2	8,168.2	47,393.9	28.0
<b>Total non-hazardous waste</b>	<b>t</b>	<b>215,833.2</b>	<b>144,860.9</b>	<b>137,590.5</b>	<b>16,790.0</b>
Hazardous					
Recycling	t	641.9	254.3	226.2	32.0
Incineration	t	61.6	0	0	-
Landfill	t	123.0	91.0	78.1	-
<b>Total non-hazardous waste</b>	<b>t</b>	<b>826.5</b>	<b>345.3</b>	<b>304.3</b>	<b>32.0</b>
<b>Total waste</b>	<b>t</b>	<b>216,659.7</b>	<b>145,206.2</b>	<b>137,894.8</b>	<b>16,822.0</b>
Waste generated by destination Ready-mixed concrete production	Units	2017	2016	2015	
Non-hazardous					
Recycling	t	199,826.5	136,172.9	147,721.1	
Incineration	t	244.9	400.0	325.0	
Landfill	t	40,406.9	35,166.9	42,554.0	
<b>Total non-hazardous waste</b>	<b>t</b>	<b>240,478.3</b>	<b>171,739.8</b>	<b>190,600.1</b>	
Hazardous					
Recycling	t	23.5	8.3	7.4	
Incineration	t	1.3	2.6	0.9	
Landfill	t	128.4	145.9	89.1	
<b>Total non-hazardous waste</b>	<b>t</b>	<b>153.1</b>	<b>156.6</b>	<b>97.4</b>	
<b>Total waste</b>	<b>t</b>	<b>240,631.4</b>	<b>171,896.4</b>	<b>190,697.5</b>	

Waste generated by destination Other	Units	2017	2016	2015
<b>Non-hazardous</b>				
Recycling	t	44.0	0	0
Incineration	t	34.2	0	0
Landfill	t	60.0	60.0	60.0
<b>Total non-hazardous waste</b>	<b>t</b>	<b>138.1</b>	<b>60.0</b>	<b>60.0</b>
<b>Hazardous</b>				
Recycling	t	123.2	0	0
Incineration	t	6.3	0	0
Landfill	t	6.8	0	0
<b>Total non-hazardous waste</b>	<b>t</b>	<b>136.3</b>	<b>0</b>	<b>0</b>
<b>Total waste</b>	<b>t</b>	<b>274.4</b>	<b>60.0</b>	<b>60.0</b>



## **We respect the environment in all our operations**

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

### **Risk analysis and pursued policies**

In addition to the risks described in the previous paragraph, the cement production process is associated with environmental impacts in terms of atmospheric emissions, mainly carbon dioxide, dust and nitrogen and sulphur oxides. In European countries where the Group operates, there is a risk posed by governmental decisions on emissions and fluctuations in the price of CO<sub>2</sub> emission allowances (set by the European Union's Emission Trading System - EU ETS), especially in the medium to long term. These annually permitted emission allowances are also being discussed in other countries where the Group operates, in particular China, where the introduction of a system comparable to the European one was planned for 2017 but has been postponed.

To mitigate these risks, the Group constantly monitors its emissions and compliance with regulations, planning the availability of CO<sub>2</sub> emission allowances.

In addition, 11 of the Group's 13 cement production sites have adopted a UNI EN ISO 14001 certified management system, so Management sets objectives and commitments for the continuous improvement of performance in the various Environmental Policies adopted, based on the main environmental impacts identified. As well as aiding in constant performance monitoring, the systems also establish management procedures and operating instructions to guide plant operations.

Given the characteristics of the production process, the products processed and the regulatory framework, the Group's plants' number-one priority in their environmental policies is to gradually but continuously replace traditional fuels to reduce emissions generated by the production process.

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).

List of Group plants certified ISO 14001					
Cement production		Ready-mixed concrete production		Waste management and processing	
Aalborg	x	Unicon Denmark		Sureko	x
Anqing		Unicon Norway	x	Hereko	x
Ipoh	x	CCB		Neales	x
Edirne	x	Cimbeton			
Elazig	x	AB Sydsten			
Izmir	x				
Kars	x				
Guarain	x				
Al Arish					
Arquata Scrivia	x				
Maddaloni	x				
Spoletto	x				
Taranto	x				

### Commitment on climate change and energy consumption

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<sub>2</sub> 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<sub>2</sub> 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.

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

### 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 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 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.**

**In 2017, the cement production plants used 35,597,264.92 GJ of thermal energy and 5,997,533.44 GJ of electricity.** The increase in consumption was due to the addition of the Belgian plants to the reporting boundary, which were excluded from the previous reporting cycle (and for which only 2017 data are available). Excluding Belgium - and therefore on like-for-like basis - energy consumption grew by 5% due to higher production during 2017. However, energy intensity indexes remained almost stable, with a total energy consumption coefficient per ton of cement produced of 3.83 GJ/tTCE (figure includes consumption for plants in Belgium).

Energy used in cement production					Cementir Italia 2017
Type	Unit	2017	2016	2015	
Thermal energy	GJ	35,597,264.92	29,492,934.14	26,734,608.84	6,050,845.53
<i>of which: from alternative fuel</i>	GJ	5,997,533.44	3,887,806.17	3,405,180.54	69,428.00
Thermal energy sold	GJ	1,449,809.00	1,199,988.00	1,214,257.00	-
Electricity	GJ	4,527,158.42	3,437,152.21	3,210,118.23	54,556.31
Total energy	GJ	38,674,614.34	31,730,098.34	28,730,470.08	6,105,401.84
Thermal energy per t of Total Cement Equivalent	GJ/tTCE	3.38	3.58	3.47	2.57
Thermal energy produced by alternative sources per t of Total Cement Equivalent	GJ/tTCE	0.59	0.49	0.46	0.03
Electricity per t of Total Cement Equivalent	GJ/tTCE	0.45	0.43	0.44	0.02
Total energy per t of Total Cement Equivalent	GJ/tTCE	3.83	4.02	3.91	2.59

The Aalborg production plant has a system for recovering heat from combustion gases used. The thermal energy recovered from the system is used to supply the district heating network of the city of Aalborg, meeting the annual heat requirements of about 36,000 households. During 2017, the heat recovered and sold to the municipality of Aalborg increased by 20%.

The Aalborg plant also has a UNI EN ISO 50001 certified energy management system, which entails a specific energy policy and annual efficiency targets.

Most of the electricity is consumed in the grinding of raw materials and cement at the plant's mills; this makes their optimisation a priority, in order to improve the plant's performances.

**The ready-mixed concrete production plants, which have an energy requirement that is far lower than cement plants, used about 72,000 GJ of electricity and 312,000 GJ of thermal energy.<sup>8</sup> The energy intensity index for these plants was calculated using tons of concrete and aggregates produced during the year as the denominator.**

Energy used in production of ready-mixed concrete					Cementir Italia 2017
Type	Unit	2017	2016	2015	
Thermal energy	GJ	312,127.04	211,577.85	203,385.28	844
Electricity	GJ	72,651.62	67,786.37	62,120.37	1,231
Total energy	GJ	384,778.66	279,364.22	265,505.65	2,075
Thermal energy per t of ready-mixed concrete and aggregates	GJ/t	0.02	0.01	0.01	0.01
Electricity per t of ready-mixed concrete and aggregates	GJ/t	0.006	0.004	0.004	0.01
Total energy per t of ready-mixed concrete and aggregates	GJ/t	0.03	0.02	0.02	0.02

<sup>8</sup> Both figures include the energy consumption of plants in Belgium, which are included in the reporting boundary for the first time and for which only 2017 data are available.

Energy usage in other activities				
Type	Unit	2017	2016	2015
Thermal energy	GJ	237,056.97	56,099.63	65,562.88
Electricity	GJ	96,625.43	43,217.22	44,518.04
Total energy	GJ	333,682.40	99,316.85	110,080.92
Thermal energy per t of product made	GJ/t	0.02	0.16	0.17
Electricity per t of product made	GJ/t	0.01	0.12	0.12
Total energy per t of product made	GJ/t	0.02	0.28	0.28

Energy consumption in the waste management sector has decreased over the three years, while the energy intensity index (calculated using tons of waste collected as the denominator) has remained almost flat.

Energy used in the waste management sector				
Type	Unit	2017	2016	2015
Thermal energy	GJ	35,140.08	35,630.77	40,155.43
Electricity	GJ	29,641.18	51,947.91	68,025.30
Total energy	GJ	64,781.25	87,578.68	108,180.73
Thermal energy per t of waste collected	GJ/t	0.06	0.04	0.05
Electricity per t of waste collected	GJ/t	0.05	0.06	0.08
Total energy per t of waste collected	GJ/t	0.10	0.10	0.13

## CO<sub>2</sub> emissions

The data on CO<sub>2</sub> 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 2017, total CO<sub>2</sub> equivalent emissions (direct and indirect) from the production of cement amounted to 10.8 million tons, and about 92% of these are direct emissions (scope 1).** The increase recorded compared to 2016 is mainly linked to the entry into the scope of reporting of CCB, and to a lesser extent to the increase in annual production.

The emission coefficient per tonne of cement produced in 2017 was 825.8 kilograms per tonne of cement equivalent (Kg/TCE). This figure excludes the activities of Cementir Italia which are reported separately, in consideration of the sale of that business unit. The decrease in the coefficient compared to 2016 is also linked to the entry of CCB into the scope of reporting. Net of its activities, the coefficient is in line with that recorded in the previous year (865.7 kg/TCE)

The table below shows detailed information broken down by direct and indirect emissions, also indicating biogenic emissions, i.e. CO<sub>2</sub> equivalent emissions deriving from biomass combustion. The data for 2017 are representative of the Group's new scope, so they include CCB and exclude the activities of Cementir Italia. The previous two-year period is reported net of CCB and the activities of Cementir Italia.

CO <sub>2</sub> emissions for cement production	Unit	2017	2016	2015	Cementir Italia 2017 <sup>9</sup>
CO <sub>2</sub> eq emissions (Scope 1)	t	7,652,288	6,246,307	5,706,859	1,501,365
Biogenic CO <sub>2</sub> eq emissions (Scope 1)	t	236,350	101,204	82,034	3,968
Coefficient of CO <sub>2</sub> eq emissions (Scope 1)	kg/tTCE	757.2	790.6	774.9	659.9
CO <sub>2</sub> eq emissions (Scope 2)	t	693,356	578,026	547,413	147,913
Biogenic CO <sub>2</sub> eq emissions (Scope 2)	t	63,012	44,283	39,226	9,175
Coefficient of CO <sub>2</sub> eq emissions (Scope 2)	kg/tTCE	68.6	73.2	74.3	65.0
<b>Total CO<sub>2</sub> eq emissions</b>	<b>t</b>	<b>8,345,644</b>	<b>6,824,333</b>	<b>6,254,272</b>	<b>1,649,278</b>
<b>Coefficient of total CO<sub>2</sub> eq emissions</b>	<b>kg/tTCE</b>	<b>825.8</b>	<b>863.7</b>	<b>849.2</b>	<b>724.9</b>

<sup>9</sup> For Cementir Italia, due to the absence of clinker production in 2017 at the Taranto and Arquata plants, the Coefficients of CO<sub>2</sub> eq have been calculated considering the amount of TCE of these plants equal to zero. Indeed, the TCE is an indicator linked to the plant's production of clinker, based on the plant's average clinker/cement ratio.

In the production of concrete, CO<sub>2</sub> equivalent emissions are significantly lower. The Group's performance remained almost constant compared to the previous two years. The increase in the volume of emissions is linked to the entry into the scope of reporting of CCB, net of which the total emissions would have decreased. The emission coefficient, calculated in consideration of the annual production of m<sup>3</sup> of concrete, has decreased.

CO <sub>2</sub> emissions for the production of concrete <sup>10</sup>	Unit	2017	2016	2015
CO <sub>2</sub> eq emissions (Scope 1)	t	37,580	35,294	29,876
Coefficient of CO <sub>2</sub> eq emissions (Scope 1)	kg/m <sup>3</sup>	7.5	8.4	8.1
CO <sub>2</sub> eq emissions (Scope 2)	t	8,391	5,088	5,032
Biogenic CO <sub>2</sub> eq emissions (Scope 2)	t	1,721	1,107	1,074
Coefficient of CO <sub>2</sub> eq emissions (Scope 2)	kg/m <sup>3</sup>	1.7	1.2	1.4
<b>Total CO<sub>2</sub> eq emissions</b>	<b>Kg</b>	<b>45,971</b>	<b>40,383</b>	<b>34,908</b>
<b>Coefficient of total CO<sub>2</sub> eq emissions</b>	<b>kg/m<sup>3</sup></b>	<b>9.2</b>	<b>9.7</b>	<b>9.5</b>

The following are the data relating to CO<sub>2</sub> equivalent emissions of the other productive sectors (manufacture of aggregates, concrete prefabricated products and distribution). The emissions from these activities are residual compared to the other Group activities.

CO <sub>2</sub> emissions for the production of aggregates	Unit	2017
CO <sub>2</sub> eq emissions (Scope 1)	t	17,854
Coefficient of CO <sub>2</sub> eq emissions (Scope 1)	Kg/t	1.0
CO <sub>2</sub> eq emissions (Scope 2)	t	9,750
Biogenic CO <sub>2</sub> eq emissions (Scope 2)	Kg/t	3,241
Coefficient of CO <sub>2</sub> eq emissions (Scope 2)	Kg/t	0.5
<b>Total CO<sub>2</sub> eq emissions</b>	<b>t</b>	<b>27,604</b>
<b>Coefficient of total CO<sub>2</sub> eq emissions</b>	<b>Kg/t</b>	<b>1.5</b>

<sup>10</sup> In 2017, Betontir, a company of the Cementir Italia Group, worked at a reduced rate, so its emissions data are not shown in the table. However, during the year, direct and indirect emissions linked to the company's activities amounted to 165.7 tonnes of CO<sub>2</sub> eq, with an emission coefficient of 1.4 kg/t of produced concrete.

CO <sub>2</sub> emissions for other activities	Unit	Pipe production 2017	Cement dispatch 2017
CO <sub>2</sub> eq emissions (Scope 1)	t	1033	0
CO <sub>2</sub> eq emissions (Scope 2)	t	732	946
<b>Total CO<sub>2</sub> eq emissions</b>	t	1765	946
<b>Coefficient of total CO<sub>2</sub> eq emissions</b>	kg/t	21.7	5.2

Finally, in 2017 the CO<sub>2</sub> equivalent emissions generated by the waste collection and treatment sector decreased. This decrease is due to the reduction in urban waste treatment that occurred during the year.

CO <sub>2</sub> emissions for waste management	Unit	2017	2016	2015
CO <sub>2</sub> eq emissions (Scope 1)	t	2,605	2,643	2,969
CO <sub>2</sub> eq emissions (Scope 2)	t	5,640	10,075	13,174
Biogenic CO <sub>2</sub> eq emissions (Scope 2)	kg/t	178	125	182
<b>Total CO<sub>2</sub> eq emissions</b>	t	8,245	12,718	16,143
<b>Coefficient of total CO<sub>2</sub> eq emissions</b>	kg/t	13	15	19

### 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 and Quality 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 analysed at the Izmir plant (Turkey)**. These 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 the Group's senior management. The Committee monitors product quality and development, taking account of the relevant macro trends. The Group's capacity for innovation is fuelled by a 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<sub>2</sub> 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, by building structures used for testing new technologies in real-life conditions. In 2017, studies and empirical tests continued on a product capable of **reducing CO<sub>2</sub> emissions by at least 20-30% compared to conventional concrete.**

The Cementir Group is today at the forefront of the development of future cements with low CO<sub>2</sub> impact. In Turkey, the subsidiary Çimentaş has created a sulphate-resistant cement for highly durable construction. This type of cement uses certain types of volcanic ash and its environmental impact is lower because the need to burn certain elements of 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 the production processes and of the product performance during the life cycle of cement and ready-mixed concrete. For this reason, the Cementir Group is investing in consolidating 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 the environmental product declaration make it possible to quantify the environmental benefits of using alternative fuels. For example, this type of study has been performed on the benefits of the alternative fuels that the Neales Waste Group (specialising in waste management) provides to the cement production plant at Aalborg Portland (Denmark).

### Other air emissions

The environmental impact of cement production also involves other air emissions, mainly sulphur oxides (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>). 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. Emissions are monitored through continuous monitoring systems or through spot measurements, in accordance with local regulations and in consideration of the characteristics of the plants. The monitored data are periodically communicated to the competent authorities, which verify compliance with the limits and the plants.

**In 2017, NO<sub>x</sub> emissions from the Cementir Group plants amounted to 11,606 tonnes, with an emission index per tonne of cement (kg/t TCE) of 1.15, almost in line with what was recorded last year.**

**SO<sub>2</sub> emissions originating from sulphur in the fuels and raw materials used in Group plants amounted to 1,787 t, with an emissions index per tonne of cement (g/t TCE) of 177, a slight increase on 2016 (138 g/tTCE). This rise is due to the increased production of white cement at the Danish plant in Aalborg.**

The CO emissions amounted to 9,861 t with an emission index per ton of cement (kg/tTCE) of 0.98, also a slight increase compared to the previous year (0.75 kg/tTCE). This increase is due to the raw material used in the Gaurain plant in Belgium.

Finally, dust emissions reached 576 t with a dust emissions index per tonne of cement (g/t TCE) of 57, a sharp decrease from 2016 (102 g/TCE). To reduce their impact, some plants updated their technologies for reducing air emissions.

Air emissions for cement production	Unit	2017	2016	2015	Cementir Italia 2017
NO <sub>x</sub>	t	11,606	9,276	8,113	1,352
SO <sub>2</sub>	t	1,787	1,089	884	10
CO	t	9,861	5,960	4,850	808
Hcl	t	37	8	7	1
VOC	t	101	0	0	27
Dust	t	576	807	419	9

Coefficients of emissions Cement production	Unit	2017	2016	2015
NO <sub>x</sub>	Kg/tTCE	1.15	1.17	1.10
SO <sub>2</sub>	gr/tTCE	177	138	120
CO	gr/tTCE	0.98	0.75	0.66
Dust	gr/tTCE	57.00	102.08	57.06

The production of concrete and aggregates has a decidedly reduced impact on air emissions. The increase shown in the table is due to the inclusion in the scope of reporting of the activities in Belgium (net of these, the values are almost constant over time).

Air emissions Concrete and other activities	Unit	2017	2016	2015
NO <sub>x</sub>	t	17	3	3
SO <sub>2</sub>	t	57	4	3

### Water consumption

The cement and concrete production process does not have a high impact on water resources. In dry cement production processes, water is used principally to cool the systems and for conditioning 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. The water discharge is not significant in quantity or in pollutant concentration.

Water withdrawals Cement production	Unit of measure	2017	2016	2015	Cementir Italia 2017
Surface water	m <sup>3</sup>	729,593.0	556,595.0	528,726.0	1,698,922.0
Ground water	m <sup>3</sup>	4,018,243.9	3,976,570.5	3,633,150.2	174,438.0
Rain water	m <sup>3</sup>	679,975.5	106,550.0	106,650.0	-
Public aqueduct	m <sup>3</sup>	448,707.1	475,864.2	449,179.2	53,737.0
Other sources	m <sup>3</sup>	2,573,892.8	1,252,922.0	1,280,157.0	-
<b>Total</b>	<b>m<sup>3</sup></b>	<b>8,450,412.3</b>	<b>6,368,501.7</b>	<b>5,997,862.4</b>	<b>1,927,097.0</b>

The increase in consumption shown in the table is attributable to the inclusion of the plants in Belgium into the scope of reporting. On a like-for-like basis, net of these plants, consumption remained almost constant between 2016 (6,368,501 m<sup>3</sup>) and 2017 (6,623,386 m<sup>3</sup>). The slight 4% increase is due to the increase in annual production volumes.

Over the years, the Cementir Group plants have adopted some technical solutions in order to reuse or use water resources more efficiently.

Water reuse Cement production	Unit of measure	2017	2016	2015	Cementir Italia 2017
Volume of reused water	m <sup>3</sup>	5,180,347.9	3,876,363.0	3,871,529.0	54,169.0
% of reused water	%	61%	61%	65%	3%

### A selection of projects implemented by plants

In 2017, Sinai White Portland Cement implemented a new project with an investment of EUR 100,000 for the excavation of raw water wells (about 260 metres deep) inside the plant to provide the water necessary for cooling the clinker. In addition, a project is planned for 2019 to dig a new fresh water well in the plant (about 1,000 metres deep), with an investment of EUR 500,000.

The Anqing plant has a water reuse system that can use the surface water taken outside the plant about 4.5 times, thus significantly reducing the plant's water needs.

The main impact to be managed during operations in Belgium regards the extraction of quarry material and the dependence on groundwater, correctly managing the discharge of waste water. Therefore CCB has concentrated its investments and efforts on this aspect, signing an agreement to enhance the drainage waters with SWDE (water utility in the Walloon region of Belgium) for the future Barry quarry that will regard 9 million m<sup>3</sup> of water annually. Another project launched in Belgium concerns the potabilisation of the water that is drained during the excavation phase in the Clypot quarry. This project was launched in 2012 with a feasibility study, and in 2015 an agreement was signed with the local water company for the supply of approximately 2 million m<sup>3</sup> of water per year, which should be available from the end of 2017. This project should make it possible to avoid the over-exploitation of local groundwater.

In the production of concrete, water is one of the production process resources since it represents an input resource. In this case too, the increase in withdrawals in absolute terms recorded in 2017 is linked to the inclusion in the scope of reporting of the Belgium plants' activities. On a like-for-like basis, net of Belgium, there was a decrease in consumption that was essentially irrelevant (0.05%).

<b>Water withdrawals</b> Ready-mixed concrete production	Unit of measure	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>Cementir Italia 2017</b>
Surface water	m <sup>3</sup>	67,833.5	17,500.0	17,000.0	-
Ground water	m <sup>3</sup>	573,185.6	472,331.0	374,443.0	26,561.0
Rain water	m <sup>3</sup>	99,778.8	21,000.0	20,750.0	-
Public aqueduct	m <sup>3</sup>	329,485.4	317,157.0	576,899.0	-
Other sources	m <sup>3</sup>	12,011.0	0	0	-
<b>Total</b>	<b>m<sup>3</sup></b>	<b>1,082,294.3</b>	<b>827,988.0</b>	<b>989,092.0</b>	<b>26,561.0</b>

<b>Water reuse</b> Ready-mixed concrete production	Unit of measure	<b>2017</b>	<b>2016</b>	<b>2015</b>
Volume of reused water	m <sup>3</sup>	191,116.2	83,363.0	74,984.0
% of reused water	%	18%	10%	8%

In other Group production activities, in particular grey and white cement, water consumption was almost irrelevant because it is not linked to production processes<sup>11</sup>.

<sup>11</sup> The Clypot quarry in the material extraction phase collects a volume of water that is entirely reused (495,675 m<sup>3</sup>). While companies operating in the waste management sector have significantly lower water withdrawals compared to the cement and concrete sectors (in 2017, water withdrawals amounted to 15,420 m<sup>3</sup>, a constant volume compared to 2016,

## **We value our people**

*We attract and value talent and ensure a safe and stimulating working environment for our people, who are our most important resource.*

### **Risk analysis and pursued policies**

The Cementir Group continues to consolidate the structures that operate in 18 countries and 5 continents, with the aim of increasing human resource integration and strengthening the organisational platform. The current market landscape and the increasingly global context in which the Cementir Group operates demands timely, targeted decisions to respond to the various organisation, remuneration, development, labour law and trade union requirements.

In 2017, the Cementir Group identified a new specific risk related to people management, namely the loss of knowledge and professional skills that leads to a discontinuity in work. This often requires a significant investment in the search and selection of qualified personnel following the departure of key personnel.

The Group continued to build a solid organisational structure to support the business in achieving the established objectives and the full integration of the Group's various organisational entities, with a focus on those acquired in 2016. In particular, the integration process relating to Compagnie des Ciments Belges progressed further.

The Group also strengthened the Holding company, further developing the “professional families” model and launching a transformation of the Corporate function, so as to increase integration and synergies between the different Group companies. The harmonisation of the Group's processes and organisational structures also took place through the adoption of an international job evaluation methodology and the launch of a number of process reengineering and organisational review initiatives.

Against this background, the Corporate Human Resources department was strengthened and organised into Centres of Excellence to ensure the adoption of a new governance system for the key Human Resources processes. This has helped to clarify roles and responsibilities within a matrix organisational model (Corporate/Regions), to harmonise processes and functions, and to align Group standards, methodologies and approaches by building models, systems, inter-functional processes and tools to support decision-making.

## **Leadership Model of the Cementir Group**

The Group Leadership Model was set up in early 2017. It is a single competency model for all companies and is addressed to all Group personnel. The Model enables people evaluation and development processes, starting from recruiting, assessment of potential, performance management and development. The purpose is to increase the individual and overall company performance by supporting the Enterprise Contribution, i.e. relying on individual performance (results that each employee achieves by carrying out his/her work) and also on the network performance (results achieved by the employee by using others' contributions or by contributing to other colleagues' activities).

The Model is consistent with the strategic guidelines and aligned with Group Values. The Model was presented for the first time at the Annual Meeting in May and subsequently disseminated locally as part of the Group Identity initiatives. At the corporate level, an online training programme has been set up, and will be open to all employees to increase their awareness of behaviours that are expected and effective to achieve company objectives while respecting the Group Values.

The Leadership Model supports the Group's new Talent Management and People Development system, which will be implemented over the years with progressive releases.

## **Talent identification and development**

The Talent Identification initiative launched in the first half of the year is part of this system. The aim of this project is to map people, by intersecting their performance (trend) and their potential, understood as the set of individual abilities, skills and motivations, useful for growing into managerial roles. Therefore, an initial pool of people was identified (Leadership Pool) from diverse population clusters (junior, middle manager and senior leader). Following the talent mapping, in which many senior leaders of the Group were involved, an individual development model was defined, including tools and initiatives aimed at developing talent (Talent Development).

## **Succession plans for key Group positions**

During 2017, a structured process was defined for developing and managing the succession on key Group managerial positions, in order to guarantee the necessary business continuity and to develop a portfolio of successors for these positions.

First of all, key positions were identified according to predefined criteria. Subsequently, a portfolio of internal successors was mapped based on qualitative elements such as performance, skills and experience gained over time, and growth

potential. This phase required the direct involvement of the senior management team and concluded with the validation of the successors by the Chairman and Chief Executive Officer. The successor mapping also required an assessment of the readiness of each successor to take up one or more key positions in the short (within 1 year), medium (between 1-3 years) and/or long term (over 3 years) or, in case of anticipated or unexpected replacement, to temporarily cover a key role as emergency successor in order to guarantee the ordinary management of the business. The results of this first mapping cycle, which will be repeated annually, orient the Cementir Group towards targeted policies for the development and management of successors through appropriate individual and cross-functional plans. These are targeted at strengthening the leadership profile and organisational culture, and at prioritising interventions based on the strategic nature and complexity of the key positions and the most critical areas. Finally, the definition and monitoring of a set of KPIs allows to verify the effectiveness of the process and to adopt consistent corrective measures to reinforce the portfolio of successors over time.

### **Group Recruiting and Selection policy**

A Group recruitment and selection policy was also developed further. The main innovative elements of this policy are the systematic use of social networking platforms to search managerial and technical profiles for the Group and the adoption of diagnostic tools (e.g. online tools) that are highly predictive of future performance and linked to our Leadership Model. Another innovation is the definition of individual and collective onboarding programmes to accompany new hires in their first months of employment in the Group and to increase their sense of belonging to the Company and the organisation.

### **Performance evaluation and development**

In most Group companies there is a structured process for assessing personnel performance with the aim of:

- Spreading a high performance culture throughout the company;
- Rewarding people based on their performance
- Managing and developing employees' talent and aptitudes to ensure the right combination of skills necessary for the company's growth;
- Planning development and career paths consistent with people's potential and with business needs;
- Supporting the development of personnel succession plans.

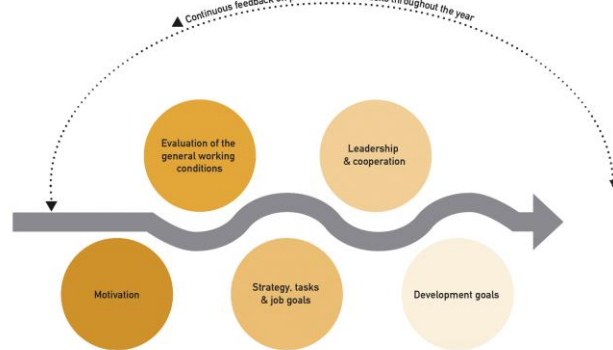


Driven by the intent to develop a new way of looking at performance evaluation, not only as a tool for aligning management with results, but also as a process that can stimulate the constant development of organisational skills and people, orienting performance towards the expected business results, the performance management process will be progressively extended to an increasing number of Group employees and companies

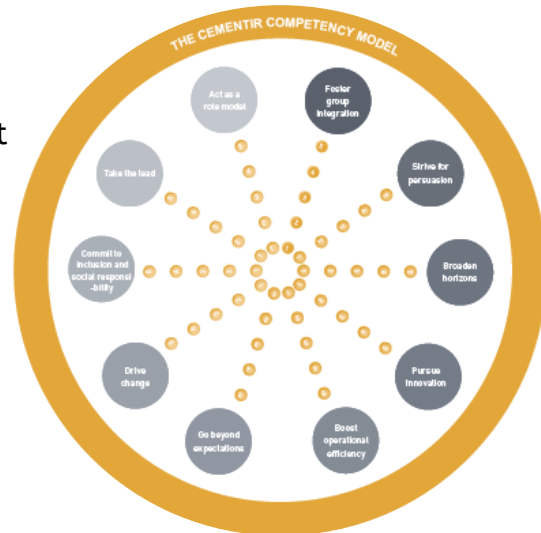
By way of example, the N&B Model is shown below.

The people development and evaluation model is an ongoing process and focuses mainly on five aspects:

1. motivation;
2. evaluation of the general working conditions;
3. strategy, tasks and job goals;
4. leadership and cooperation;
5. development goals.



On the basis of these elements, constant feedback is given to the people, and the training measures to be implemented are defined, also in consideration of the Group's Competency Model.



During 2017, the number of personnel involved in the performance assessment process increased compared to previous years following the entrance into the Group reporting scope of the companies in Belgium and France as well as at constant scope<sup>12</sup>. In particular, there was a slight increase in the managers involved.

<sup>12</sup> Indeed 70 employees (1 executive and 69 managers) receive performance reviews in the companies entered the scope of reporting.

Employees who receive regular performance reviews <sup>13</sup>	Units	2017			2016			2015		
		Men	Women	Total	Men	Women	Total	Men	Women	Total
Executives	no.	48	2	50	48	0	48	39	0	39
Manager	no.	214	40	254	138	29	167	144	19	163
Employees	no.	332	161	493	307	157	464	317	153	470
Blue collars	no.	818	34	852	783	32	815	773	34	807
Executives	%	89%	100%	89%	72%	-	72%	66%	-	66%
Manager	%	94%	98%	95%	74%	83%	76%	74%	79%	75%
Employees	%	61%	62%	61%	57%	63%	59%	56%	61%	57%
Blue collars	%	47%	87%	48%	46%	76%	47%	43%	76%	44%

Employee development is also supported through **internal and external training courses**, 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 roles and responsibilities
- Specific analyses to identify whether the skills already present in the company are sufficient to meet the needs arising from new corporate strategic plans;
- Employee performance evaluations.

During 2017, approximately 18 hours of training per capita were provided, in line with previous years. The measures put in place involved in a cross-functional and balanced way the entire company population covering various roles, as can be seen from the summary table of training hours by professional category.

<sup>13</sup> The data for the following companies is not available (in parenthesis the number of employees), so they are excluded from this scope of reporting: Aalborg Portland Islandi (11), Aalborg Portland France (1), Aalborg Portland Polska (8), Aalborg Portland Belgium (2), Aalborg Portland OOO (1), Aalborg Portland (Australia) Pty Ltd (3), Vianini Pipe (69), Gaetano Cacciatore (2) , and Cementir Italia group (599) which is not more part of the Cementir Group from January 2018. For companies based in Belgium and France, data are only available for 2017, when they became part of the scope of reporting.

Hours of training <sup>14</sup>	Units	2017			2016			2015			2017 Cementir Italia		
		Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Executives	Hours	151	-	151	193	-	193	309	-	309	125	8	133
Manager	Hours	4.711	555	5.266	4.297	738	5.035	3.629	449	4.078	350	44	394
Employees	Hours	11.870	2.994	14.864	13.339	2.748	16.087	10.227	2.845	13.071	1,482	143	1,625
Blue collars	Hours	34.077	848	34.925	33.091	1.410	34.501	33.875	1.345	35.220	4,550	0	4,550
<b>Total</b>	<b>Hours</b>	<b>50.809</b>	<b>4.396</b>	<b>55.205</b>	<b>50.919</b>	<b>4.896</b>	<b>55.816</b>	<b>48.039</b>	<b>4.639</b>	<b>52.677</b>	<b>6,507</b>	<b>195</b>	<b>6,702</b>
Executives	h/person	2,8	0,0	2,7	2,9	-	2,9	5,2	-	5,2	7.4	8.0	7.4
Managers	h/person	20,8	13,5	19,6	23,1	21,1	22,8	18,7	18,7	18,7	15.9	11.0	15.2
Employees	h/person	21,7	11,6	18,4	24,6	11,0	20,3	17,9	11,4	15,9	10.0	5.3	9.3
Blue collars	h/person	19,6	21,7	19,7	19,4	33,6	19,7	18,9	29,9	19,1	12.0	-	12.0
<b>Total</b>	<b>h/person</b>	<b>19,0</b>	<b>12,0</b>	<b>18,2</b>	<b>20,3</b>	<b>15,0</b>	<b>19,7</b>	<b>19,1</b>	<b>15,6</b>	<b>18,7</b>	<b>11.5</b>	<b>6.1</b>	<b>11.2</b>

## Diversity and Inclusion

International competition requires ever greater flexibility, creativity and open-mindedness, functional to offering innovative services and models that fulfil the demand. In this context, the development of diversity in its broadest sense is decisive in order to meet the demands of the business, create new ideas and make our people grow towards open-minded and inclusive models. The Group has embarked on an outreach programme about diversity and inclusion aimed at increasing the awareness that diversity (gender, age, culture, ethnicity, etc.) is an asset and a value. To that effect, this topic was heavily emphasised both in the Values Charter (*Diversity and Inclusion*) and in the *Leadership Model (Striving for Inclusion and Social Responsibility and Encouraging Integration)*.

The production sector in which the Group operates is historically characterised by a predominantly male component. Analysing the data on personnel distribution shows that almost 90% of the company population is composed of men.

Regarding the management of gender diversity, it must be said that despite the sector in which the Group operates being characterised by a strong male component, especially in the production plant activities, the Group is careful to encourage a greater *gender balance* through the inclusion of female professionals in some organisational areas (e.g. staff, R&D). This focus partly helps to mitigate the gender difference. In fact, among the office personnel, the share of women rises to 28%. This contributes to achieving better financial performance, greater efficiency, effectiveness and competitiveness.

<sup>14</sup> The data for the following companies (in parenthesis the number of employees) is not available, so they are excluded from the scope of reporting: Aalborg Portland Islandi (11), Aalborg Portland France (1), Aalborg Portland Polska (8), Aalborg Portland Belgium (2), Aalborg Portland OOO (1), Aalborg Portland (Australia) Pty Ltd (3), Vianini Pipe (69) and Gaetano Cacciatore (2). For companies based in Belgium and France, data are only available for 2017, when they became part of the scope of reporting.

The gender and age distribution of the members of the Board of Directors and the Committees of the Parent Company is also shown below.

Composition of Corporate Bodies	2017			2016			2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Board of Directors</i>									
Under 30	0	0	0	0	0	0	0	0	0
30-50	4	3	7	5	3	8	5	3	8
Over 50	5	1	6	5	0	5	5	0	5
<b>TOTAL</b>	<b>9</b>	<b>4</b>	<b>13</b>	<b>10</b>	<b>3</b>	<b>13</b>	<b>10</b>	<b>3</b>	<b>13</b>
<i>Of which independent</i>	2	3	5	2	2	4	2	2	4
<i>Control and Risks Committee</i>									
Under 30	0	0	0	0	0	0	0	0	0
30-50	0	2	2	0	2	2	0	2	2
Over 50	1	0	1	1	0	1	1	0	1
<b>TOTAL</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>
<i>Of which independent</i>	1	2	3	1	2	3	1	2	3
<i>Appointment and Remuneration Committee</i>									
Under 30	0	0	0	0	0	0	0	0	0
30-50	0	2	2	0	2	2	0	2	2
Over 50	2	0	2	2	0	2	2	0	2
<b>TOTAL</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>4</b>
<i>Of which independent</i>	1	2	3	1	2	3	1	2	3
<i>Board of Statutory Auditors</i>									
Under 30	0	0	0	0	0	0	0	0	0
30-50	1	2	3	0	2	2	1	2	3
Over 50	2	1	3	4	0	4	3	0	3
<b>TOTAL</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>6</b>
<i>Of which independent</i>	3	3	6	4	2	6	4	2	6

At the end of 2017, given the upcoming renewal of the Board of Directors, certain diversity considerations were drawn up. These were not based exclusively on gender, but also on technical and professional skills, which must be taken into account when appointing new members of the Board of Directors and Committees of the Group.

In its international operations, diversity management for the Cementir Group also translates into attention to cultural and religious differences. With this in mind, in some countries the Group is dealing with issues that are sensitive from a religious point of view. In Malaysia, for example, different prayer rooms have been set up inside the plant, depending on the religious beliefs of the employees, and the consumption of food products banned by some religions was forbidden, precisely to respect cultural differences.

Finally, in most of the countries in which the Group operates, the fundamental conventions of the International Labour Organization (ILO) have been ratified<sup>15</sup>, concerning the abolition of forced labour, collective bargaining, and the elimination of child labour and discrimination. Furthermore, in some countries where these agreements have not been ratified, the Group has defined the policies to manage these aspects in the Code of Ethics, which states: "The Group offers all workers the same opportunities and expressly forbids any form of abuse by positions of authority or coordination. Abuse means any behaviour that consists in requesting, or inducing to offer, services, personal favours or other benefits detrimental to the dignity, professionalism or independence of others. The recipients of this Code, as defined by national and international legislation, are required to refrain from engaging in illicit behaviour that is harmful to the person, such as, but not limited to, offences against the individual, child labour, people trafficking and child pornography".

### Workforce number and composition

The Cementir Group workforce comprises 3,620 employees, spread across 18 countries and 5 continents, as well as 590 contractors, people not directly employed and employees of contractors who perform some of the production operations at the company's cement and concrete plants and quarries. The Group's workforce is composed to a much greater extent by male employees (about 90% of the total), mainly hired with permanent full-time contracts.

The table below summarises<sup>16</sup> the main figures for personnel in the workforce at 31 December 2017. The data are presented in consideration of the new company scope, following the Group's reorganisation linked to the sale of Italian businesses that took effect from 3 January 2018.

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<sup>15</sup> Freedom of Association and Protection of the Right to Organise Convention, 1948 (No.87); Right to Organise and Collective Bargaining Convention, 1949 (No. 98); Forced Labour Convention, 1930 (No. 29); Abolition of Forced Labour Convention, 1957 (No. 105); Minimum age Convention, 1973 (No, 138); Worst Forms of Child Labour Convention, 1999 (No. 182); Equal Remuneration Convention, 1951 (No. 100); Discrimination (employment and occupation) Convention, 1958 (No. 111).

<sup>16</sup> The appendix contains detailed tables divided by country.

	Cementir Group <sup>17</sup> 31-12-2017			Cementir Italia 31-12-2017		
	Men	Women	Total	Men	Women	Total
Employees	2695	369	<b>3064</b>	567	32	<b>599</b>
Contractors	586	4	<b>590</b>	0	0	<b>0</b>
Professional category						
Executives	55	2	57	17	1	<b>18</b>
Manager	239	44	<b>283</b>	22	4	<b>26</b>
Employees	580	277	<b>857</b>	148	27	<b>175</b>
Blue collars	1821	46	<b>1867</b>	380	0	<b>380</b>

In the last year, recruitment in the Group has increased, also considering a like-to-like scope (i.e. net of the businesses acquired in 2016 in Belgium and France, where recruitments were 75 in 2017). Taking into account also the companies acquired in 2016, the increase is significant, as can be seen in the table below.

Group turnover <sup>18</sup>	2017			2016			2015			2017 Cementir Italia		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Incoming</i>												
Under 30	91	14	<b>105</b>	62	13	<b>75</b>	91	18	<b>109</b>	0	0	<b>0</b>
30-50	180	30	<b>210</b>	116	28	<b>144</b>	142	16	<b>158</b>	17	2	<b>19</b>
Over 50	36	3	<b>39</b>	29	0	<b>29</b>	34	1	<b>35</b>	4	0	<b>4</b>
<b>Total</b>	<b>307</b>	<b>47</b>	<b>354</b>	<b>207</b>	<b>41</b>	<b>248</b>	<b>267</b>	<b>35</b>	<b>302</b>	<b>21</b>	<b>2</b>	<b>23</b>
<i>Outgoing</i>												
Under 30	62	15	<b>77</b>	68	11	<b>79</b>	45	9	<b>56</b>	0	0	<b>0</b>
30-50	166	28	<b>194</b>	200	17	<b>217</b>	136	21	<b>157</b>	62	1	<b>63</b>
Over 50	71	8	<b>79</b>	73	4	<b>77</b>	49	3	<b>52</b>	33	0	<b>33</b>
<b>Total</b>	<b>299</b>	<b>51</b>	<b>350</b>	<b>341</b>	<b>32</b>	<b>373</b>	<b>230</b>	<b>33</b>	<b>265</b>	<b>95</b>	<b>1</b>	<b>96</b>

In the course of 2017, the number of staff leaving slightly increased, also in consideration of the reorganization of the Group.

<sup>17</sup> The table includes 100% of employees of the company SCT, 65% controlled by Aalborg Portland Holding whose employees are 65% consolidated in the Consolidated Financial Statements (therefore the total number of employees reported in the table differs by 43 units compared to total employees as per 2017 Consolidated Financial Statements equal to 3,620).

<sup>18</sup> The scope of reporting does not include: Aalborg Portland France (1), Aalborg Portland Polska (8), Aalborg Portland Islandi (11), Aalborg Portland Belgium (2), Aalborg Portland OOO (1), Aalborg Portland (Australia) Pty Ltd (3), Vianini Pipe (69) and Gaetano Cacciatore (2).. For the other Group companies operating in France and in Belgium, only the data for 2017 are reported, as they have become part of the scope of reporting this year.

## Safety first

Cementir considers the health and safety of its employees at work as crucially important. 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 adopted an occupational health and safety management system** certified with the OHSAS 18001 international standard by accredited external parties. The following are the main measures implemented to ensure compliance with the laws, regulations and directives applicable in EU countries and to minimise accidents:

- Analysis and ongoing 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;
- Investment in and expenditure on safety equipment (both personal 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;
- Continuous improvement of the occupational health and safety management system by defining measurable indicators monitored according to predetermined implementation plans.

Group plants certified OHSAS 18001					
Cement		Concrete and other activities		Recycling management	
Aalborg	X	Denmark		Sureko	X
Anqing		Norway		Hereko	X
Ipoh		AB Sydsten		Neales Waste Management	X
Edirne	X	CCB			
Elazig	X	Cimbeton			
Izmir	X	SCT			
Kars	X	Trabel Affretement			
Sinai White Portland		De Paepe Beton			
Arquata Scrivia		Ilion Cimento			
Maddaloni		Vianini Pipe			
Spoletto		Gaetano Cacciatore			
Taranto					
CCB					

In 2017, in line with what occurred in previous years, over 27,000 hours of specific training in health and safety were provided. The component of personnel engaged in production activities was the main beneficiary of these specific training programmes. The Cementir Group's commitment to health and safety is also demonstrated by its total investment of 1.6 million euros.

The LOTOTO System (Lock Out, Tag Out, Try Out) is **one of the most effective tools for ensuring health and safety in the cement industry**, and is based on a risk assessment model mainly developed on the use of dangerous machinery.

This System, already implemented at the cement plants in Aalborg and Izmir, will be improved to become an example of best practices 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 the health and safety training courses.

The constant attention placed on the protection of the health and safety of employees and the actions that were implemented also in terms of information and training, have helped maintain the number of accidents in line with the figures of recent years despite the entrance in the reporting scope of the businesses in Belgium and in France and to reduce both the frequency rate and the severity rate. The details are shown in the tables below. 41 accidents were recorded in 2017 to contractors and third parties operating in the plants of the Group.

Accident rates - Group data <sup>19</sup>				
Accident rates	2017	2016	2015	Cementir Italia 2017
	Total	Total	Total	Total
<b>Number of accidents</b>	72	78	79	16
<b>Frequency rate <sup>20</sup></b>	2,8	3,2	3,2	3,9
<b>Severity rate <sup>21</sup></b>	32,7	62,2	52,9	65,4

Accident indexes - Nordic & Baltic Region and US <sup>22</sup>			
Accident indexes	2017	2016	2015
	Total	Total	Total
<b>Number of accidents</b>	52	30	29
<b>Frequency rate</b>	4,1	3,8	3,6
<b>Severity rate</b>	35,3	45,0	36,3

<sup>19</sup> The 2017 data do not consider the following companies (in parenthesis the number of employees): Quercia (37), Neals Waste Management (83), Aalborg Portland Islandi (11), Aalborg Portland France (1), Aalborg Portland Polska (8), Aalborg Portland Belgium (2), Aalborg Portland OOO (1), Vianini Pipe (69), Gaetano Cacciatore (3) and Spartan Hive (1). The 2016 and 2015 data do not take into consideration companies based in Belgium and France, as they only became part of the scope of reporting this year.

<sup>20</sup> The frequency rate was calculated as: (total number of accidents / hours worked) \*200,000

<sup>21</sup> The severity rate was calculated as: (days lost through accidents / hours worked) \*200,000

<sup>22</sup> The 2017 data do not consider the following companies (in parenthesis the number of employees): Aalborg Portland Islandi (11), Aalborg Portland France (1), Aalborg Portland Polska (8), Aalborg Portland Belgium (2), Aalborg Portland OOO (1), Vianini Pipe (69), Gaetano Cacciatore (2) and AB Sydsten (143). The 2016 and 2015 data do not take into consideration companies based in Belgium and France, as they only became part of the scope of reporting this year



<b>Accident indexes - Asia Pacific</b>			
Accident indexes	2017	2016	2015
	Total	Total	Total
<b>Number of accidents</b>	4	7	14
<b>Frequency rate</b>	1.0	1.8	3.6
<b>Severity rate</b>	54.7	89.9	41.8

<b>Accident indexes - East Mediterranean<sup>23</sup></b>			
Accident indexes	2017	2016	2015
	Total	Total	Total
<b>Number of accidents</b>	16	25	22
<b>Frequency rate</b>	1.9	2.7	2.1
<b>Severity rate</b>	21.6	33.5	28.4

<b>Accident indexes - Central Mediterranean<sup>24</sup></b>			
Accident indexes	2017	2016	2015
	Total	Total	Total
<b>Number of accidents</b>	16	16	14
<b>Frequency rate</b>	3.3	5.4	6.1
<b>Severity rate</b>	54.2	161.5	240.9

## Industrial relations

Operating in different countries around the world, Group companies are subject to different labour regulations, and consequently the contracts of Group employees vary according to the country in which they were hired.

Approximately 70% of the employees of the entire Group are covered by collective bargaining agreements, and this percentage varies from country to country depending on the applicable local legislation and the job classification categories. Therefore, the minimum number of weeks' notice that must be guaranteed to workers for organisational changes varies depending on the country and the professional categories (some countries do not have a minimum notice period while, where defined, it may vary according to the business reorganisation program).

<sup>23</sup> The 2017 data do not consider the following companies (in parenthesis the number of employees): Quercia (37) and Neales Waste Management (83).

<sup>24</sup> Data refer to all the activities of the Region (Cementir Italia group and Cementir Holding); the 2016 and 2015 data do not take into consideration Spartan Hive and Cementir Sacci, as they were not part of the scope of reporting.

## **We support our communities**

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

### **Risk analysis and pursued policies**

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. The Group has identified the risk that the companies' activities, in particular those related to concrete production and waste treatment, may lead to a critical and/or contrary attitude by local communities and local stakeholders, resulting in a deterioration of the company's image.

The actions to mitigate this risk, present in particular in Turkey, involve communication at a local level, organising community meetings with feedback sessions, stakeholder analyses and the definition of a communication plan.

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

This aspect becomes even more relevant where increased urbanisation has brought towns closer to the Group's plants, in particular in Turkey. For this reason, specific tools have been adopted in the East Mediterranean region to map the stakeholders to be involved in defining actions to be implemented and to communicate important aspects regarding the operation of the plants. These tools also enable companies in this area to analyse stakeholder complaints in order to provide the necessary information or to plan specifically focused actions.

### **Dialogue and support of local communities**

Against this backdrop, the topics most debated with local stakeholders in 2017 mainly concerned permits for the use of quarries and the introduction of alternative fuels, the streamlining and, where possible, the reduction of incoming and outgoing traffic transporting raw materials and fuel at the 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.

The proximity of the Elazığ and Izmir plants to residential areas involves a constant dialogue with the local communities, which are particularly sensitive to the plants' landscape and visual impacts. To face these specific aspects, Çimentas is adopting specific strategies of involvement and communication with stakeholders interested in the issue. Another aspect that is particularly felt in Turkey is the collection and recycling of waste, since there is no in-depth knowledge of waste management processes and the local community perceives some activities as risky. Precisely for this reason, the Group companies operating in this industry have decided to define a specific engagement and communication plan aimed at stakeholders. This plan entails the involvement of opinion leaders, experts and members of the community in regular meetings, the use of multimedia channels and digital media to provide information about the ways in which waste is managed, and meetings and interaction with families living near the plants.

### **Çimentas Education and Health Foundation**

In Turkey, the Cementir Group maintains close ties with the most vulnerable groups through the Çimentas 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 upper school and university students, and has contributed to the renovation of various school buildings near the plant in Elazığ. 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 **İşikkent High School** was founded. This upper school is recognised for its innovative approach to education and research, and can accommodate up to 765 students a year.

As described above, the Aalborg plant is able to recover part of its thermal energy, so it can be used by the Aalborg community for domestic heating. In addition to this initiative, the Aalborg plant has decided to use the cold water from the lake where it takes the plaster used for cement production to provide a cooling system in the new town hospital as an energy-efficient alternative to conventional electric cooling systems. "District cooling" is a cooling system equivalent to district heating. Cold water is pumped through a closed loop to the buildings to be cooled. The water absorbs heat in the buildings and is pumped back for cooling, which in this case is performed by the lake's cold water.

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

## Methodology note

This document, Sustainability Report - Consolidated Non-Financial Statement (NFS) of the Cementir Group, was prepared in compliance with the requirements of Italian Legislative Decree 254 of 30 December 2016 (hereinafter also referred to as "Decree").

The Disclosure consolidates the information of the entire Cementir Group, therefore it includes the data of the parent company and its fully consolidated subsidiaries<sup>25</sup>. In addition, this Statement fully consolidates the environmental and human resources management data of the subsidiary SCT, which is consolidated on a proportional basis in the Group Financial Report (as it is jointly controlled at 65%). Any limitations of the scope of reporting are clearly identified in the text and do not significantly affect understanding the Group's business, its performance or its results (as required under Article 4, paragraph 1 of Italian Legislative Decree 254/2016).<sup>26</sup>

This Statement relating to the period from 1 January 2017 to 31 December 2017, produced on an annual basis, is presented and approved by the Board of Directors of Cementir Holding SpA.

The document was drafted with the intent of providing information that are reliable, complete, balanced, accurate, understandable and comparable, as required by the reporting standards used: GRI Sustainability Reporting Standards. The Cementir Group has decided to prepare the document in accordance with the reporting "core option".

At the end of the document there are two tables: the "Table of Correlation between Italian Legislative Decree 254/2016 - material issues - GRI Standards" to provide evidence of the correlation between Cementir's material issues with the topics of the Decree and the GRI Standards used for the reporting, and the GRI content index which provides a detailed description for all the topics contained in the document (other than those related to the requirements of the Decree).

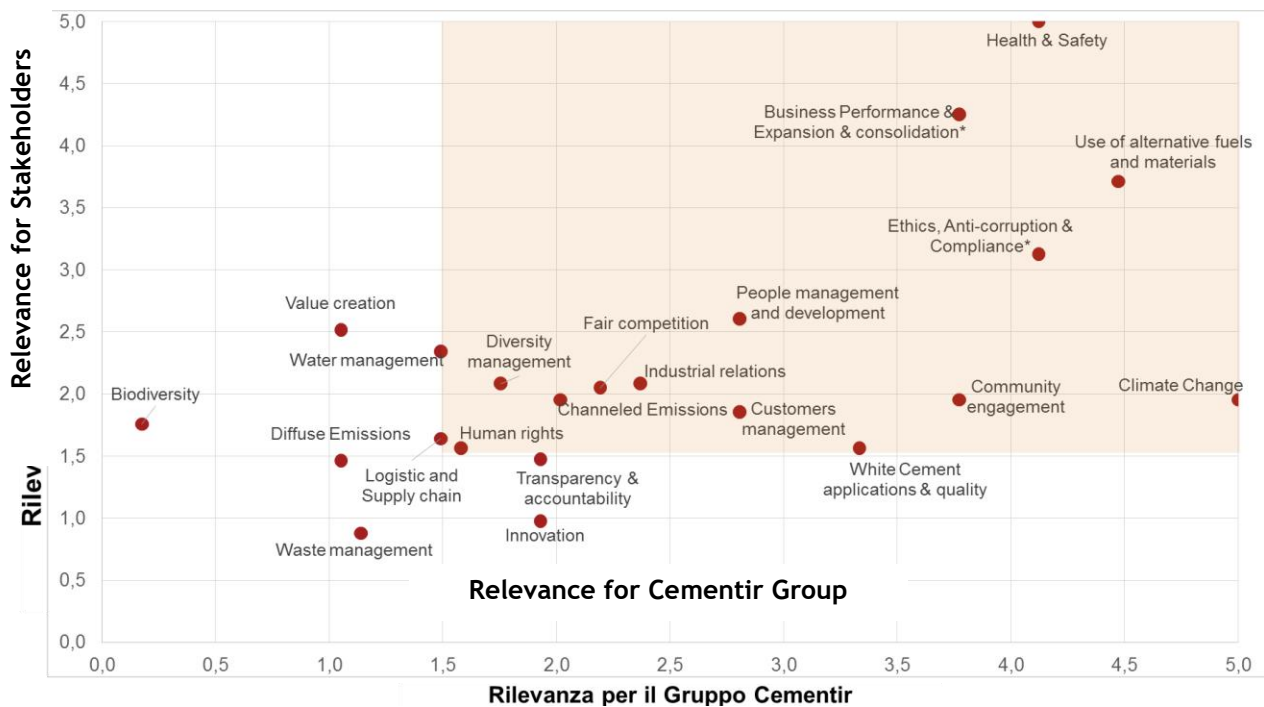
### The definition of the material issues

For the definition of the material issues on the basis of which this document was drawn up, the Cementir Group has carried out an update of the materiality analysis carried out for the last reporting cycle. This analysis is aimed at identifying the issues relevant to the company and its stakeholders, or all those issues that have an impact, directly or indirectly, on Cementir's ability to create, preserve or adversely affect the Group's value. 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 document has been structured.

<sup>25</sup> For details on the Group companies, see the Group consolidated financial statements

<sup>26</sup> The limitations are clearly indicated also in the table linking the requests of Italian Legislative Decree 254/2016 and the material issues identified by the Cementir Group

The materiality matrix is the result of a broad process with many phases, which saw the senior 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 an analysis of industry documents and benchmarks, which were subsequently checked through interviews conducted individually with Cementir senior 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, the benchmarks and the opinions of Cementir senior management. This work exposed the issues on which the Sustainability Report - Consolidated Non-Financial Statement Disclosure (NFD) was established, including the shared priorities between Cementir and its stakeholders, as represented in the matrix. All material issues have an internal relevance for the organisation, except for the issue related to health and safety as it has an impact even against third parties operating within the plants of the Group.



## Group stakeholders

The management of the Group's main stakeholders varies according to the type and frequency of listening and involvement, depending on the type of subject and the topic of interest. In consideration of the nature of the Parent Company, some of these stakeholders interface directly with the central structures, while others are purely interested in how the local activities of the Group's plants are carried out and in the management of relations with these stakeholders is therefore delegated to Region or plant level.

The table below shows the Group's main stakeholders and the issues of interest identified for each.

Stakeholder category	Topic of interest
Employees	<ul style="list-style-type: none"> <li>• Health &amp; Safety</li> <li>• People Management and Development</li> <li>• Diversity Management</li> <li>• Industrial Relations</li> <li>• Human Rights</li> </ul>
Institutions and Authorities (local e national)	<ul style="list-style-type: none"> <li>• Health &amp; Safety</li> <li>• Industrial Relations</li> <li>• Human Rights</li> <li>• Ethics, anti-corruption and compliance</li> <li>• Fair competition</li> <li>• Climate Change</li> </ul>
Shareholders	<ul style="list-style-type: none"> <li>• Business performance, Expansion and Consolidation</li> <li>• Ethics, anti-corruption and compliance</li> </ul>
Trade Unions	<ul style="list-style-type: none"> <li>• Industrial Relations</li> <li>• Human Rights</li> </ul>
Local communities and local committees	<ul style="list-style-type: none"> <li>• Use of alternative fuels and materials</li> <li>• Channelled emissions</li> <li>• Community Engagement</li> </ul>
Customers	<ul style="list-style-type: none"> <li>• White Cement applications and quality</li> <li>• Customer management</li> <li>• Fair competition</li> <li>• Innovation</li> </ul>
Suppliers and contractors	<ul style="list-style-type: none"> <li>• Health &amp; Safety</li> <li>• Use of alternative fuels and materials</li> <li>• Logistic and supply chain</li> </ul>
Environmental associations	<ul style="list-style-type: none"> <li>• Climate change</li> <li>• Channelled and diffuse emissions</li> <li>• Use of alternative fuels and materials</li> <li>• Biodiversity</li> </ul>
Capital providers	<ul style="list-style-type: none"> <li>• Business performance, Expansion and Consolidation</li> <li>• Ethics, anti-corruption and compliance</li> <li>• Transparency e accountability</li> <li>• Use of alternative fuels and materials</li> </ul>

## Table of correlation between Italian Legislative Decree 254/2016 - material issues - GRI Standards

Topic of the Italian Decree 254/2016	Cementir's Material Topics	Main risks	Policies pursued	GRI Standard	Disclosure used	Note
Environmental	Use of alternative fuels and materials	Cap. "In waste we see resources"	Cap. "In waste we see resources"	GRI 103: Management approach GRI 302: Energy GRI 301: Materials	302-1 302-3 301-1	
	Climate change	Cap. "We respect the environment in all our operations"	Cap. "We respect the environment in all our operations"	GRI 103: Management approach GRI 305: Emissions	305-1 305-2 305-4	
	Channelled emissions	Cap. "We respect the environment in all our operations"	Cap. "We respect the environment in all our operations"	GRI 103: Management approach GRI 305: Emissions	305-7	
	Water management	Cap. "We respect the environment in all our operations"	Cap. "We respect the environment in all our operations"	GRI 103: Management approach GRI 303: Water	303-1 303-3	
Social	Community engagement	Cap. "We support our communities"	Cap. "We support our communities"	GRI 103: Management approach GRI 413: Local Communities	413-2	
	Fair competition	Cap. "Integrity and competition"	Cap. "Integrity and competition"	GRI 103: Management approach GRI 206: Anti-competitive behaviour	206-1	
	Logistic and supply chain	Risk of unavailability of raw materials The production of cement and concrete requires the use of non-renewable raw materials such as limestone, clay and aggregates. To mitigate this risk we define appropriate contractual agreements with suppliers to guarantee adequate supplies. Some of the Group's environmental and social risks also extend to the supply chain.	Cap. "How cement is made"	GRI 103: Management approach GRI 308: Supplier environmental assessment GRI 414: Supplier social assessment	-	In this reporting cycle, consistent and homogeneous information are not available to fully represent the Group. The Group is committed to implement appropriate actions to be able to report in a solid and uniform manner the information in the next reporting cycle.
Employee matters	Health and Safety	Cap. "We value our people"	Cap. "We value our people"	GRI 103: Management approach GRI 403: Occupational health & safety	403-2	In this reporting cycle it was not possible to collect homogeneous data on the rate of absenteeism and the

						<p>rate of occupational disease. The Group is committed to implement appropriate actions to be able to report in a solid and uniform manner the information in the next reporting cycle.</p> <p>Within the section dedicated to the topic are indicated in an exact manner the limitations of the perimeter.</p>
	People management and development	Cap. "We value our people"	Cap. "We value our people"	GRI 103: Management approach GRI 401: Employment GRI 404: Training and Education	401-1 404-1 404-2 404-3	Within the section dedicated to the topic are indicated in an exact manner the limitations of the perimeter.
	Diversity management	Cap. "We value our people"	Cap. "We value our people"	GRI 103: Management approach GRI 405: Diversity and Equal opportunities	405-1	Within the section dedicated to the topic are indicated in an exact manner the limitations of the perimeter.
	Industrial relations	Cap. "We value our people"	Cap. "We value our people"	GRI 103: Management approach GRI 402: Labor/Management Relations	402-1	
Respect of human rights	Human rights	Cap. "We value our people"	Cap. "We value our people"	GRI 103: Management approach GRI 406: Non-discrimination GRI 412: Human Rights Assessment	406-1	<p>In 2017, the internal audit received 2 complaints about possible discrimination at work. Both were subject to detailed investigations as a result of which they were not confirmed as the absence of discrimination was detected.</p> <p>The Group is committed to implement appropriate actions to be able to improve the disclosure on the specific topic, widening the set of information in the next reporting cycle.</p>
Anti-corruption and bribery matters	Ethics, anti-corruption and compliance	Cap. "Commitment to combating corruption"	Cap. "Commitment to combating corruption"	GRI 103: Management approach GRI 205: Anti-corruption	205-3	



## Appendix

Tables on the composition of the personnel by country<sup>27</sup>

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Turkey</i>									
Employees	711	54	<b>765</b>	744	59	<b>803</b>	871	65	<b>936</b>
Contractors	225	4	<b>229</b>	158	0	<b>158</b>	225	2	<b>227</b>
Professional category									
Executives	9	1	<b>10</b>	11	0	<b>11</b>	10	0	<b>10</b>
Manager	35	5	<b>40</b>	37	5	<b>42</b>	42	4	<b>46</b>
Employees	138	43	<b>181</b>	149	48	<b>197</b>	174	53	<b>227</b>
Blue collars	529	5	<b>534</b>	547	6	<b>553</b>	645	8	<b>653</b>
Age range									
<30	62	4	<b>66</b>	68	5	<b>73</b>	99	8	<b>107</b>
30-50	597	48	<b>645</b>	634	50	<b>684</b>	727	54	<b>781</b>
>50	52	2	<b>54</b>	42	4	<b>46</b>	45	3	<b>48</b>
Type of contract									
Permanent	709	54	<b>763</b>	742	59	<b>801</b>	871	65	<b>936</b>
Temporary	2	0	<b>2</b>	2	0	<b>2</b>	0	0	<b>0</b>
Full-time	711	54	<b>765</b>	744	59	<b>803</b>	871	65	<b>936</b>
Part-time	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Egypt</i>									
Employees	65	7	<b>72</b>	64	7	<b>71</b>	63	7	<b>70</b>
Contractors	326	0	<b>326</b>	384	0	<b>384</b>	394	0	<b>394</b>
Professional category									
Executives	8	0	<b>8</b>	8	0	<b>8</b>	8	0	<b>8</b>
Manager	19	0	<b>19</b>	19	0	<b>19</b>	18	0	<b>18</b>
Employees	21	7	<b>28</b>	19	7	<b>26</b>	19	7	<b>26</b>
Blue collars	17	0	<b>17</b>	18	0	<b>18</b>	18	0	<b>18</b>
Age range									
<30	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>
30-50	58	7	<b>65</b>	57	7	<b>64</b>	57	7	<b>64</b>
>50	7	0	<b>7</b>	7	0	<b>7</b>	6	0	<b>6</b>
Type of contract									
Permanent	65	7	<b>72</b>	64	7	<b>71</b>	63	7	<b>70</b>
Temporary	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>
Full-time	65	7	<b>72</b>	64	7	<b>71</b>	63	7	<b>70</b>
Part-time	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>

<sup>27</sup> The in-depth tables do not include data of companies that carry out production activities. Information on commercial companies, given the small number of employees, is shown in summary form.

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>China</i>									
Employees	164	46	210	162	46	208	162	45	207
Contractors	0	0	0	0	0	0	0	0	0
Professional category									
Executives	1	0	1	2	0	2	2	0	2
Manager	14	1	15	13	1	14	13	1	14
Employees	44	24	68	45	24	69	44	22	66
Blue collars	105	21	126	102	21	123	103	22	125
Age range									
<30	20	6	26	19	7	26	22	11	33
30-50	112	39	151	111	38	149	113	33	146
>50	32	1	33	32	1	33	27	1	28
Type of contract									
Permanent	140	29	169	134	32	166	126	33	159
Temporary	24	17	41	28	14	42	36	12	48
Full-time	164	46	210	162	46	208	162	45	207
Part-time	0	0	0	0	0	0	0	0	0

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Malaysia</i>									
Employees	152	36	188	136	37	173	131	36	167
Contractors	35	0	35	43	0	43			0
Professional category									
Executives	2	0	2	2	0	2	2	0	2
Manager	9	2	11	8	4	12	8	2	10
Employees	44	34	78	38	33	71	37	34	71
Blue collars	97	0	97	88	0	88	84	0	84
Age range									
<30	30	4	34	28	5	33	25	5	30
30-50	85	26	111	71	27	98	72	29	101
>50	37	6	43	37	5	42	34	2	36
Type of contract									
Permanent	138	36	174	121	37	158	111	36	147
Temporary	14	0	14	15	0	15	20	0	20
Full-time	151	36	187	135	37	172	130	36	166
Part-time	1	0	1	1	0	1	1	0	1

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Denmark</i>									
Employees	655	81	736	645	76	721	645	75	720
Contractors	0	0	0	0	0	0	0	0	0
Professional category									
Executives	3	0	3	3	0	3	2	0	2
Manager	49	12	61	51	11	62	54	9	63
Employees	137	63	200	134	61	195	138	60	198
Blue collars	466	6	472	457	4	461	451	6	457
Age range									
<30	28	6	34	30	5	35	30	5	35
30-50	280	53	333	281	48	329	294	44	338
>50	347	22	369	334	23	357	321	26	347
Type of contract									
Permanent	651	81	732	642	75	717	643	75	718
Temporary	4	0	4	3	1	4	2	0	2
Full-time	650	77	727	641	71	712	625	63	688
Part-time	5	4	9	4	5	9	20	12	32

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Norway</i>									
Employees	127	16	143	133	16	149	131	14	145
Contractors	0	0	0	0	0	0	0	0	0
Professional category									
Executives	0	0	0	0	0	0	0	0	0
Manager	18	3	21	18	2	20	18	0	18
Employees	29	13	42	31	13	44	32	12	44
Blue collars	80	0	80	84	1	85	81	2	83
Age range									
<30	5	2	7	7	3	10	11	2	13
30-50	72	9	81	76	11	87	73	9	82
>50	50	5	55	50	2	52	47	3	50
Type of contract									
Permanent	127	16	143	133	16	149	131	14	145
Temporary	0	0	0	0	0	0	0	0	0
Full-time	127	16	143	133	16	149	128	12	140
Part-time	0	0	0	0	0	0	3	2	5

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Great Britain</i>									
Employees	101	19	120	98	18	116	92	20	112
Contractors	0	0	0	0	0	0	0	0	0
Professional category									
Executives	1	0	1	1	0	1	1	0	1
Manager	7	2	9	4	1	5	5	1	6
Employees	16	11	27	17	13	30	14	16	30
Blue collars	77	6	83	76	4	80	72	3	75
Age range									
<30	22	1	23	24	2	26	17	3	20
30-50	41	9	50	45	8	53	41	7	48
>50	38	9	47	29	8	37	34	10	44
Type of contract									
Permanent	100	18	118	94	18	112	89	19	108
Temporary	1	1	2	4	0	4	3	1	4
Full-time	101	19	120	98	18	116	92	20	112
Part-time	0	0	0	0	0	0	0	0	0

	31-12-2017		
	Men	Women	Total
<i>France<sup>28</sup></i>			
Employees	25	1	26
Contractors	0	0	0
Professional category			
Executives	0	0	0
Manager	9	0	9
Employees	16	1	17
Blue collars	0	0	0
Age range			
<30	0	0	0
30-50	19	1	20
>50	6	0	6
Type of contract			
Permanent	25	1	26
Temporary	0	0	0
Full-time	25	1	26
Part-time	0	0	0

<sup>28</sup> The data for France are shown solely for 2017, as it has become part of the scope of reporting this year

	31-12-2017		
	Men	Women	Total
<i>Belgium<sup>29</sup></i>			
Employees	438	53	<b>491</b>
Contractors	0	0	<b>0</b>
Professional category			
Executives	1	0	<b>1</b>
Manager	51	10	<b>61</b>
Employees	79	42	<b>121</b>
Blue collars	307	1	<b>308</b>
Age range			
<30	36	3	<b>39</b>
30-50	240	40	<b>280</b>
>50	162	10	<b>172</b>
Type of contract			
Permanent	419	53	<b>472</b>
Temporary	19	0	<b>19</b>
Full-time	408	38	<b>446</b>
Part-time	30	15	<b>45</b>

	31-12-2017		
	Men	Women	Total
<i>USA<sup>30</sup></i>			
Employees	68	3	<b>71</b>
Contractors	0	0	<b>0</b>
Professional category			
Executives	2	0	<b>2</b>
Manager	4	0	<b>4</b>
Employees	5	3	<b>8</b>
Blue collars	57	0	<b>57</b>
Age range			
<30	10	0	<b>10</b>
30-50	12	0	<b>12</b>
>50	46	3	<b>49</b>
Full-time	67	3	<b>70</b>
Part-time	1	0	<b>1</b>

<sup>29</sup> The data for Belgium are shown solely for 2017, as it has become part of the scope of reporting this year. In the Sustainability report, 100% of SCT's employees are reported (65% owned by Aalborg Portland Holding, for which in the Consolidated Financial Statements only the portion of employees referred to company control by the Cementir Group).

<sup>30</sup> For the United States only the data for 2017 are available and data for the type of contract are not available

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Sweden</i>									
Employees	109	25	134	109	23	132	106	21	127
Contractors	0	0	0	0	0	0	0	0	0
Professional category									
Executives	1	0	1	1	0	1	1	0	1
Manager	6	2	8	7	1	8	7	1	8
Employees	25	16	41	23	16	39	21	16	37
Blue collars	77	7	84	78	6	84	77	4	81
Age range									
<30	13	2	15	14	1	15	16	1	17
30-50	44	18	62	49	18	67	47	16	63
>50	52	5	57	46	4	50	43	4	47
Type of contract									
Permanent	107	24	131	106	23	129	100	20	120
Temporary	2	1	3	3	0	3	6	1	7
Full-time	109	24	133	109	22	131	106	20	126
Part-time	0	1	1	0	1	1	0	1	1

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Cementir Italia group</i>									
Employees	567	32	599	358	17	375	372	21	393
Contractors	0	0	0	0	0	0	0	0	0
Professional category									
Executives	17	1	18	9	0	9	10	0	10
Manager	22	4	26	18	3	21	19	2	21
Employees	148	27	175	71	14	85	77	19	96
Blue collars	380	0	380	260	0	260	266	0	266
Age range									
<30	2	0	2	0	0	0	0	1	1
30-50	334	28	362	257	16	273	272	20	292
>50	231	4	235	101	1	102	100	0	100
Type of contract									
Permanent	564	32	596	354	17	371	368	21	389
Temporary	3	0	3	4	0	4	4	0	4
Full-time	567	29	596	358	14	372	372	19	391
Part-time	0	3	3	0	3	3	0	2	2

	31-12-2017			31-12-2016			31-12-2015		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<i>Italy</i> <sup>31</sup>									
Employees	58	24	82	57	27	84	47	15	62
Contractors	0	0	0	0	0	0	0	0	0
Professional category									
Executives	27	1	28	30	0	30	23	0	23
Manager	13	6	19	11	7	18	10	4	14
Employees	18	17	35	16	20	36	14	11	25
Blue collars	0	0	0	0	0	0	0	0	0
Age range									
<30	2	2	4	2	8	10	2	3	5
30-50	35	22	57	35	19	54	28	12	40
>50	21	0	21	20	0	20	17	0	17
Type of contract									
Permanent	58	20	78	57	26	83	46	15	61
Temporary	0	4	4	0	1	1	1	0	1
Full-time	58	24	82	57	27	84	47	15	62
Part-time	0	0	0	0	0	0	0	0	0

	Men	31-12-2017		31-12-2016 Total	31-12-2015 Total
		Women	Total		
<i>Iceland</i> <sup>32</sup>					
Employees	10	1	11	9	8
Contractors	0	0	0	0	0
Professional category					
Executives	0	0	0		
Manager	0	1	1	1	1
Employees	3	0	3	2	2
Blue collars	7	0	7	6	5
Type of contract					
Permanent	9	0	9		
Temporary	1	1	2		
Full-time	10	1	10		
Part-time	0	0	0		

<sup>31</sup> Data refer to Cementir Holding and Spartan Hive, the only companies with employees in Italy after the disposal of Cementir Italia group.

<sup>32</sup>The subdivision by age group in 2017 is not available. For previous years, only the total number of employees and the breakdown by professional category is available.

	Men	31-12-2017 Women	Total	31-12-2016 Total	31-12-2015 Total
<i>Poland</i> <sup>33</sup>					
Employees	5	3	8	7	7
Contractors	0	0	0		
Professional category					
Executives	0	0	0	0	0
Manager	1	0	1	1	1
Employees	2	3	5	4	4
Blue collars	2	0	2	2	2

	Men	31-12-2017 Women	Total	31-12-2016 Total	31-12-2015 Total
<i>Russia</i> <sup>34</sup>					
Employees	1	0	1	2	2
Contractors	0	0	0	0	0
Professional category					
Executives	0	0	0	0	0
Manager	1	0	1	2	2
Employees	0	0	0	0	0
Blue collars	0	0	0	0	0

	Men	31-12-2017 Women	Total
<i>Australia</i> <sup>35</sup>			
Employees	3	0	3
Contractors	0	0	0
Professional category			
Executives	0	0	0
Manager	3	0	3
Employees	0	0	0
Blue collars	0	0	0

<sup>33</sup> Only the data divided by professional category are available in 2017. For previous years, only the total number of employees and the breakdown by professional category is available.

<sup>34</sup> Only the data divided by professional category are available in 2017. For previous years, only the total number of employees and the breakdown by professional category is available.

<sup>35</sup> Only the data divided by professional category are available in 2017.



## GRI CONTENT INDEX

GRI Standard	Disclosure	Page number or URL	Omission
Generale Disclosure			
GRI 102: General Disclosures	102-1 Name of the organization	Cementir Holding	-
	102-2 Activities, brands, products, and services	"The Group's products"	-
	102-3 Location of headquarters	Roma - Corso di Francia 200	-
	102-4 Location of operations	"The Group's products"	-
	102-5 Ownership and legal form	"The Corporate Governance system"	-
	102-6 Markets served	"The Group's products"	-
	102-7 Scale of the organization	"The Cementir Group"	-
	102-8 Information on employees and other workers	"Workforce number and composition" "Appendix"	-
	102-9 Supply chain	"How cement is made"	-
	102-10 Significant changes to the organization and its supply chain	"The Cementir Group" "Methodology note"	-
	102-11 Precautionary Principle or approach	n.a.	-
	102-12 External initiatives	"Our Principles"	-
	102-13 Membership of associations	The Company is member of several national and international associations related to its business, in almost all the Countries where it operates.	-
	102-14 Statement from senior decision-maker	"Letter to the stakeholders"	-
	102-16 Values, principles, standards, and norms of behavior	"Our principles"	-
	102-18 Governance structure	"The Cementir Group" and Financial Report	-
	102-40 List of stakeholder groups	"Group stakeholders"	-
	102-41 Collective bargaining agreements	"Industrial relations"	-
	102-42 Identifying and selecting stakeholders	"Group stakeholders"	-
	102-43 Approach to stakeholder engagement	"Group stakeholders" "We support our communities" "Customer management"	-
	102-44 Key topics and concerns raised	"Group stakeholders" "We support our communities"	-
	102-45 Entities included in the consolidated financial statements	"Methodology note"	-
	102-46 Defining report content and topic Boundaries	"Methodology note"	-
	102-47 List of material topics	"Methodology note"	-
	102-48 Restatements of information	"Methodology note"	-
	102-49 Changes in reporting	"Methodology note"	-
102-50 Reporting period	"Methodology note"	-	
102-51 Date of most recent report	"Methodology note"	-	
102-52 Reporting cycle	"Methodology note"	-	
102-53 Contact point for questions regarding the report	communication@cementirholding.it	-	

	102-54 Claims of reporting in accordance with the GRI Standards	"Methodology note"	-
	102-55 GRI content index	"GRI Content Index"	-
<b>Material Topics</b>			
<b>Economic Performance (Business performances, expansion and consolidation)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Earnings and financial results" "Economic value generated and distributed"	-
	103-2 The management approach and its components	"Earnings and financial results" "Economic value generated and distributed"	-
	103-3 Evaluation of the management approach	"Earnings and financial results" "Economic value generated and distributed"	-
GRI 201: Economic Performances	201-1 Direct economic value generated and distributed	"Economic value generated and distributed"	-
<b>Anti-corruption (Ethics, Anti-corruption and Compliance)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Our principles" "Commitment to combating corruption"	-
	103-2 The management approach and its components	"Our principles" "Commitment to combating corruption"	-
	103-3 Evaluation of the management approach	"Our principles" "Commitment to combating corruption"	-
GRI 205: Anti-corruption	205-3 Confirmed incidents of corruption and actions taken	"Commitment to combating corruption"	-
<b>Anti-competitive behaviour (Fair Competition)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Our principles" "Integrity and competition"	-
	103-2 The management approach and its components	"Our principles" "Integrity and competition"	-
	103-3 Evaluation of the management approach	"Our principles" "Integrity and competition"	-
GRI 206: Anti-competitive behaviour	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	"Our principles" "Integrity and competition"	-
<b>Materials (Use of alternative fuels and materials)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "In waste we see resources"	-
	103-2 The management approach and its components	"In waste we see resources" "Use of alternative fuels" "Alternative raw materials"	-

	103-3 Evaluation of the management approach	"In waste we see resources" "Use of alternative fuels" "Alternative raw materials"	-
GRI 301: Materials	301-1 Materials used by weight or volume	"Alternative raw materials"	-
Energy (Use of alternative fuels and materials e Climate Change)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "In waste we see resources" "We respect the environment in all our operations"	-
	103-2 The management approach and its components	"In waste we see resources" "We respect the environment in all our operations"	-
	103-3 Evaluation of the management approach	"In waste we see resources" "We respect the environment in all our operations"	-
GRI 302: Energy	302-1 Energy consumption within the organization	"Energy consumption" "Use of alternative fuels"	-
	302-3 Energy intensity	"Energy consumption"	-
Water (Water management)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We respect the environment in all our operations"	-
	103-2 The management approach and its components	"We respect the environment in all our operations"	-
	103-3 Evaluation of the management approach	"We respect the environment in all our operations"	-
GRI 303: Water	303-1 Water withdrawal by source	"Water consumption"	-
Emissions (Climate Change e Channeled emissions)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We respect the environment in all our operations" "Commitment on climate change"	-
	103-2 The management approach and its components	"We respect the environment in all our operations" "Commitment on climate change"	-
	103-3 Evaluation of the management approach	"We respect the environment in all our operations" "Commitment on climate change"	-
GRI 305: Emissions	305-1 Energy consumption within the organization	" CO2 emissions"	-
	305-2 Energy intensity	" CO2 emissions"	-
	305-4 Energy intensity	" CO2 emissions"	-

Logistic and Supply Chain			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note"	-
	103-2 The management approach and its components	"Methodology note" "Raw materials and product logistics"	-
	103-3 Evaluation of the management approach	"Methodology note" "Raw materials and product logistics"	-
GRI 308: Supplier Environmental Assessment	308-1 New suppliers that were screened using environmental criteria	-	Not available. In this reporting cycle, consistent and homogeneous information are not available to fully represent the Group. The Group is committed to implement appropriate actions to be able to report in a solid and uniform manner the information in the next reporting cycle.
GRI 414: Supplier Environmental Assessment	414-1 New suppliers that were screened using social criteria	-	Not available. In this reporting cycle, consistent and homogeneous information are not available to fully represent the Group. The Group is committed to implement appropriate actions to be able to report in a solid and uniform manner the information in the next reporting cycle.
Employment (People management and development)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 401: Employment	401-1 New employee hires and employee turnover	"Workforce number and composition"	Within the section dedicated to the topic are indicated in an exact manner the limitations of the perimeter.
Labor/Management relations (Industrial Relations)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 402: Labor/Management relations	402-1 Minimum notice periods regarding operational changes	"Industrial relations"	-
Occupational Health & Safety (Health & Safety)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 403: Occupational Health & Safety	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	"Safety first"	Within the section dedicated to the topic are indicated in an exact manner the limitations of the perimeter.

Training and education (People management and development)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 404: Training and education	404-1 Average hours of training per year per employee	"We value our people"	Within the section dedicated to the topic are indicated in an exact manner the limitations of the perimeter.
	404-2 Programs for upgrading employee skills and transition assistance programs	"We value our people"	-
	404-3 Percentage of employees receiving regular performance and career development reviews	"We value our people"	Within the section dedicated to the topic are indicated in an exact manner the limitations of the perimeter.
Diversity and Equal Opportunity (Diversity Management)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 405: Diversity and Equal Opportunity	405-1 Diversity of governance bodies and employees	"Diversity and inclusion" "Appendix"	Within the section dedicated to the topic are indicated in an exact manner the limitations of the perimeter.
Non discrimination (Human Rights)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people" "Diversity and inclusion"	-
	103-2 The management approach and its components	"We value our people" "Diversity and inclusion"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 406: Non discrimination	406-1 Incidents of discrimination and corrective actions taken	No cases of incidents related to discrimination were recorded	In 2017, the internal audit received 2 complaints about possible discrimination at work. Both were subject to detailed investigations as a result of which they were not confirmed as the absence of discrimination was detected.
Local Communities (Community Engagement)			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We support our communities"	-
	103-2 The management approach and its components	"We support our communities"	-
	103-3 Evaluation of the management approach	"We support our communities"	-
GRI 413: Local Communities	413-1 Operations with significant actual and potential negative impacts on local communities	"Operations with local community engagement, impact assessments, and development programs"	Qualitative description of local communities involvement and developed programs
	413-2 Operations with significant actual and potential negative impacts on local communities	"Dialogue and support of local communities"	-

Customer Management			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Customer management"	-
	103-2 The management approach and its components	"Customer management"	-
	103-3 Evaluation of the management approach	"Customer management"	-
n.a.	GRI disclosures is not applicable. Nessuna disclosure del GRI applicabile. A qualitative description of the issue and related actions by the Group is described.	"Customer management"	-
White Cement applications and quality			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Leader in white cement"	-
	103-2 The management approach and its components	"Leader in white cement"	-
	103-3 Evaluation of the management approach	"Leader in white cement"	-
n.a.	Nessuna disclosure del GRI applicabile. Nel documento è presente una descrizione qualitativa della tematica e delle azioni messe in campo dal Gruppo	"Leader in white cement"	-

Rome, 8 March 2018

Chairman of the Board of Directors

Francesco Caltagirone Jr.

(signed on the original)

## 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<sub>2</sub>:** 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.

**g/ tTCE:** grams per ton of cement equivalent.

**Joule:** unit of measure 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\*10<sup>9</sup> joules, while a terajoule (TJ) is equal to 1\*10<sup>12</sup> joules.

**Frequency rate:** the index used to calculate the scale 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 defined by OSHA and adopted by the GRI-G4 Guidelines.

**Severity rate:** the rate used to calculate the extent of injury (i.e. the severity of the consequences of accidents at work). This 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 defined by OSHA and adopted by the GRI-G4 Guidelines.

**Accident<sup>36</sup>:** 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 processing solid urban waste, generally collected in cylindrical blocks known as eco-bales.

**SRF (Solid Recovered Fuel):** a solid dry shredded fuel obtained by processing solid urban waste compliant with European standard ER15359.

**ISO 14001:** a voluntary international standard, establishing the requirements that an efficient environmental management system must fulfil. ISO 14001 is a certifiable standard, meaning that certification of compliance with its requirements 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 a company/organisation that decides to establish/implement/maintain/improve its environmental management system. Adopting 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 the definition and achievement of specific environmental goals.

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<sup>36</sup> Accidents during travel are excluded

**OHSAS 18001:** the international standard that sets the requirements for developing a system for managing and protecting the health and safety of workers (OHSAS stands for 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 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 create sustainable economic development, highlighting the role and responsibilities of businesses. To obtain (and maintain) the EMAS certification (registration), organizations 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 for occupational safety.

l/t: Litres per tonne.

m<sup>3</sup>: Cubic metre

NO: Nitrogen oxide.

NO<sub>2</sub>: Nitrogen dioxide

NO<sub>x</sub>: Nitrogen oxides (NO and NO<sub>2</sub>)

SO<sub>2</sub>: Sulphur dioxide

### **Emission factors used**

To calculate the equivalent CO<sub>2</sub> direct emissions (scope 1), emission factors related to net calorific values for fuels and biomass combustion have been used, as for IPCC guidelines.

To calculate the equivalent CO<sub>2</sub> indirect emissions (scope 2) for the cement sector, the emission factors given by Ecoinvent 3.3 have been used. It consist of a database with emission factors linked to the electric power production mix of various world countries.





**INDEPENDENT AUDITOR'S REPORT ON THE  
CONSOLIDATED NON-FINANCIAL STATEMENT  
PURSUANT TO ARTICLE 3, PARAGRAPH 10, OF  
LEGISLATIVE DECREE NO. 254/2016 AND ARTICLE 5  
OF CONSOB REGULATION NO. 20267**

**CEMENTIR HOLDING SPA**

**YEAR ENDED 31 DECEMBER 2017**



## ***Independent auditor's report on the Consolidated non-financial statement***

*pursuant to article 3, paragraph 10, of Legislative Decree No. 254/2016 and article 5 of CONSOB Regulation No. 20267*

To the Board of Directors of Cementir Holding SpA

Pursuant to article 3, paragraph 10 of the Legislative Decree 254 of 30 December 2016 (the Decree) and to article 5 of CONSOB Regulation 20267, we have performed a limited assurance engagement on the "Sustainability report – Consolidated non-financial statement" of Cementir Holding SpA and its subsidiaries (the Cementir group) as of 31 December 2017, prepared in accordance with article 4 of the Decree, approved by the Board of Directors of Cementir Holding SpA on 8 March 2018 (the NFS).

### ***Responsibility of the directors and of the Board of Statutory Auditors for the NFS***

The directors are responsible for the preparation of the NFS in accordance with article 3 and 4 of the Decree and with the Sustainability Reporting Standards, issued by Global Reporting Initiative in 2016 (GRI Standards). The directors are responsible, in accordance with the law, for the implementation of internal controls necessary to ensure that the NFS is free from material misstatement, whether due to fraud or unintentional errors.

The directors are responsible for identifying the content of the NFS, within the matters mentioned in article 3, paragraph 1, of the Decree, considering the activities and characteristics of the group and to the extent necessary to ensure the understanding of the group activities, its trends, its results and related impacts. The directors are responsible for defining the business and organisational model of the group and, with reference to the matters identified and reported in the NFS, for the policies adopted by the group and for the identification and management of risks generated or faced by the group.

The Board of Statutory Auditors is responsible for overseeing, in accordance with the law, the compliance with the Decree.

### ***Auditors' independence and quality control***

We are independent in accordance with the principles of ethics and independence disclosed in the Code of Ethics for Professional Accountants published by the International Ethics Standards Board for Accountants, which are based on the fundamental principles of integrity, objectivity, competence and professional diligence, privacy and professional behaviour. Our audit firm adopts the International Standard on Quality Control 1 (ISQC Italia 1) and, accordingly, maintains an overall quality control system which includes processes and procedures for the compliance with ethical and professional standards and with applicable laws and regulations.

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#### ***PricewaterhouseCoopers SpA***

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### ***Auditors' responsibility***

We are responsible for expressing, on the basis of the work performed, a conclusion regarding the compliance of the NFS with the Decree and with the GRI Standards. We conducted our engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000 Revised), issued by the International Auditing and Assurance Standards Board (IAASB), for limited assurance engagements. The standard requires that we plan and perform procedures to obtain a limited assurance that the NFS does not contain material errors. The procedures performed in a limited assurance engagement are less in scope than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised and, therefore, do not provide us with a sufficient level of assurance to become aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.

The procedures performed on the NFS are based on our professional judgement and consisted of interviews, primarily with company personnel responsible for the preparation of the NFS, in the analysis of documents, recalculations and other procedures aimed at obtaining evidence as appropriate.

In particular, we have performed the following procedures:

1. analysis of the relevant matters reported in the NFS relating to the activities and characteristics of the group, in order to assess the reasonableness of the selection process used, in accordance with article 3 of the Decree, with the reporting standard adopted;
2. analysis and assessment of the criteria used to identify the consolidation area, to assess its compliance with the Decree;
3. comparing the financial information reported in the NFS with the information reported in the group consolidated financial statements;
4. understanding of the following matters:
  - business and organisational model of the group, with reference to the management of the matters specified by article 3 of the Decree;
  - policies adopted by the group with reference to the matters specified by article 3 of the Decree, actual results and related key performance indicators;
  - main risks, generated or faced by the group, with reference to the matters specified in article 3 of the Decree.

- With reference to such matters, we have carried out some validation procedures on the information presented in the NFS and some controls as described under point 5 below;
5. understanding of the processes underlying the preparation, collection and management of the qualitative and quantitative material information included in the NFS. In particular, we have held meetings and interviews with the management of Cementir Holding SpA and with the management of Aalborg Portland Holding A/S and Aalborg Portland A/S, and with the personnel of Compagnie des Ciments Belges S.A. and we have performed limited analysis and validation procedures, to gather information about the processes and procedures for the collection, consolidation, processing and submission of the non-financial information to the function responsible for the preparation of the NFS.



- Moreover, for significant information, considering the activities and characteristics of the group:
- at a group level,
    - a) with reference to the qualitative information included in the NFS, and in particular to the business model, the policies adopted and the main risks, we carried out interviews and obtained supporting documentation to verify its consistency with available evidence;
    - b) with reference to quantitative information, we performed analytical procedures and limited tests, in order to assess, on a sample basis, the consolidation of the information;
  - for the following industrial sites of Aalborg (Denmark) and Gaurain (Belgium), which were selected on the basis of their activities, their contribution to the performance indicators at consolidated level and their location, we carried out testing procedures and gathered supporting documentation regarding the compliance with procedures and calculation methods used for the key performance indicators.

### ***Conclusions***

Based on the work performed, nothing has come to our attention that caused us to believe that the NFS of the Cementir Group as of 31 December 2017 has not been prepared, in all material respects, in compliance with articles 3 and 4 of the Decree and with the GRI Standards.

### ***Other aspects***

With respect to the year ended 31 December 2016, Cementir group prepared a Sustainability Report whose data has been included, for comparative purposes, in the NFS. Comparative data was not subject to any procedures.

Rome, 27 March 2018

*Signed by*

Luciano Festa  
(Partner)

*Signed by*

Paolo Bersani  
(Authorised signatory)

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