# SUSTAINABILITY REPORT 2019 Cementir Group

Non-Financial Statement (in accordance with Dutch Decree Disclosure of Non-financial Information PbEU, 2014, L330 and Decree Disclosure Diversity Policy PbEU, 2014, L330)



# SUSTAINABILITY REPORT 2019 Cementir Group

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

(in accordance with Dutch Decree Disclosure of Non-financial Information PbEU, 2014, L330 and Decree Disclosure Diversity Policy PbEU, 2014, L330)



# **CONTENTS**

- 4 Letter to the Stakeholders
- 8 Methodology note
- 9 The definition of the material issues
- 10 Group's stakeholders
- 12 Sustainability Targets

1

# THE CEMENTIR GROUP

- 20 The Cementir Group
- 22 2019 At A Glance
- 22 Our Presence in the world
- 22 Our Brands
- 22 Plants, production capacity by Country
- 24 Turnover composition By Region/BU
- 25 How cement is made
- 26 Leader in white cement
- 27 Difference between grey and white cement
- 28 Advantages offered by White Cement in construction
- 29 Grey cement
- 30 Production of ready-mixed concrete
- 30 Aggregates and cement products
- 30 Pursuing Innovation
- 31 The 'In White' project
- 31 Enhancing AALBORG WHITE applications with emerging technologies
- 32 Development of UHPC (Ultra High Performance Concrete)
- 32 Supporting GRC (Glass-Fibre Reinforced Concrete)
- 33 Exploring new opportunities with 3D printed concrete: Aalborg Explore™
- 34 FUTURECEM™ Technology
- 34 Customer management
- 34 Towards direct relationship-building
- 35 A new perspective: hearing the customer's voice and measuring performance
- 36 Waste management and recycling
- 37 Waste processed in 2019
- 38 Governance
- 38 The Corporate Governance system
- 40 The Sustainability Governance system
- 41 Internal control and risk management system
- 42 Integrity and competition
- 42 The Code of Ethics
- 43 Commitment to fight corruption
- 44 Commitment in Human Rights
- 45 Cementir Holding Antitrust Program
- 45 Relevant litigation

# 2 THE 4 PILLARS That guide our actions

- 48 In waste, we see resources: we promote a circular economy
- 49 Risk analysis and policies adopted
- 49 Use of alternative fuels
- 51 Group synergies
- 52 Alternative raw materials

- 55 Managing Quarrying Activities
- 55 Life in Quarries Project
- 56 Waste produced
- 58 We respect the environment in all our operations
- 58 Responsibility for our carbon footprint
- 58 Climate change Strategy
- **59** Climate change targets
- 59 Incentives provided for the management of climate-related issues
- 60 Investments in Sustainability and Digitization
- 61 Our commitment on carbon-related public policy
- 62 Risk analysis and policies adopted
- 63 Energy consumption
- 65 CO<sub>2</sub> emissions
- **67** Other air emissions
- 68 Water consumption
- 69 We value our people
- 69 Risk analysis and policies adopted
- 69 Group People Survey
- 70 Talent Review and Succession plans for Group key positions
- 70 Talent Acquisition
- 70 People evaluation and development
- 71 Cementir Academy
- 72 Diversity and Inclusion
- 73 Workforce number and composition
- 74 Safety first
- 77 Industrial relations
- 78 We support our communities
- 78 Risk analysis and policies adopted
- 78 Dialogue and support of local communities
- 79 Earthquake in Elazig
- 79 Coronavirus outbreak
- 79 Çimentaș Education and Health Foundation
- 79 Recovery of heat from kiln fuel

#### 3 LOOKING AT THE VALUE CREATED

- 82 Earnings and financial results
- 83 Economic value generated and distributed
- 84 Table of correlation between European Directive 95/2014/EU material issues GRI Standards

#### **86 APPENDIX**

- 86 Tables on the composition of personnel by country
- **102** GRI CONTENT INDEX
- 108 Glossary
- 109 Emission factors used
- 110 Independent Auditor's Report on the Consolidated Non-Financial Statement

# **LETTER TO THE STAKEHOLDERS**



Dear Stakeholders,

most climate experts agree that the world must take urgent action to cut emissions and we cannot deny that cement manufacturing is an energy and CO<sub>2</sub> intensive process. We consider ourselves a responsible member of the community we live in and, as such, our part is to promote initiatives and solutions that bring wellbeing to society.

Sustainability must guide our day-by-day operations.

In the last years, the Group has been actively committed to pursue a program inspired by the principles of the circular economy which envisages a series of initiatives focused on reducing the environmental impact of our activities and on developing lower CO<sub>2</sub> intensity products but, in 2019, Cementir decided to take more disruptive actions for fighting climate change and granting a better tomorrow for society and our company.

For this purpose, we established the Group Sustainability Committee (GSC) with the primary objective of assisting the Board of Directors in defining the sustainability strategy, indicating the main objectives and areas of intervention to be reflected in the Industrial Plan and providing indications and recommendations to the Board of Directors and other Bodies within the company on policies, guidelines and KPIs linked to sustainability objectives.

The Group set 25 Sustainability Targets covering the priority areas for Cementir. The targets are related to the effort of Cementir for adopting all necessary measures and the most innovative technological solutions to minimise the impact of our business on the environment; creating a healthy, safe and inclusive work environment; respecting human rights and creating a constructive and transparent relationship with the local communities and business partners.

We will reduce CO<sub>2</sub> emissions per ton of cement of about 30% by 2030. The target will be achieved through greater use of alternative fuels (77% of the total to produce grey cement within 2030) and renewable resources, reduction of thermal consumption and the clinker ratio of cements. A pivotal role in CO<sub>2</sub> reduction will be played by FUTURECEM<sup>™</sup>- our proprietary technology internally developed and worldwide patented - which allows over than 40% clinker replacement in cement.

Cutting our CO<sub>2</sub> emissions is a priority of Cementir Group, but clearly, we cannot achieve a carbon neutral future alone. For this reason, at the end of 2019, we accepted an additional challenge: support the Danish Government in the most ambitious CO<sub>2</sub> reduction project ever sponsored by a nation, providing our expertise and technology. In the Autumn 2019, the Danish government adopted a new binding climate law with the target of reducing the Danish CO<sub>2</sub>-emissions of 70% by 2030. In December 2019, the Danish Prime Minister appointed the Managing Director of Aalborg Portland as head for the climate partnership for the Danish energy intensive industry. This Climate partnership, led by Aalborg Portland and composed by the main refining, chemicals and food Danish companies will provide to the Danish Government the technical forecast of all achievable CO<sub>2</sub> reductions and will define the prerequisites for such reductions (in terms of policy, research, innovation, subsidies etc.).

Our efforts are also spread through other fundamentals areas, to promote circular economy and preserve the natural resources. In 2019, the 65% of the water consumed in our cement plants was recycled in the production process and our Group's treatment plants in UK and Turkey produced 100,000 tons of alternative fuels from waste and recycled almost 7,000 tons of garbage.

Within 2030, all our operating companies related to cement production, concrete production and waste management will operate with a certified environmental system (ISO 14001), energy system (ISO 50001) and health and safety system (ISO 45001). Safety serves as the basis for earnestly undertaking production process and represents the starting point of all our activities. This is why we continue to invest resources to provide all the tools and professional training required to create a strong safety culture and to pursue the long-term object of "zero accidents".

To accomplish the mentioned targets, according to the Industrial Plan 2020 - 2022, we will spend 100 million euros for green investments that include, among others:

- construction of an 8 MW wind farm for the needs of Aalborg plant;
- waste heat recovery in our Danish and Turkish plants;
- expansion of district heating to 50,000 families in Aalborg;
- increase in the use of alternative fuels from current 40% to 80% in Belgium.

I would like to stress that investing in our people is one of the pillars on which the future of our company is based. The 30% of new or vacant position are covered with internal successors. Talent management is the key factor to identify the top team for the future of our Group. Group Academy, Leadership programs and international mobility support the people to growth in a multicultural environment where the integration and inclusion are values embedded in the whole organization. An example is represented by "Your Voice", survey launched in 2019 to measure the level of engagement of our personnel across the Group that obtain a participation of more than 80%. According to the results of the Survey, specific action plans have been defined at global and local levels.

Respecting human rights is a shared responsibility within the company, deriving from the obligation to comply with our Code of Ethics and the other policies with an impact on human rights issues. In 2019, we launched a Human Rights project, with the goal of identifying a comprehensive system for monitoring and prevention of the areas of greatest risk.

We have the utmost commitment towards the communities in which we operate.

We feel the responsibility to help in times of need, as we did, at the beginning of 2020, after the earthquake that struck Elazig, in Turkey, or in China during the coronavirus outbreak.

In Elazig we provided support and assistance to the victims of the disaster. In the following hours after the earthquake, we made donation to the local authorities and we opened the plant to provide accommodation to the families that lost their houses. In China our plant has been temporary closed and a donation has been made to the local authorities that are facing this public health emergency. The health and well-being of our employees and partners are our priority, for this reason we will gradually restart the operations in close consultation with our suppliers and public health experts.

In Turkey, the Cementir Group maintains close ties with the most vulnerable groups through the Çimentaş Education and Health Foundation, established in 1986 and committed to provide financial assistance and educational materials to families and schools. In 1998, the Foundation established the Işıkkent High School. This upper school is recognized for its innovative approach to education and research and in 2019 counted 770 students.

In Belgium we participate in the Life in Quarries initiative, a project founded by the European Commission to develop biodiversity and the rehabilitation of closed quarries.

Much has been done, but even more is left to do. Cement sector has to handle important challenges through the next years and we have the responsibility to lead the change with our competitive and innovative approach and energy.

I cordially invite you to comment and inspire us in order to continuously improve the sustainability of our business and contribute to the construction of a better Future.

Rome, 5 March 2020

**Francesco Caltagirone, Jr.** Chairman of the Board of Directors



# **METHODOLOGY NOTE**

The Cementir Group Sustainability Report - Consolidated Non-Financial Statement (SR or NFS), has been prepared in compliance with EU directive 2014/95 on the disclosure of non-financial and diversity information, and in accordance to the related Dutch decrees (PbEU, 2014, L330 and PbEU, 2014, L330), because of the transfer of the Holding's registered office from Rome to Amsterdam.

The Report consolidates the information on the entire Cementir Group; it therefore includes the data on the parent company and its fully consolidated subsidiaries<sup>1</sup>. Furthermore, it also fully consolidates the non-financial data on the subsidiary SCT which, in the Group's Financial Report, is consolidated applying the proportional method (since it is controlled jointly at 65%). Any limits to the scope of reporting are clearly identified in the text and do not significantly affect understanding of the Group's business, its performance or its results.

The qualitative and quantitative information reported in the NFS derives from a data-gathering process performed at the levels of Holding and single legal entity, using excel reporting packages.

The Report discloses the data for the period 1 January 2019 - 31 December 2019, is drafted annually, and is approved by the Board of Directors of Cementir Holding NV. Previous years' data are included for comparative purposes in order to enable an assessment, in time, of the performance of the Group. Any restatement of data reported in previous years is clearly indicated in the document.

The document was drafted with the aim of providing information that is reliable, complete, balanced, accurate, understandable and comparable, as required by the reporting standards used: GRI Sustainability Reporting Standards, 2016. The Cementir Group has decided to prepare the document in compliance with the "In Accordance - Core" reporting option. A detailed overview of the indicators disclosed can be found in the GRI Content Index which provides a detailed description of all the topics covered in the document.

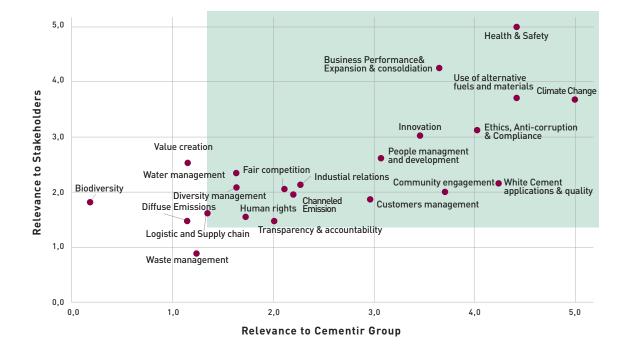
At the end of the document the Annex also includes detailed information on the emission factors used to report CO<sub>2</sub> equivalent emissions indicators.

The Sustainability Report - Consolidated Non-Financial Statement was subjected to limited assurance by PricewaterhouseCoopers S.p.A..

<sup>&</sup>lt;sup>1</sup> For the Group details see the Group Annual report

# THE DEFINITION OF THE MATERIAL ISSUES

For Cementir Group, the relevant issues for the company and its stakeholders are those that have an impact, directly or indirectly, on Cementir's ability to create, preserve or that adversely affect the Group's value. The materiality analysis performed by the Group three years ago was part of a broader assessment of the sustainability performance of Cementir, through which useful elements were collected that helped in setting the groundwork for the Group sustainability strategy defined in 2019. The initial analysis saw the involvement of the management both of Cementir Holding and of the Group's various Regions and identified the priority aspects for the company and for its stakeholders. The 2018 topics, in line with those defined three years ago, were evaluated in the previous reporting year in order to assess their continued relevance. The review consisted of a benchmark with a panel of companies operating in the sector and a survey on the context and the challenges the sector has to deal with. The results of this work confirmed that the material topics maintained their relevance in 2018. In 2019 therefore, from this starting point, and following the definition of the sustainability strategy and targets, the Group performed a slight review of the topics and their importance. The review was performed at a desk level, assessing the requirements of the top management, as witnessed by the sustainability strategy. Based on this, the materiality matrix was defined. The results were then reviewed and validated by the top management. Below, the 2019 materiality matrix is presented. The matrix illustrates the most relevant topics both for the business and for its stakeholders, as presented in the upper-right-hand corner of the graph. All the material topics are important in the organisation, except for the subject of health and safety which also has an impact on third parties operating in Group plants.



# **GROUP'S STAKEHOLDERS**

Management of the Group's main stakeholders varies in terms of method and the frequency of listening and involvement, based on type of subject, topic, interest and characteristics of the Group's various regions. Considering the Parent Company is a Holding, some of these stakeholders' interface directly with central structures, while others are purely interested in performing the local activities of Group plants and the management of relations with those subjects is delegated to the regional level. Therefore, frequencies of stakeholder engagement and topics discussed with them vary by stakeholder category and countries where the Group operates.

The table below lists the Group's main stakeholders and the subjects of interest identified for each one.

Type of stakeholder	Subject of interest
Personnel	<ul> <li>Health and Safety</li> <li>People management and development</li> <li>Managing diversity</li> <li>Industrial relations</li> <li>Human rights</li> </ul>
Institutions and Authorities (local and national)	<ul> <li>Health and Safety</li> <li>Industrial relations</li> <li>Human rights</li> <li>Ethics, anti-corruption and compliance</li> <li>Climate change</li> <li>Loyal competition</li> </ul>
Shareholders	<ul> <li>Business performance, expansion and consolidation</li> <li>Ethics, anti-corruption and compliance</li> </ul>
Trade Unions	<ul><li>Industrial relations</li><li>Human rights</li></ul>
Local communities and local committees	<ul> <li>Use of alternative fuels and materials</li> <li>Channelled emissions</li> <li>Involvement of local communities</li> </ul>
Customers	<ul> <li>White cement (quality and application)</li> <li>Management customers</li> <li>Loyal competition</li> <li>Innovation</li> </ul>
Suppliers and contractors	<ul> <li>Health and safety</li> <li>Use of alternative fuels and materials</li> <li>Managing logistics and the supply chain</li> </ul>
Associations of environmentalists	<ul> <li>Climate change</li> <li>Emission conveyed and spread</li> <li>Use of alternative fuels and materials</li> <li>Biodiversity</li> </ul>
Financiers	<ul> <li>Business performance, expansion and consolidation</li> <li>Ethics, anti-corruption and compliance</li> <li>Transparency and accountability</li> <li>Use of alternative fuels and materials</li> </ul>



# **SUSTAINABILITY TARGETS**

We want to build a better tomorrow, creating value for society and for our company. Progress offers multiple opportunities but poses important challenges such as the reduction of carbon emissions, the depletion of natural resources and the production of waste.

Among the many challenges in front of us, sustainable growth is one of the most difficult. For our Group, sustainable growth is both a responsibility and a requirement for continuing to work in the cement sector, which has to deal more than most 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 are translated into an action plan that 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 2019 the Group progressed along its path to promoting sustainable growth by establishing a series of sustainability targets covering the four pillars of the Group.

The targets have been defined by the Sustainability Team in collaboration with regional and corporate functions and according to the guidelines established by the Sustainability Committee.

The Group Management Team (GMT), is accountable for managing the projects and achieving the targets.

The internal audit is responsible the periodic monitoring of the activities implemented in reference to the Group's sustainability strategy and its targets.

Yearly, in the Sustainability Report, Cementir will share its progress toward achieving these targets with its stakeholders.

In the next page is an indication, for each of the four pillars identified by Cementir, of the main targets and objectives, of the reference UN Sustainable Development Goals (SDGs) and of the results obtained in 2019.



JN SDGs	Target	Detailed description	2019 Results	Deadline and	l progress	Pages
12 REPORTED AND PRODUCTION AND PRODUCTION 13 CLIMMIT CONTRACTION	77% of alternative fuels for Grey cement production by 2030	The Group target has differentiated goals for each single plant producing grey cement. The overall Group target defined, which also has intermediate target dates in 2022 and 2025, has a final target date in 2030	In 2019, 31.4% of alternative fuels were used to produce grey cement	2022 2025 2030	Target in line with planned roadmap	Alternative fuels (pag. 49 / 51) Climate Tragets (pag. 59)
12 RESPONSE ADE PRODUCTION ADE PRODU	6% of alternative fuels for White cement production by 2030	The demand for consistency in the color of white cement is much higher than for grey as there is a high attention to the purity of the color. Alternative fuels affect the color and for this reason their utilization is drastically limited in the production of white cement. This explains the reason of the 6% final target defined in the white cement production, which also contains intermediate target in 2022 and 2025	In 2019, 3.9% of alternative fuels were used to produce white cement	2022 2025 2030	Target in line with planned roadmap	Alternative fuels (pag. 49 / 51) Climate Tragets (pag. 59)
12 RESPONSE CONSUMPTION AND PRODUCTION	Waste recycling	Since 2009, Cementir has been operating in the urban and industrial waste management and processing sector	In 2019, the Group's plants recycled, through mechanical selection and treatment processes almost 7,000 tons of materials	ongoing	Target in line with planned roadmap	Waste Management (pag. 36 / 37)
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Production of alternative fuels from waste	The Group's plants produce alternative fuels and thermal energy, minimizing landfill waste and contributing to the reduction of greenhouse gas (GHG)	In 2019, the Group's treatment plants produced a total of 100,000 tons of fuel	ongoing	Target in line with planned roadmap	Waste Management (pag. 36 / 37)

# >CIRCULAR ECONOMY Pillar I: In waste, we see resources: we promote a circular economy

100,000 tons of fuel from waste reduction of greenhouse gas (GHG) emissions

>ENVIRONMENT

#### Pillar II: We respect the environment in all our operations

UN SDGs	Target	Detailed description	2019 Results	Deadline ar	nd progress	Pages
13 CLIMATE	CO₂ reduction target of 30% per ton of cement by 2030 (baseline 1990)	Cementir has set CO <sub>2</sub> emission reduction targets, using a 1990 baseline, for grey and white cement production. The 2030 target includes a 35% reduction for white cement (equivalent to 808 kg/TCE in 2030) and 31% reduction for grey cement (equivalent to 500 kg/TCE in 2030). Intermediate targets for 2022 and 2025 have been defined	In 2019, the CO <sub>2</sub> emission for grey was 696 KG/TCE, while for white was 926 Kg/TCE	2022 2025 2030	Target in line with planned roadmap	Climate Targets (pag. 59) CO2 emissions (pag. 65 / 66)
7 ATORIMALE AND 10 ALLAN INHERIT 10 ANN INFANTION 10 ANN INFANTION 11 ANN INFORMATION AND PRODUCTION AND PRODUCTION	100 million green investments in the 2020-2022 period	In the 2020 - 2022 Industrial Plan, green investments of 100 million euros have been planned which include, among others: - construction of a 8 MW wind farm for the needs of Aalborg plant; - heat recovery in our Danish and Turkish plants - increase in the use of alternative fuels from current 40% to 80% in Belgium; - digitization of the manufacturing process, maintenance, inventory management and spare parts in all our main plants	In November 2019 the BoD approved the 2020-2022 Industrial Plan	2022	Target in line with planned roadmap	Cliamte Change Strategy (pag.58) Investment in Sustainability (pag. 60)

continued

#### continued

JN SDGs	Target	Detailed description	2019 Results	Deadline and p	rogress	Pages
13 ACTION	Lowering clinker content of grey cement to 69%	Application of FUTURECEM™ technology. FUTURECEM™ will allows over than 40% clinker replacement in cement, depending on clay type, but keeping the same performance of a pure Portland cement	In 2019, the clinker / cement ratio for grey cement was 82%	2022 2025 2030	Target in line with planned roadmap	Climate Targets (pag. 59) Alternative raw materials (pag. 52 / 54)
13 CUMATE ACTION	Lowering clinker content of white cement to 80%	The demands for consistency of color of white cement is much higher than for grey as no nuances of white or colored surfaces can be accepted. Alternative minerals affect the color and for this reason their utilization is drastically limited for white cement	In 2019, the clinker / cement ratio for white cement was 84%	2022 2025 2030	Target in line with planned roadmap	Climate Targets (pag. 59) Alternative raw materials (pag. 52 / 54)
12 RESPONSIBLE CONCOMPTION AND PRODUCTION	District heating in Denmark	In the Danish city of Aalborg, our production plant recovers energy to provide district heating to over 36,000 dwellings, which will become 50,000 in the near future, covering about the half of its urban population	In 2019, the Aalborg Plant provided 1,6 million Gigajoules of thermal energy to the local community	ongoing	Target in line with planned roadmap	District Heating (pag. 79)
	All operating companies have to operate with a certified environmental management system (i.e ISO 14001)	Cementir has defined that all operating companies in the cement production, concrete production and waste management sectors have to operate with a certified environmental management system (i.e. ISO 14001). As of 2019, 67% of all operating companies are certified ISO 14001, in 2025 the percentage will be 86% while in 2030 all operating companies will be certified	In 2019, 67% of operating companies operate with a certified environmental management system	2025 2030	Target in line with planned roadmap	Environment (pag. 62)
7 AFFOREMELTE AND CLEAN INCRUT	All operating companies have to operate with a certified energy management system (i.e ISO 50001)	Cementir has defined that all operating companies in the cement production, concrete production and waste management sectors have to operate with a certified energy management system (i.e. ISO 50001). As of 2019, 33% of all operating companies are certified ISO 50001, in 2025 the percentage will be double to 71% while in 2030 all operating companies will be certified	In 2019, 33% of all operating companies with a certified energy management system	2025 2030	Target in line with planned roadmap	Energy Consumption (pag. 64)
6 CLEAN WATER AND SANITATION	Reuse water in production	Cementir Group aims to reuse water in production by recycling process water and capturing rainwater from selected areas	In 2019, 65% of water used in the cement production plants was reused	ongoing	Target in line with planned roadmap	Water Consumption (pag. 68)
17 PATNERSHIPS FOR THE CALLS	Supporting Denmark in delivering a 70% reduction in greenhouse gases by 2030	Through Aalborg Portland, the Group is involved in the most ambitious CO <sub>2</sub> reduction project sponsored by a government. The Managing Director of Aalborg Portland is leading the technical group that will provide to the Danish government the technical forecast of all potential CO <sub>2</sub> reductions achievable by energy intensive industry in Denmark and will define the prerequisites (policy, research, innovation, subsidies, etc.) for such reductions	In December 2019, the Danish Prime Minister appointed the Managing Director of Aalborg Portland as head of the climate partnership for energy- intensive industry in Denmark	2030	Target in line with planned roadmap	Commitment on carbon related policy (pag. 61)

#### continued

>PEOPLE	Pillar III: We	e value our people				
UN SDGs	Target	Detailed description	2019 Results	Deadline and prog	jress	Pages
4 QUALITY EDUCATION	Sustainable talent management	Key positions are filled internally with top-class candidates worldwide	In 2019, 30% of new/vacant key positions filled in with internal successors	ongoing	Target in line with planned roadmap	Talent review (pag. 70)
5 семия семину	Promoting diversity in the workforce	Cementir is committed to promoting diversity in the workforce	In 2019, 23% of personnel involved in the Group Talent Program is female. The Group diversity policy was published on web site. 16% of successors for key position is female (double respect 2018)	ongoing	Target in line with planned roadmap	Talent review (pag. 70)
3 GOOD HEALTH AND HEL-SEING	People engagement	Increase people engagement across the Group by listening, engaging and implementing improvement plans	In 2019, the Group performed the survey "Your Voice" to verify the level of engagement of personnel across the Group. Participation rate 83% at Group Level	ongoing	Target in line with planned roadmap	Group People Survey (pag. 69)
	Human rights awareness	Promoting sensibility, awareness & education about Human rights across the Group	In 2019, Cementir Group defined its Human Rights framework including Policy, training program, communication plan and adoption	2020	Target in line with planned roadmap	Human Rights (pag. 44)
3 GOOD HEALTH AND WELL-BEING	Zero fatalities for Group employees	Group-wide training initiative on the importance of management responsibility in occupational health and safety. Analysis of the causes of accidents and near misses for the entire Group and implementation of appropriate preventative measures	Zero fatalities concerning Group Employee during 2019	ongoing	Target in line with planned roadmap	Safety First (pag. 74 / 76)
3 GOOD HEALTH AND HELL-ERG	All operating companies have to operate with a certified health and safety management system (i.e. ISO 45001)	Group-wide training initiatives on the importance of management responsibility in occupational health and safety. As of 2019, 55% of all operating companies are certified ISO 45001 or OHSAS 18001. The goal set by the Group is to reach 80% of coverage by 2025 and 100% by 2030	In 2019, 55% of all operating companies operate with a certified H&S management system	2025 2030	Target in line with planned roadmap	Safety First (pag. 74 / 76)
4 QUALITY EDUCATION	Quality Education for the employees	In 2018, the Group launched the Cementir Academy, a training hub that aims to develop and enhance the technical, behavioral and managerial skills of all our employees	More than 50,000 hours of training were supplied in 2019. Almost 17 hours of training per capita	ongoing	Target in line with planned roadmap	Cementir Accademy (pag. 71)

continued

#### continued

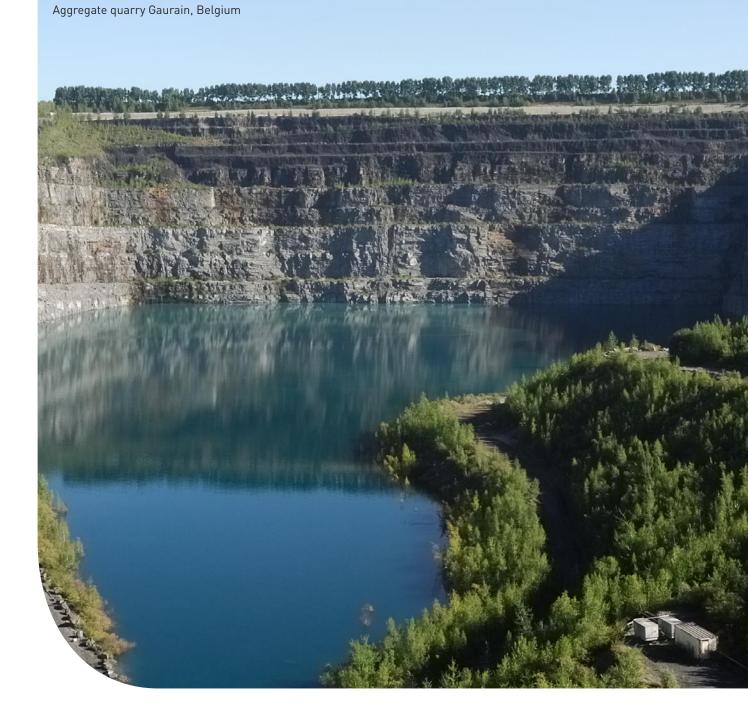
#### >PEOPLE Pillar III: We value our people Detailed description **UN SDGs** 2019 Results Deadline and progress Pages Link between The sustainability targets defined by In 2019, Cementir 2020 Target in line Incentives 13 ACTION the Group are included in the monetary with planned employee's established sustainability for the remuneration and incentive plan adopted by Cementir targets as part of its roadmap management sustainability targets sustainability strategy (pag. 59) definition. Some targets, (i.e. alternative fuels and alternative raw materials) have already been included in the 2019 monetary incentive plan. Other targets (i.e. CO2 reduction) will be included starting from 2020 . . . . . . . . . . . . . . Promotion of gender 42% of Board Members Implementation of a specific Group Diversity and ongoing Target achieved 5 GENDER equality with an **Diversity Policy** are women Inclusion objective of at least (pag. 72) Ξ 30% of the Board of

Directors being composed of women

#### >LOCAL COMMUNITY Pillar IV: We support our communities

UN SDGs	Target	Detailed description	2019 Results	Deadline and pro	gress	Pages
13 CLIMATE	Transparent communication with stakeholders	In 2020, Cementir will submit CDP Climate Change Questionnaire and, as already done in the past years, the Sustainability Report will be assured by external auditors	Limited assurance engagement on Sustainability Report by external Auditors New corporate website with dedicated section for Sustainability www.cementirholding.com	2020	Target in line with planned roadmap	See Independent Auditor's Report (pag. 110)
4 duant toucation	Quality Education for the local community	In Turkey, the Group supports the Çimentaş Education and Health Foundation. Since its establishment, the Foundation has sponsored over 500 scholarships for upper school and university students. Thanks to the Foundation's financial support, the Işıkkent High School was founded	The Işıkkent High School provides education at all levels from nursery school to high school	ongoing	Target in line with planned roadmap	Cimentas Foundation (pag. 79)
	Implementation of monitoring systems to eliminate human rights related risks across the Group	A human rights self-assessment checklist, based on Cementir Code of Ethics, UN Declaration on Human Rights, ILO Conventions and UK Slavery Act has been established and has been included as part of Internal Audit process. In the next 3 years the checklist will be applied to all major Cementir companies	Inclusion of Human Rights checklist as part of the Internal Audit work program	2022	Target in line with planned roadmap	Human Rights (pag. 44)





# **1** THE CEMENTIR GROUP

- 20 The Cementir Group
- 22 2019 At A Glance
- 22 Our Presence in the world
- 22 Our Brands
- 22 Plants, production capacity by Country
- 24 Turnover composition By Region/BU
- 25 How cement is made
- 26 Leader in white cement
- 27 Difference between grey and white cement
- 28 Advantages offered by White Cement in construction
- 29 Grey cement
- 30 Production of ready-mixed concrete
- 30 Aggregates and cement products
- **30** Pursuing Innovation
- 31 The 'In White' project
- 31 Enhancing AALBORG WHITE applications with emerging technologies
- 32 Development of UHPC (Ultra High Performance Concrete)
- 32 Supporting GRC (Glass-Fibre Reinforced Concrete)
- 33 Exploring new opportunities with 3D printed concrete: Aalborg Explore™
- 34 FUTURECEM™ Technology
- 34 Customer management
- 34 Towards direct relationship-building
- 35 A new perspective: hearing the customer's voice and measuring performance
- 36 Waste management and recycling
- 37 Waste processed in 2019
- 38 Governance
- 38 The Corporate Governance system
- 40 The Sustainability Governance system
- 41 Internal control and risk management system
- 42 Integrity and competition
- 42 The Code of Ethics
- 43 Commitment to fight corruption
- 44 Commitment in Human Rights
- 45 Cementir Holding Antitrust Program
- 45 Relevant litigation

# THE CEMENTIR GROUP<sup>2</sup>



Cementir Holding is a multinational Group with registered offices in the Netherlands operating globally in the building materials sector. Through its subsidiaries in 18 countries on 5 continents, the Cementir Group is global leader in the white cement sector and is specialised in the production and distribution of grey cement, ready-mixed concrete, aggregates and concrete products and in the processing 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. The Group grew internationally over the years mainly through investments and acquisitions amounting to over EUR 1.7 billion. These transformed the company from being solely Italian into a multinational with production sites and commercialisation operations in over 70 countries.

With about 3.3 million tons of installed capacity, Cementir Holding is world leader in the white cement segment; and is leader in the production of cement and ready-mixed



# **SALES VOLUMES**



6.8 MILLION TONS OF GREY CEMENT 2.7 MILLION TONS OF WHITE CEMENT 4.1 MILLION CUBIC METRES OF READY-MIXED CONCRETE 9.7 MILLION TONS OF AGGREGATES

# **PLANTS**



6 WHITE CEMENT PLANTS 6 GREY CEMENT PLANTS 30 TERMINALS 100 READY-MIXED CONCRETE PLANTS 11 QUARRIES 1 CEMENT PRODUCT PLANT 3 WASTE TREATMENT AND RECYCLING PLANTS

 $<sup>^{\</sup>rm 2}{\rm The}$  number of total employees included 100% of SCT as described into the Methodology Note.

concrete in Scandinavia, third in Belgium and is one of the main international producers of cement in Turkey. The company pursues a targeted geographical diversification and product strategy accompanied by greater integration of its business activities.

This international growth strategy has been driven by the acquisitions made over the years, including that of Compagnie des Ciments Belges (CCB) 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. In March 2018, Cementir finalised the acquisition of a further 38.75% share in Lehigh White Cement Company from Lehigh Cement Company LLC, a subsidiary of HeidelbergCement AG. Through that transaction, the Cementir group controlled LWCC with a 63.25% share as of 31 December 2018, while the remaining 36.75% was held by the Cemex group. The acquisition enabled it to become involved in the direct management of assets in the US, in the white cement segment, the Group's core business, enhancing its global leadership in line with the growth strategy.

The Group's operations are organized on a regional basis in seven geographical areas: Nordic & Baltic, Belgium, North America, Turkey, Egypt, Asia Pacific and Italy.

The vertically integrated aggregates, cement and concrete production platforms are located in 3 countries: Denmark, Belgium and Turkey. In Denmark, Cementir is leader in both cement (grey and white) and concrete; in Sweden and Norway it is leader in the concrete sector while in the United Kingdom and Turkey Cementir operates in the industrial and urban waste field. In North America, Egypt and Asia-Pacific, Cementir is present only in the white cement production and commercialisation sector.



# **2019 AT A GLANCE**

OUR PRESENCE IN THE WORLD NORDIC&BALTIC BELGIUM AND FRANCE NORTH AMERICA TURKEY EGYPT ASIA PACIFIC ITALY

**OUR BRANDS** 



# PLANTS, PRODUCTION CAPACITY BY COUNTRY

#### **NORDIC & BALTIC**

#### Denmark

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

#### Norway Ready-mixed concrete plants: 28 Terminals: 1

Sweden Ready-mixed concrete plants: 9 Quarries: 7

Latvia Terminals: 1

iceland Terminals: 3 **Netherlands** Terminals: **1** Registered office of Cementir Holding N.V.

**Poland** Terminals: **1** 

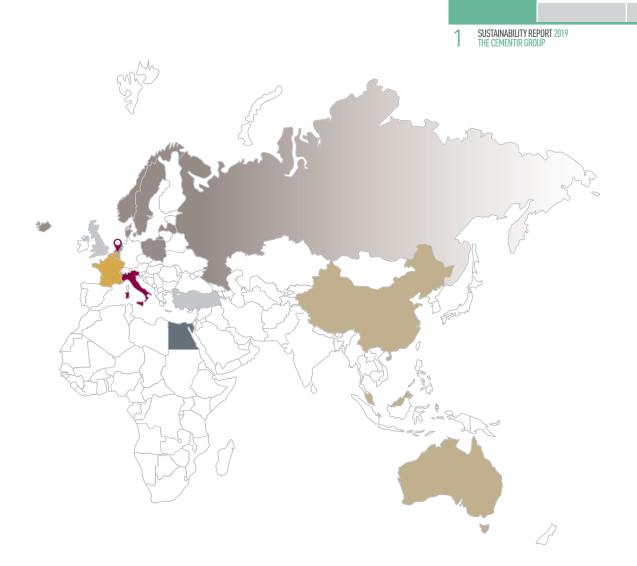
#### **BELGIUM / FRANCE**

#### Belgium

Grey cement production capacity: **2.3 million t** Cement plants: Ready-mixed concrete plants: Terminals: Quarries:

#### France

Ready-mixed concrete plants: **5** Terminals: **1** 



#### NORTH AMERICA

#### USA

White cement production capacity: **0.26 million t** Cement plants: Cement product plants: Terminals:

#### TURKEY

#### Turkey

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

#### United Kingdom

Waste management facilities: 1 Terminals: 1

EGYPT

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

#### ASIA PACIFIC

#### China

White cement production capacity: **0.7 million t** Cement plants: **1** Terminals: **3** 

#### Malaysia

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

Australia Terminals: 4

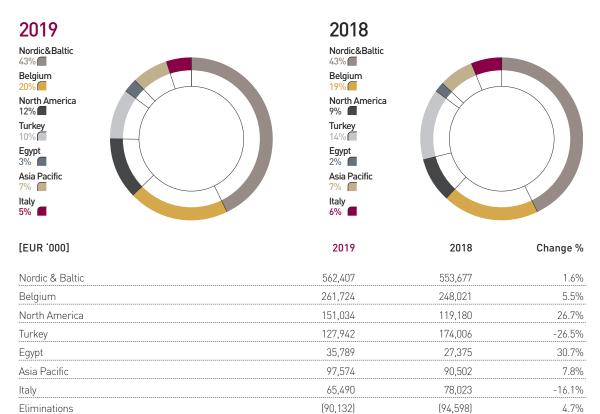
#### ITALY

#### Italy

Trading activities Secondary and operational office of Cementir Holding N.V.

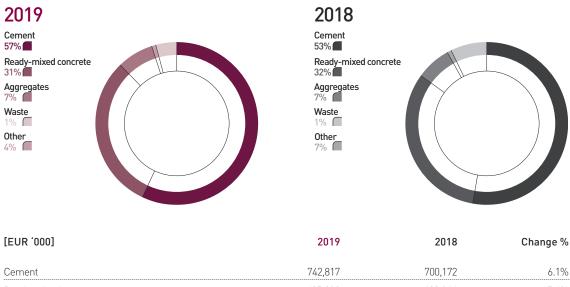
# **TURNOVER COMPOSITION BY REGION/BU**

#### REVENUE FROM SALES AND SERVICES BY GEOGRAPHICAL SEGMENT



#### REVENUE FROM SALES AND SERVICES BY BUSINESS SEGMENT

Total revenue from sales and services



1,211,828

1,196,186

1.3%

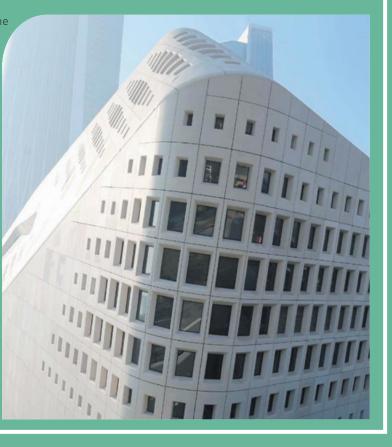
Total revenue from sales and services	1 211 828	1 196 186	1.3%
Eliminations	(103 645)	(128 571)	10 / 0/
Other	58,012	92,357	-37.2%
Waste	14,699	16,092	-8.7%
Aggregates	94,756	87,070	8.8%
Ready-mixed concrete	405,209	429,066	-5.6%
Cement	742,817	700,172	6.1%

# How cement is made

The 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".

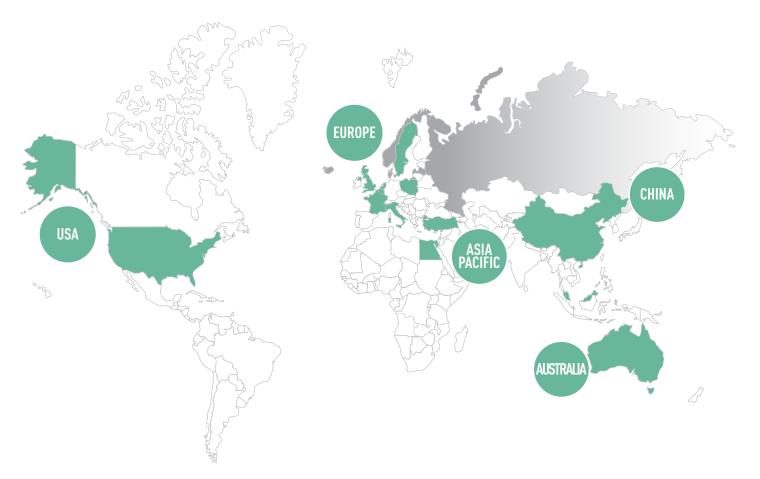
The raw meal is cooked at very high temperatures in special kilns, which are fuelled mainly by fossil fuels, in order to obtain a semi-finished product known as "clinker", cement's main component. Once cooled, clinker undergoes a process of grinding, mixing with gypsum and other mineral constituents (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 2019 Cementir Holding distributed worldwide around 6.8 million tons of grey cement and over 2.7 million tonnes of white cement of various types and classes, produced in 11 plants located in Denmark, Belgium, Turkey, Egypt, China, Malaysia and US.



# **LEADER IN WHITE CEMENT**

The Cementir Group is the world's leading producer and exporter of white cement, with the 27% share of worldwide trade and a production capacity over 3 million tons. With the Aalborg White® brand we are the leader in China, the United States, Western Europe, Australia, Malaysia, Egypt.



Aalborg White® has always been identified with white cement throughout the world. A pure, high quality cement that can be found everywhere from Park Avenue skyscrapers in Manhattan, to the London Olympics structures and even the Lindholm High Museum in Nørresundby, Denmark. https://www.cementirholding.com/en/our-business/projects

The distinctive feature of white cement is its colour. Such whiteness is obtained thanks to very pure and select raw materials, the use of complex production processes and an extremely rigorous quality control process which allow this material to be used in complex architectural designs and sophisticated aesthetic applications. The peculiarity of the limestone used for manufacturing AALBORG WHITE® is the lack of contamination from sand and clay, a circumstance that makes it very pure, ideal for the production of white cement. The combination of this pure raw material, high-quality sands and kaolin, advanced technology, a specialised workforce and over 100 years of experience have made AALBORG WHITE® cement unique in the world for its properties such as high reflection, high mechanical performance, low alkali content and high resistance to sulphates. As the world leader in the white cement market with the Aalborg White® brand, Cementir offers a wide product range which complies with the best international standards. Our industrial processes are inspired by the Group's consolidated best practices that guarantee our customers a unique quality and reliability over time. Our research quality technical centre (RQT) has a worldwide reputation for international patents, awards and multiple collaborations with prestigious universities.

#### DIFFERENCE BETWEEN GREY AND WHITE CEMENT

White and grey cement are two distinctly different products, with different applications and production methods. Applications of white cement are different from the uses of grey cement. White cement is mainly used for drymix products, mortars, special products and decorative purposes. Main uses for grey cement are in heavy construction, such as in-situ or precast concrete. Grey cement is a commodity product, used for mass construction, such as civil works, dwellings and industrial estates.

From a commercial point of view, there is a clear distinction between grey and white cement. In contrast to grey cement, white cement is a specialty product,

with niche applications and markets, which are clearly differentiated from grey cement applications.

White cement is differentiated from grey in term of:

- White colour and capacity for being combined with different pigments in order to produce uniformly coloured products.
- Consistent product quality low variation, high strength and low content of minor elements make white cement a preferred component of dry mix construction formulations.



White cement is used for specialty applications, where chemical purity, compatibility with other components, high strength or certain aesthetic impressions is desired. This is exemplified by a number of specific applications of white cement:

- White and coloured mortars. Cement-based plasters and mortars are used for facades panels, swimming pools, and in general to avoid painting. Because of its high durability, much less maintenance is needed than for painted surfaces. Without white cement it would be impossible to produce these products which need a homogeneous and reactive base product for their preparation. Only white cement satisfies these requirements.
- Renders, joint fillers, tile adhesives. White cement is often used as main binding component in the formulation of construction materials such as joint fillers, ceramic tile adhesives, insulation and anchorage mortars, industrial floor mortars, ready mixed plaster, repair mortars and water-tight coatings for e.g. bathrooms. These products have complex formulations of up to 10 or more ingredients. The regularity and chemical purity of white cement is critical to these applications.
- Exterior facade panels or decorative coating stones. White cement is also used in products such as floor tiles, kerbstones, prefabricated stairs and balconies, window sills and street furniture.

Additionally, applications such as white briquette and white press brick, concrete grids and pool edges are also included in the areas of use. Similar products cannot be made in any practical and durable manner by painting grey concrete materials.

• Works of art and street furniture. White cement is used in concrete sculptures, monuments and the restoration of archaeological sites. This is due to the ability of white concrete to be cast in any shape (plastic capability). It is also used for the construction of street furniture, as it is more durable than steel and can be made in different colours.



 Pre-cast and concrete elements. Use of white cement is a more durable alternative than paint in applications where colours are required. Furthermore, in concretes produced by white cement, both early and ultimate compressive strengths are significantly higher. This property allows increased production speed in concrete and prefabricated applications, reduces costs by eliminating steam curing and removes the negative effect of steam curing on the final strength of concrete. It has been used iconic buildings and remarkable public constructions (bridges, railway stations, stadiums, etc.).
 From the clinker production process, there are two big

differences between white and grey cement:

White cement is used for specialty applications, where chemical purity, compatibility with other components, high strength or certain aesthetic impressions is desired

1. The quality control of the colour. A reflection of at least 86% is generally required for the white cement to be competitive. The reflection of grey cement is in the range of 30-40%, a fairly dark

colour being preferred. The demand for consistency of colour of white cement is much higher than for grey as no nuances of white or mottling can be accepted.

**2.** The production process, including the use of consistent raw materials selected within a narrow range of chemical compositions.

These peculiarities of white clinker production compared to grey leads to a need for higher energy consumption in the clinker burning process. This is caused by three main reasons:

- The raw mix, with low iron content and high silicate content, is hard to burn. The reason for this is the relatively small amount of liquid produced during sintering, because of the low iron content of the mix. The final reaction in the kiln, conversion of belite to alite, requires the melt liquid as a solvent, and is slower if the amount of melt is low;
- The reduced burning conditions increase the energy demand of the process;
- The quenching process, necessary to maintain the white colour, contributes to the relatively poor energy efficiency of the process, since the sensible heat of the clinker is not recycled as in normal clinker manufacture.

Our plants constantly strive to reduce energy consumption. At the Aalborg plant, the white cement kilns are fitted with heat recovery units, which supply district heating to the city of Aalborg.

#### **ADVANTAGES OFFERED BY WHITE CEMENT IN CONSTRUCTION**

The use of white cement in construction offers multiple advantages.

**Energy saving and better thermal comfort of dwellings**: reflection of sunlight reduces heat absorption and improves thermal comfort. This allows savings in lighting and air conditioning of the rooms.

Light-coloured surfaces reflect sunlight much more effectively than dark. Providing more reflective surfaces such as light-coloured roofs, walls and pavements will therefore result in more energy reflected to space, resulting in less warming.

Locally, this effect is especially significant in cities which tend to become unbearably hot during summertime. Substituting dark roofs, walls and pavements by white significantly reduces this "heat island effect".

**Optimization of construction and maintenance costs**: white cement allows to obtain coloured cement products, reducing construction costs and subsequent maintenance costs.

Greater road safety: white concrete road barriers increase visibility and improve safety because they keep a

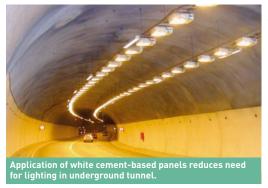




Concrete road barriers based on grey and white cement, respectively, illustrating the visibility advantage of white concrete under wet conditions.



Grey concrete road barriers painted white. Illustrates the safety hazard and additional costs needed for repainting the road barriers.



bright colour over time in wet and poor lighting conditions. White cement has an important use in road barriers, where the white colour increases visibility. This is especially significant under wet conditions; where grey concrete road barriers will appear almost black (see picture below).

Painting grey road barriers white is not a safe option, as the paint will wear off and frequent repainting (which rarely happens) is necessary.

Another benefit of using white cement products is in tunnels. White cement plaster or panels will reduce the need for artificial lighting, reducing the need for electricity for this purpose.

The constant investment in production facilities and highquality raw materials has helped the Group to reach its current position as global leader in white cement. The production facilities of the Cementir Group benefit from being located close to major sources of high-purity limestone and other key raw materials that are essential for production of white cement.

The characteristics of the Group's sites make it possible to produce cement with consistent chemical properties, a uniform white colour and high mechanical performance.

In addition to the consistency and high performance of its products, the Cementir Group supports its partners by providing them with value-added services along the supply chain, broad technical support, customer assistance and potential collaboration for the development of new white cement applications.

In the current business plan, the Group's management team has clearly identified the need to strengthen its

leadership position and further develop white cement as a key strategic pillar, building a competitive position that is unique in its global reach. Due to its direct presence on key markets, Cementir benefits from a diversified customer base in terms of size, business, culture, tradition and technological level.

#### **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, microsilica, pozzolana, ash, calcined shales, limestones and secondary constituents) and by class based on mechanical resistance to compression. There is a 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 2019, Cementir Holding produced and distributed 4.1 million cubic metres of ready-mixed concrete of all types and classes. Ready-mixed concrete is used widely in constructions and comes from a mixture of cement and aggregates like sand and gravel, water and any additives. 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 prestressed 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

stone 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.

# **PURSUING INNOVATION**

Continuous process and product innovation are at the heart of the Group strategy. Cementir's goal is to develop high added value solutions in close collaboration with customers, consultants and partners.

Innovation is in our DNA. Since the beginning, we have been producing special cement. Then we have established ourselves as world leaders in segments such as white cement and high value-added products with. We consider research and development a strategic and essential tool to improve both product quality and sustainability.

For us, innovation means continuously broadening our horizon by listening to the market and our customers' needs. This approach leads us to develop new products and solutions capable of improving existing performance and promoting a circular economy.

#### THE 'IN WHITE' PROJECT

The Group aims to differentiate its value proposition on white cement at a global level, redefining and developing sustainable solutions that will support the growth of its customers' business through personalised services, knowhow sharing, consulting and strategic partnership. Cementir

high value-added, exclusive, technologically-advanced products.

# Cementir Group has created InWhite, a global innovation engine for white cement

wants to challenge the traditional way of seeing white cement mainly as an aesthetic and architectural material, by assessing macro social trends especially in the construction sector and working to fully understand the demands and opinions of customers and the work they need to carry out.

There is an untapped potential to further develop customer activity in the use of white cement which, as the global leader, Cementir must offer to its partners.

Cementir Group has created InWhite, a global innovation engine for white cement, aimed at generating a prioritised and actionable pipeline of high potential customer value propositions, providing new solutions for completely new or known applications of white-cement products. These activities are highly linked to the megatrends in our society, such as mass customisation, circular economy, high energy efficiency, etc.

InWhite benefits from the Group's global and local presence, with close connection to its customers and the markets in which they operate, both on the established and emerging applications of white cement, and on the technical know-how of its internationally renowned Research and Quality Centre in Aalborg, Denmark. The group has registered the Aalborg InWhite Solution™ trademark as a commercial platform to promote

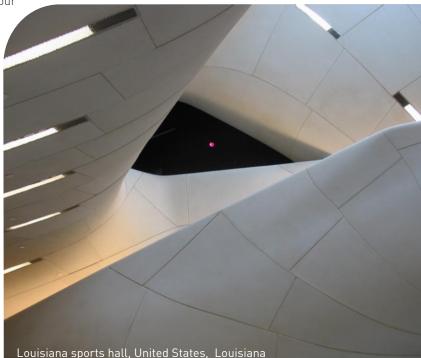
#### ENHANCING AALBORG WHITE APPLICATIONS WITH EMERGING TECHNOLOGIES

Some emerging but rapidly expanding applications for AALBORG WHITE® cement, due to its chemical purity and excellent mechanical properties, are concrete products manufactured with advanced production technologies such as UHPC (ultra-high-performance concrete) and GRC (glassfibre reinforced concrete).

These technologies fully enable our customers to develop and adapt their production according to emerging trends in society, including:

- a 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 in order to avoid additional treatments;
- modular and combinable to allow the reuse of materials.

New solutions based on high value and fast-developing technologies like UHPC (ultra-high-performance concrete), GRC (glassfibre reinforced concrete) and 3D-printed concrete have been identified and are in primary focus in the coming years.



# **DEVELOPMENT OF UHPC (ULTRA HIGH PERFORMANCE CONCRETE)**

When talking about UHPC, attention is readily placed on the potential of the material to achieve very high compressive strength. As a concrete material belonging to the nanotechnology family, UHPC is composed of homogeneous, high strength and reduced diameter aggregates compared to conventional concrete, cement and an exquisite selection of different fine powders, some of the them reactive when combined with cement, all of them filling with high precision the gaps in between each other to maximise the relative content of solids. The latest-generation admixtures are used in the production of UHPC to achieve a fluid concrete with self-compacting properties at very low additions of water (very low water to binder ratio), whilst still maintaining a very high strength potential.

However, UHPC is much more than only a high strength material. The product has extremely high durability due to its high density and low porosity structure, minimising the ingress rate of deleterious substances into the concrete, and the action of degrading mechanisms such as freeze/thaw. As an enormous advantage to the finished product, the high density and low porosity translates directly into outstanding aesthetic durability of the finished surface - it becomes increasingly difficult for dirt and dust to settle on microscopic porosity defects of the surface, and effectively reduces algae growth on the surface.

The full sustainable design potential for the use of UHPC will come from other performance parameters than those directly related to its compressive strength, such as the ability to safely reduce the amount of the concrete cover assigned to protect the reinforcing steel from corrosion, and the ability to reduce, or even replace, the conventional reinforcing steel by adding ductile behaviour in the way of proper selection of intermixed fibres.

Ultimately, all the aforementioned advantages of UHPC are based on the assumption that what can be designed, mixed and manufactured in small specimens under laboratory conditions also is transferable to the conditions applicable to a full-scale production facility, where completely new requirements become decisive for the quality of the UHPC placed in the final structure/element. A couple of examples hereof are, ensuring a proper open time of the fluid UHPC mix to enable a controlled casting operation, and minimising shrinkage of the UHPC potentially leading to cracks through, on one side, proper selections of component's chemistry and particle size. There are certainly many manufacturers "out there" that master the discipline of manufacturing high quality UHPC end products. However, this has required, among many others, an extensive investment and commitment to develop and document the properties of workable UHPC mixes, building up suitable quality-control systems, know-how, casting techniques, etc. Such challenges may seem a substantial mouthful to other manufacturers wanting to explore the possibilities of such a unique material.

Aalborg ExtremeTM Light 120, the first commercial product launched under the InWhite Solution umbrella at the end of 2018, has been developed to provide a safe and reliable solution for the manufacture of UHPC products, designed to successfully match the requirements of industrial manufacturers, whilst still offering customisation possibilities in terms of colouring, starting from its white colour, and further permitting a customised selection of fibre type and dosage. The robust UHPC mix has high viscosity, but excellent, high flow properties with an open time suited to industrial use.

By the end of 2019, a new formulation, Aalborg ExcelTM, primarily targeted the aesthetic applications and offering even further improved flow properties and enabling the finest surface finishing quality, has been commercialised by the Group.

## SUPPORTING GRC (GLASS-FIBRE REINFORCED CONCRETE)

Glassfibre reinforced concrete is one of the most versatile building materials available to architects and engineers. It is mainly composed of glass fibres, cement, sand and special alkali resistant (AR) fibres; GRC is a thin compound (up to 10-15 mm) that is very strong and environmentally friendly and has many construction applications. Its flexibility means it can meet performance, appearance and cost parameters.

The technology was developed in the 1970s. However, the general lack of attention to the architectural value

of buildings in the period 1970-2000 limited its use in markets with very low labour costs. The material and the technology now have the potential to meet high and complex demands in modern society, far exceeding the relatively higher production costs associated with the increased amount of work required for its production.

The Cementir Group has been a member of, among others, the International GRC Association since 2016, with the aim of helping to lead and playing an active role in



supporting the future development of this technology. This membership is in line with AALBORG WHITE®'s strategic objective to focus on the development of market- and customer-oriented technologies and applications. As part of the activities in the InWhite ™ process, Cementir Group is further developing the technology and its application, in order to provide know-how and assistance to customers globally, facilitating and supporting their growth. Furthermore, a particularly suited pre-mix for this application is under development.

#### EXPLORING NEW OPPORTUNITIES WITH 3D PRINTED CONCRETE: AALBORG EXPLORE™

The 3D printing of concrete is a group of processes leading to the creation of physical concrete objects, layer by layer, offering the largest available freedom of design, and detaching from the "traditional" mould-confined production framework of concrete. Furthermore, it is generally believed to minimise the usage of material, maximise the potential customisation of each unit and minimise labour costs.

Cementir Group does not see this new technology as a replacement for the traditional concrete production process, but more like a supplement, exploiting its customisation capacities, and generally expanding the applications of concrete.

However, the technology is not mature yet, and there are many challenges for its use as a scalable production



technology, such as lack of standards, high initial investments, inefficient use on sites, the ability to operate continuously and autonomously, etc.

For the last year, as part of the InWhite<sup>™</sup> process, Cementir Group has been running an initiative on 3D concrete printing, assessing its applicability and alignment to mega trends and quantifying the impact in the value chain. As part of this, the Group has joined a new research project in Denmark as knowledge partner and supplier of raw material.

The Cementir Group intends to play a leading role in developing this technology and expects to market in 2020 a new high-performance dry premix, Aalborg Explore™, for 3D printing. This cutting-edge product leverages on the technical and aesthetic performance of AALBORG WHITE®.

## **FUTURECEM™** Technology

Cementir Group believes that the key to reducing the CO₂ footprint of cement production is found in Cementir's FUTURECEM<sup>™</sup> technology. FUTURECEM <sup>™</sup> is a proprietary technology patented in the US, Canada, Mexico, Europe, India, China and Australia, and relies on the synergy between calcined clay and limestone filler which allows for more than 40% clinker replacement in cement, whilst keeping the same performance of CEM I Portland cement. FUTURECEM<sup>™</sup> cements are sustainable and account for a potential 30% CO₂ reduction in CO₂ emissions, and the raw materials used for the production are largely available on Earth. FUTURECEM<sup>™</sup> technology is fully acknowledged as a solution for clinker ratio reduction in the roadmap for "Low Carbon transition in the cement industry" by International Energy Agency - 2018.



An important achievement in 2019 was the conclusion of the Danish "Green Concrete II" (Green Transformation of Cement and Concrete Production) project: the whole value chain of construction, as well as universities and research institutes have been involved. In the project, cement based on FUTURECEM™ as well as new resource saving concrete recipes were developed and tested. Testing in full-scale structures documented excellent fresh concrete performance and suitability for industrialisation as well as good durability. Life-cycle analyses were performed to document up to 30% CO₂ reduction, compared to conventional concrete.

As part of the Group innovation process, FUTURECEM<sup>™</sup> technology will enhance our offering with value adding, innovative cements, pursuing the ambitious path of our company towards sustainability. Complying with our customercentric approach, specific product development activities have been launched across regions to match the requirements of our customers in different applications. Furthermore, this technology is a fundamental component of the Group's special premixes marketed under the InWhite SolutionTM umbrella.

FUTURECEM<sup>™</sup> technology will contribute largely to the Group's goal of reducing CO<sub>2</sub> emissions by an average 30% per ton of cement by 2030.

# **CUSTOMER MANAGEMENT**

# **TOWARDS DIRECT RELATIONSHIP-BUILDING**

There is clear evidence of the Group acting locally whilst remaining global- a distinctive feature of the Cementir approach sustaining the so-called "glocal" corporate strategy.



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 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.

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 programmes, 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 CUSTOMER'S VOICE AND MEASURING PERFORMANCE

While operating in a traditional sector, the Group has moved towards a more customer-centric approach. The process started internally as a complex management process, 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 customer's voice 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 journey with the customer; a 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 more on the customer in commercial operations. The organisation 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 in the Asia-Pacific Region from 2018).

This methodology allows direct dialogue with customers in order to continuously improve customer experience and to strengthen their loyalty. The latest 2019 results show an NPS of 49 for exports of white cement in Europe, up by 74 in Denmark.

The NPS achieved by Asia-Pacific is 45 and is specifically to be assigned to China.

# 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.

Cementir Holding was one of the leading industrial players to capitalise on these opportunities and **since 2009 has been operating in the renewable energy and urban and industrial waste management and processing sector.** These operations are conducted through 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 enables 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 2019**

In 2019 the Group's plants collected and processed more than 420,000 tons of waste: 55% solid urban waste and 45% industrial waste.

Waste processed	U.M.	2019	2018	2017
Solid urban waste	t	230,943	260,671	184,551
Industrial waste	t	189,411	134,213	202,88
Total	t	420,354	394,884	387,431

In 2019, the Group's plants recycled, through mechanical selection and treatment processes, about 6,757 tons of materials.

Recycled material produced	U.M.	2019	2018	2017
Ferrous material	t	2,316	2,930	2,853
Plastic	t	1,807	4,908	3,839
Aluminium	t	966	1,156	857
Other materials	t	1,668	1,348	2,672
Total	t	6,757	10,342	10,221

Through biomechanical and drying processes, the Cementir Group's treatment plants produced a more than 100,000 tons of fuel from waste in 2019 - with a slight decrease compared to the last year. Of this, 16% was Refuse Derived Fuel (RDF) and 83% was Solid Recovered Fuel (SRF).

Alternative fuel produced	U.M.	2019	2018	2017
Refuse-derived fuel	t	16,223	21,890	21,266
Solid recovered fuel	t	84,297	83,589	67,565
Total	t	100,520	105,479	88,831

# **GOVERNANCE**

### THE CORPORATE GOVERNANCE SYSTEM

Cementir Holding N.V. (hereinafter "Cementir Holding" or "Company") is a Dutch public limited company resulting from the conversion of the Italian joint-stock company (Cementir Holding S.p.A.) into a Dutch Naamloze Vennootschap (equivalent to an Italian joint-stock company), following the transfer of the Company's registered office from Italy to the Netherlands (hereinafter referred to also as the "Cross Border Conversion").

The transfer of the Company's registered office to Amsterdam (36, Zuidplein, 1077 XV), approved by the extraordinary shareholders' meeting of 28 June 2019, was finalised on 5 October 2019.

On the same date, the Board of Directors of the Company has resolved to establish a secondary and operational office in Italy, at Corso di Francia, 200, Rome. The tax residence of the Company has remained in Italy. The Company continues being listed in the STAR segment of the Milan Stock Exchange, where it has been listed since 1955.

The Corporate Governance system adopted by the Cementir Group is in line with the principles and best practice provisions set out in the Dutch corporate governance code

Cementir Holding has elected the Netherlands as home Member State for the purposes of Article 2(1)(i)(iii) of the Directive 2004/109/EC of the European Parliament and the Council of 15 December 2004 (the so-called "Transparency Directive").

The **Corporate Governance system** adopted by the Cementir Group is in line with the principles and best practice provisions set out in the Dutch corporate governance code (hereinafter the "Code"), applicable since 5 October 2019. It is based on the essential role of a one tier 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, except for those exclusively reserved to the Shareholders' Meeting by law and by the Articles of Association. The Board may be composed by one or more Executive Directors and one or more Non-Executive Directors,

within a total number of Directors between five and fifteen.

Directors are appointed by the general meeting. Directors can only be nominated for appointment pursuant to a proposal of the Board or to a proposal of one or more Shareholders, alone or together representing at least the 3% of the issued share capital, provided that the proposal has been notified to the Board in accordance with the requirements of the Articles of Association.

The nomination shall state whether a person is nominated for appointment as Executive Director or Non-Executive Director.

The **Executive Directors** are responsible for the day-to-day management of the Company with the widest powers to the maximum extent permitted by the applicable law, developing and setting the Company's objectives and strategy, overseeing the associated risk profile and addressing corporate social responsibility issues that are relevant to the Company.

SUSTAINABILITY REPORT 2019 THE CEMENTIR GROUP

The Executive Director also discusses the effectiveness of the design and operation of the internal risk management and control systems with the Audit Committee and render account of this to the Board.

The **Chief Executive Officer** is primarily responsible for the day-to-day management of the Company. Only one Executive Director has been appointed and he is also automatically Chief Executive Officer and Chairman pursuant to the Company's Board Rules and Articles of Association.

The Board also appoints a non-executive director as **Senior Non-Executive Director** to serve as the chair of the Board as referred to under Dutch law according to the Company's Articles of Association and Board Rules. The Senior Non-Executive Director cannot be a former Executive Director and must be independent in accordance with Best Practice provision 2.1.8 of the Code. The Senior Non-Executive Director cannot be the chair of the Audit Committee or the Remuneration and Nomination Committee.

The Board may designate one (1) or more of its Non-Executive Directors as vice-chairman for a period decided by the Board. If the Senior Non-Executive Director is absent or unwilling to take the chair, a vice-chairman is entrusted with the duties of the Senior Non-Executive Director entrusted to him by the Board.

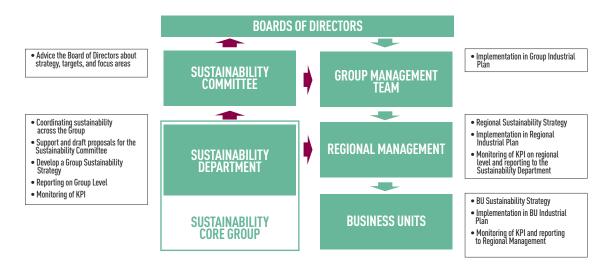
The Board has established two committees from within its ranks to provide advice and submit proposals: the Audit Committee and the Remuneration and Nomination Committee.

The annual Corporate Governance Report is also available for consultation within the Board report on the company website www.cementirholding.com in the Governance section. The gender and age distribution of the members of the Board of Directors and the Committees of the Parent Company is shown below.

Composition of Corporate Bodies		2019			2018			2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Board of Directors									
Under 30	0	0	0	-	-	-	-	-	-
30-50	3	4	7	4	4	8	4	3	7
Over 50	4	1	5	4	1	5	5	1	6
TOTAL	7	5	12	8	5	13	9	4	13
Of which independent	1	4	5	1	4	5	2	3	5
Audit Committee									
Under 30	0	0	0	-	-	-	-	-	-
30-50	0	3	3	-	3	3	-	2	2
Over 50	2	0	2	2	-	2	1	-	1
TOTAL	2	3	5	2	3	5	1	2	3
Of which independent	1	3	4	1	3	4	1	2	3
Remuneration and Nomination Committee	9								
Under 30	0	0	-	-	-	-	-	-	-
30-50	0	2	2	-	2	2	-	2	2
Over 50	2	0	2	2	-	2	2	-	2
TOTAL	2	2	4	2	2	4	2	2	4
Of which independent	1	2	3	1	2	3	1	2	3

The current composition of the Board of Directors shows a satisfactory degree of diversity and it also meets the target set by Dutch law on gender ratio, i.e. at least 30% for each gender. It is also compliant with the diversity policy and the profile approved by the Board where diversity is not based exclusively on gender and age, 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.

# THE SUSTAINABILITY GOVERNANCE SYSTEM



Every area, function and employee, from the top of the management chain to workers in plants around the world are involved in the implementation of proper sustainability practices.

Several entities within the Group, primarily those reported in the picture, help direct a disciplined approach to sustainability management.

Due to increasing relevance of sustainability related issues and sensibility of the Group, in 2019, a specific Group Sustainability Committee (GSC) has been established, dedicated to the Group's initiatives and engagement in this field and with responsibilities detailed in the related Charter.

The GSC is composed of the Group Chairman and CEO, the Group COO and a series of managerial figures belonging to both the Holding company and operating units, who ensure the coordination and adequate implementation of the sustainability strategy within the Group.

The Committee's purpose is:

- I. to assist and advise the Board in its oversight of the Group's policies, programmes and related risks, however they might concern sustainability matters;
- II. to act under authority delegated by the Board with respect to setting out, monitoring, evaluating and reporting on policies and practices, management standards, strategy, performance and governance, relating to global and local sustainability matters, involving the Group;
- III. to regularly interface with the Sustainability Department and the Group Management Team (GMT) to respectively collect any required information and provide requested insights and advice. The GMT composed of the Group COO, CFO, HR and Head of Regions, supports the Group CEO's decisions on relevant topics, defines operating guidelines and plays a vital role in ensuring that sustainability efforts are aligned with economic and business objectives;
- IV. to provide regular reporting to the Board.

The Group Sustainability Committee meets at least quarterly undertaking any responsibilities or tasks within sustainability matters with the main task of developing a Group Sustainability Strategy. Ownership of the Group strategy remains with the Board of the Group parent company, setting the overall strategy, approving the performance objectives and goals for the Group and the yearly Group NFS.

The Board of the parent company defines the guidelines of the risk management system, so that the main risks concerning the whole Group are correctly identified and adequately measured, managed and monitored, determining, moreover, the level of compatibility of such risks with the management of the company in a manner consistent with its strategic objectives. In addition, the Board of the parent Company, with the support of the Audit

Committee, reviews and evaluates at least on an annual basis the adequacy of the internal control and risk management system, including climate and other environmental and social considerations in the assessment, taking into account the characteristics of the company and its risk profile, as well as its effectiveness.

Since 2012 Cementir Group has approved the Corporate and Social Responsibility Policy establishing the set of values to be applied by the Group in terms of social and environmental responsibility and decided to voluntarily share its sustainable development policy by publishing an Environmental Sustainability Report long before it was imposed by law. Industrial decisions regarding major capital expenditures, acquisitions and /or divestitures, including climate and other environmental and societal matters, are submitted for the approval of internal bodies (Group Management Team and Group Investment Committee) and then for the approval of the Board, according to the relevant Group policies.

### INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM

The Internal Control and Risk Management System of Cementir Group is defined as the set of tools, organisational structures, procedures and corporate rules aimed at ensuring, through an adequate process of identification, evaluation, management and monitoring of the main risks, correct business management, consistent with the set objectives in terms of:

- compliance with laws and regulations;
- safeguarding of company assets;
- effectiveness and efficiency of operating activities;
- accuracy and completeness of reporting.

The Internal Control and Risk Management System of Cementir Group is incorporated in the organisational, administrative, accounting and governance structure of the Group and it has been organised based on the principles envisaged by the Enterprise Risk Management - Integrated Framework, international standard issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO Report). The Internal Control and Risk Management System of Cementir Group considers all the main risks that may threaten the achievement of the Group's objectives. For this purpose, the following risks are identified and evaluated, based on the two The Internal Control and Risk Management System of Cementir Group is incorporated in the organisational, administrative, accounting and governance structure of the Group

variables likelihood and impact, according to uniform criteria: strategic risks (related to the company mission), compliance risks (related to compliance with laws and regulations), financial risks (related to the accuracy and completeness of accounting and financial reporting) and operational risks (related to the effectiveness and efficiency of operating activities).

The identification and evaluation process described above is reviewed at least annually and specific disclosure is periodically provided to the Board of Directors and to the Audit Committee.

The Internal Control and Risk Management System of Cementir Group is incorporated into the Group Sustainability Strategy. For this purpose, a dedicated section has been inserted, in which specific risks related



to the achievement of the Sustainability Strategy's objectives and targets are mapped and evaluated. These risks are highlighted and subject to separate disclosure to the Audit Committee. The Internal Control and Risk Management System involves, at different levels, various corporate actors that interact with each other.

The Board of Directors has an oversight role by addressing and evaluating the Internal Control and Risk Management System, also by



availing of the Audit Committee, which performs a preliminary analysis with reference to the related evaluations and decisions. The Ethics Committee has the responsibility to ensure that the activities are conducted according to the ethical principles provided by the Code of Ethics. Moreover, it monitors the reports received relating to Code of Ethics violations, regarding which it receives periodical information from the Internal Audit Department, and it can request further analysis or specific checks, if necessary.

The group management team bears primary responsibility for the internal control and risk management activities and the second level

control functions support the management in the definition of adequate risk management systems and related controls according their competencies (i.e. EHS, anti-corruption, anti-trust, privacy, etc.).

Lastly, the Internal Audit Department has the responsibility for carrying out independent assurance activities on the Internal Control and Risk Management System, verifying the related adequacy in relation to the Group size and operating activities and ensuring the definition and implementation of adequate mitigation actions from the management.

In 2019 the risk assessment activity, carried out with the above-described criteria, identified a list of risks that the Group will have to face in the near future with actions that have been incorporated into the Industrial Plan. Among other things, the main Sustainability risks are related to:

- the potential shortage of some raw materials (mainly slag, fly ash and natural gypsum), necessary to produce specific types of cement and concrete;
- any limit and/or complexity in the implementation of the long-term actions defined in the sustainability strategy at Group level, due to changes in the economic context and to the introduction of new technologies;
- changes in the regulatory context, in terms of sustainability, in a restrictive sense;
- the environmental aspects, mainly regarding the Group companies with plants close to residential areas;
- the necessity to manage growing complexity in terms of product portfolio, quality controls, resources.

### **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. 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 conducted periodically, organised by the Group to maintain a constantly high level of focus on this matter.

### **THE CODE OF ETHICS**

Cementir Holding has adopted a **Code of Ethics<sup>3</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.com, covers respect for ethical and behavioural principles, and the protection of health, safety and the environment.

<sup>3</sup>To download the document, use the following link: https://www.cementirholding.com/sites/default/files/documenti/2019-11/11291.pdf

The Code of Ethics also provides that the Group's operations must compete on the market in accordance with the law and regulations of the 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 the laws, contracts and domestic regulations applicable in the various jurisdictions.



In order to monitor the continued compliance with the Code of Ethics by those employed by the Company and its subsidiaries and uphold the applicable regulations, the Board of Directors established an Ethics Committee. The Ethics Committee:

- 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 programmes 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;
- is also addressed the periodic information report on whistleblowing.

A whistleblowing system has been in place since 2013, which can be used to report breaches of the principles and rules set out in the Code of Ethics and the policies adopted by the Group, or simply to report noncompliance with laws and regulations.

Employees or third parties (suppliers, customers or other stakeholders) can send, with the maximum guarantee of confidentiality, reports of illegal or undesirable behaviour by filling in the form at the bottom of this page, by sending a letter or email or by calling the dedicated hotline.

Cementir Holding's internal audit team receives the reports, analyses them and performs the audits. The results and any potential actions are assessed by the Ethics Committee. The relevant people and functions will be notified of any violations.

The Cementir Audit Committee is periodically updated on the status of the allegations.

In 2019, 13 alleged violations were received. All those allegations were investigated. For the violations confirmed, the disciplinary measures taken are proportionate to the seriousness of the case and comply with local legislation.

### **COMMITMENT TO FIGHT 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 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 on 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. In 2018 the project was implemented in the Nordic and Baltic region.

### **COMMITMENT IN HUMAN RIGHTS**

Respect for human rights is a basic tenant of Cementir's beliefs and is consistent with its values and goals to be a more economically, socially and environmentally sustainable Group. The Cementir Human Rights Policy aims at supporting and guiding the management and employees to achieve these goals.

Cementir endorses the principles set out in the Universal Declaration of Human Rights and the International

Labour Organization (ILO) based on respect for the dignity of the individual without distinction of any kind.

Cementir's Human Rights Policy applies the founding principles of:

- the United Nations International Charter of Human Rights (UN):
- Universal Declaration of Human Rights;
- International Convention on Civil and Political Rights;
- International Convention on Economic, Social and Cultural Rights;
- the fundamental conventions of the International Labor Organization (ILO) - n. 29, 87, 98, 100, 105, 111, 138, 182 - and the declaration on Fundamental Principles and Rights at Work;
- the UN Convention on the Rights of Children;

• the ILO Conventions n.107 and n.169 on the Rights of Indigenous and Tribal Populations;

• the European Convention on Human Rights.

As part of Cementir's initiative to internally identify and mitigate any risks related to human rights, in 2019 the



Internal Audit defined a human rights selfassessment checklist as part of the standard internal audit process. Starting from 2020, any audit work programme will include the human rights selfassessment. In the next 3 years the aforementioned checklist will be applied to all major Cementir companies. The self-assessment covers the following areas: child labour and young workers, forced labour, discrimination, employee working conditions, security and supply chain management.

In 2019 the Internal

**Audit defined** 

a human rights

self-assessment

checklist as part

audit process

of the standard internal

Any alleged human rights violations can be reported through the whistleblowing system, in line with all other types of potential violations.

### **CEMENTIR HOLDING ANTITRUST PROGRAM**

The corporate culture and basic principles, to which the Group management attaches great importance and which have always characterised the development activities of the Company and of the Cementir Group in its entirety, are: the firm belief that a competitive market is a key value not only for customers but for the healthy growth of the Group business itself; the commitment to have people from all over the Group operate independently from competitors, relying only on their own skills and expertise, on coordination with the rest of the Group and on the high quality of the Group's products.

These values are spread by the affiliates in the various geographical areas where they operate, by adopting consistent, localised antitrust compliance programmes, directed to all employees and executives, informing them about the underlying values, the basic principles of competition law and the specific regulations applicable to their activities, also through specific training events on the subject.

The antitrust compliance programmes adopted locally focus on issuing specific policies, monitoring their application through regular audit procedures, to ensure constant adequacy and correct implementation, as well as on updating the programme itself, wherever necessary in order to take into account any regulatory and/or legal developments.

Under each competition compliance programme, all relevant actions and transactions of the company are monitored and their compliance with competition law requirements and practices duly scrutinised.

Distribution and sales contract templates are made available to the employees concerned and regular checks are made to ensure their constant alignment with competition rules and pricing policies.

Furthermore, specific courses are administered to newcomers, targeting those joining the sales department.

### **RELEVANT LITIGATION**

A dispute is pending between the Turkish stock exchange's regulatory, supervisory body (Capital Market Board -CMB) and the Turkish company Çimentaş AS, an indirect subsidiary of Cementir Holding, over the intragroup sale price of an equity investment in 2009, in which the CMB called on Cimentas AS to demand that Cementir Holding and any other companies involved in the Cementir Group pay back around 100 million Turkish lira (now around EUR 16 million). The request for a suspension of the decision challenged by Cimentas, 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 Çimentaş AS against CMB was accepted by Ankara Administrative Court on 09 November 2018, which cancelled the CMB decision (not on the merits but on the precise quantification of the amount due). The dispute is still pending before the Appeal Court. On 29 January 2017, CMB served a summons to Cementir Holding to appear before the Court of İzmir, requesting that the company be ordered to pay Cimentas AS an amount provisionally set at approximately 1 million Turkish lira. Cementir Holding duly filed a defence case, arguing the total groundlessness of the plaintiff's argument, both procedurally and on the merits, and in any case requesting the suspension of the civil case until the administrative action is settled. In the unlikely event that this administrative action is rejected, the issue would in any case solely be relevant between companies in the Cementir Group.

The main reason presented by Çimentaş AS for disputing the request made by CMB is related to the fiscal dispute entered into for the same transaction. Çimentaş AS had won at first level and, on appeal, the tax authority, on 15 November 2018, confirmed the decision of the first level body, with presumable positive effects on the civil dispute with CMB.



# **2** THE 4 PILLARS THAT GUIDE OUR ACTIONS

- 48 In waste, we see resources: we promote a circular economy
- 49 Risk analysis and policies adopted
- 49 Use of alternative fuels
- 51 Group synergies
- 52 Alternative raw materials
- 55 Managing Quarrying Activities
- 55 Life in Quarries Project
- 56 Waste produced
- 58 We respect the environment in all our operations
- 58 Responsibility for our carbon footprint
- 58 Climate change Strategy
- 59 Climate change targets
- 59 Incentives provided for the management of climate-related issues
- 60 Investments in Sustainability and Digitization
- 61 Our commitment on carbon-related public policy
- 62 Risk analysis and policies adopted
- 63 Energy consumption
- 65 CO<sub>2</sub> emissions
- 67 Other air emissions
- 68 Water consumption
- 69 We value our people
- 69 Risk analysis and policies adopted
- 69 Group People Survey
- 70 Talent Review and Succession plans for Group key positions
- 70 Talent Acquisition
- 70 People evaluation and development
- 71 Cementir Academy
- 72 Diversity and Inclusion
- 73 Workforce number and composition
- 74 Safety first
- 77 Industrial relations
- 78 We support our communities
- 78 Risk analysis and policies adopted
- 78 Dialogue and support of local communities
- 79 Earthquake in Elazig
- 79 Coronavirus outbreak
- 79 Çimentaş Education and Health Foundation
- 79 Recovery of heat from kiln fuel

# The 4 Pillars that guide our actions

# 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 POLICIES ADOPTED**

Price volatility in traditional fuel markets - combined with the theoretical risk of unavailability of these fuels and the need to reach increasingly stringent emissions targets - is the main risk that the Group sees with regard to energy supply. In view of this risk, 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 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 input materials in cement production.

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.

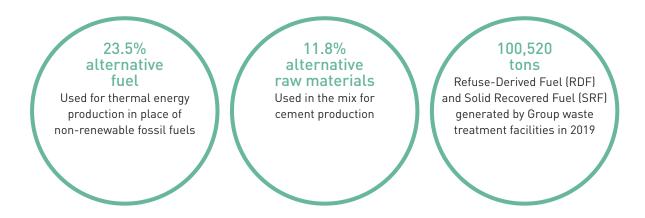
# **USE OF ALTERNATIVE FUELS**

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.

By 2030, the Group will increase the proportion of alternative fuels in the fuel mix to 77% to produce grey cement and 6% for white cement. Concerning white cement, the demand for consistency of colour is much higher than with grey as no nuances of white or coloured surfaces can be accepted. For this reason, the use of alternative fuels is drastically limited in the production of white cement.

The aforementioned targets have been differentiated per each plant and mid-term targets have been defined for 2022, 2025 and 2030.



In the last year, the replacement rate of fossil fuels has continued growing in line with previous years. Almost 23.5% of the thermal energy needed in the cement production process is generated from alternative fuels. The goal is to reach 77% from alternative fuels in grey cement production and 6% in white cement production by 2030<sup>4</sup>.

Consumption of fossil fuel is mainly linked to prices in accordance with market conditions. The significant increase in the use of alternative fuel confirms the Group's commitment to the use of those resources compared to traditional energy production sources.

Fossil fuel replacement index	Unit	2019	2018	2017
% of fossil fuel replacement (white and grey combined)	%	23.5	20.0	16.8
% of fossil fuel replacement (only grey Cement)	%	31.4	29.1	18.9
% of fossil fuel replacement (only white cement)	%	3.9	2.1	1.7

### Fossil fuel consumption for cement production<sup>5</sup>

Total	GJ	22,246,384	28,628,882	29,599,731
District heating	GJ	8,110	15,408	-
Natural gas	GJ		1,626,930	-
LPG	GJ	814	1,020	-
Gas oil	GJ	114,662	100,617	83,718
Lignite	GJ	352,409	441,457	815,670
Fuel oil	GJ	310,035	372,176	575,372
Petroleum coke	GJ		19,192,152	22,175,005
Coal	GJ		6,879,121	
Туре	Unit	2019	2018	2017

### 2019 - Fossil fuel consumption for White and Grev Cement production

for white and Grey Cement production		White	Grey	
Туре	Unit	2019	2019	
Coal	GJ	14,369	7,357,090	
Petroleum coke	GJ	6,123,474	6,207,771	
Fuel oil	GJ	113,978	196,057	
Lignite	GJ		352,409	
Gas oil	GJ	70,520	44,142	
LPG	GJ	814	-	
Natural gas	GJ	1,757,651	-	
District heating	GJ	_	8,110	
Total	GJ	8,080,805	14,165,579	

<sup>5</sup>For the company LWCC, figures are available starting from 2018 - first year of consolidation scope after acquisition.

<sup>&</sup>lt;sup>4</sup>The quality requirements of white cement production make it difficult to use alternative fuels, as they affect the colour of the cement. For this reason their use is drastically limited.

Grey

/

### Alternative fuel consumption for cement production<sup>6</sup>

Total	GJ	6,816,410	7,138,692	5,997,534
Other alternative fuels	GJ	60,336	162,360	-
Sunflower oil	GJ	89,395	76,977	86,209
RDF and SRF	GJ		5,132,148	4,284,410
Dry sewage sludge	GJ	52,319	123,057	262,277
Meat and bone meal	GJ	1,109,985	998,137	802,175
Paper/cardboard/wood	GJ	158,010	181,574	289,946
Tyres	GJ	431,120	223,916	8,848
Rubbers and plastics	GJ	58,677	40,031	28,436
Used oil	GJ	248,053	200,492	235,233
Туре	Unit	2019	2018	2017

### 2019 - Alternative fuel consumption for White and Grey Cement production

Туре	Unit	2019	2019
Used oil	GJ	-	248,053
Rubbers and plastics	GJ	-	58,677
Tyres	GJ	-	431,120
Paper/cardboard/wood	GJ	-	158,010
Meat and bone meal	GJ	325,911	784,074
Dry sewage sludge	GJ	-	52,319
RDF and SRF	GJ	-	4,608,513
Sunflower oil	GJ		89,395
Other alternative fuels	GJ	30,990	29,346
Total	GJ	356,901	6,459,509

White

# **GROUP SYNERGIES**

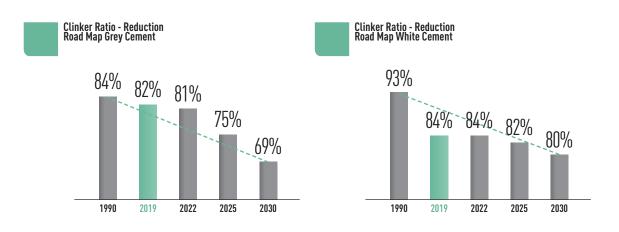
Most of the Cementir Holding's use of alternative fuels takes place at the plants in Aalborg in Denmark, Eastern Thrace and İzmir in Turkey, which alone use 87% of the total alternative fuel used by the Group. This is because, in some countries (Turkey and United Kingdom), the **Group integrates the operations of its cement business with those of the management and recycling of waste**. The two plants have cutting-edge technologies for harnessing alternative fuels and make use of a part of the waste recovered at the Neales Waste and Hereko company plants. In Kömürcüoda, near 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 Eastern Thrace 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.

<sup>6</sup> For the company LWCC, figures are available starting from 2018 - first year of consolidation scope after acquisition.

# **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 called because they do not originate from quarries but from other production processes. The Group has set the target for lowering its clinker/cement ratio to 69% for grey cement and 80% for white cement. This objective is also attained by substituting clinker with alternative raw materials.

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 2019 the cement production plants of the Cementir Group used a total of about 15 million tons of materials to produce cement, slightly less compared to the previous year (in the last three reporting years there has been a decrease in raw materials used of 6.8%). That decrease is partly linked to the drop in the total production of cement recorded in 2019. During the year, **almost 12% of raw materials used were recycled**, including fly ash, blast-furnace slag and other sub-products deriving from the quarrying activities at the CCB plant in Belgium.

Raw materials used in cement production <sup>7</sup>	Unit	2019	2018	2017
Non-renewable raw materials	t	13,357,195	13,979,467	14,495,157
Renewable raw materials	t	1,576,012	1,654,361	1,535,046
Total	t	14,933,207	15,633,828	16,030,203
Renewable raw materials as a percentage of total raw materials used	1 %	11.8%	11.8%	10.6%

<sup>7</sup> For the company LWCC, figures are available starting from 2018 - first year of consolidation scope after acquisition.

Non-renewable raw materials - Cement production <sup>8</sup>	Unit	2019	2018	2017
Limestone	t	11,190,862	11,525,227	11,985,887
Clay	t	890,370	1,033,118	1,073,574
Gypsum	t	324,297	345,840	346,553
Marl	t	414,799	531,685	558,755
Sand	t	272,549	263,986	294,247
Pozzolana	t	132,696	153,774	158,954
Admixtures	t	16,106	15,900	16,853
Auxiliaries	t	895	847	782
Stone	t	30,477	-	-
Calcium fluoride	t	10,671	19,735	3,834
Bauxite	t	11,012	18,774	7,229
Iron ore	t	19,223	40,072	48,490
Other residual materials	t	43,228	30,509	-
Total	t	13,357,195	13,979,467	14,495,157

Renewable materials - Cement production <sup>9</sup>	Unit	2019	2018	2017
Fly ash	t	365,428	507,406	596,325
FGD gypsum	t	106,642	86,967	90,672
Iron oxide	t	104,302	120,847	123,958
Blast-furnace slag	t	239,079	267,360	290,908
Recovered limestone	t	267,110	187,289	225,397
Excavated stone (clay replacement)	t	163,351	195,186	121,555
Other materials	t	330,100	289,307	86,231
Total	t	1,576,012	1,654,362	1,535,046

In 2019, Cementir Group plants producing ready-mixed concrete used a total of 8 million tons of raw materials, mainly fly ash and microsilica. The variation is mainly linked to the decrease in total production of concrete recorded in 2019.

Raw materials used in the production of ready-mixed concrete	Unit	2019	2018	2017
Non-renewable raw materials	t	8,726,530		9,884,071
Renewable raw materials	t	113,418	152,347	172,944
Total	t	8,839,948	10,247,484	10,057,015
Renewable raw materials as a percentage of total raw materials used	%	1%	2%	2%

<sup>8</sup> For the company LWCC, figures are available starting from 2018 - first year of consolidation scope after acquisition.
 <sup>9</sup> For the company LWCC, figures are available starting from 2018 - first year of consolidation scope after acquisition.

Non-renewable raw materials Ready-mixed concrete production	Unit	2019	2018	2017
Limestone	t	3,452	-	2,054
Sand	t	3,090,992	3,177,730	3,177,284
Admixtures	t	25,873	18,330	20,430
Auxiliaries	t	-	1,625	1,852
Cement	t	1,240,087	1,440,518	1,424,517
Stones	t	4,363,130	5,456,935	5,257,934
Clay	t	-	-	-
Aggregates	t	-	-	-
Steel Fiber	t	2,696	-	-
Basalt Fiber	t	4	-	-
Plastic macro fiber	t	211	-	-
Color pigment	t	85	-	-
Total	t	8,726,530	10,095,138	9,884,071

Renewable materials - Ready-mixed concrete production	Unit	2019	2018	2017
Fly ash	t	100,665	140,970	159,000
Microsilica	t	12,754	11,377	13,944
Total	t	113,418	152,347	172,944

Finally, there are the raw materials used for the Group's other production activities (mainly the manufacturing of aggregates and prefabricated products). Consumption of raw materials and materials is far lower than in the rest of the business (almost 5 million tons) and there are no activities involving the use of recycled materials, except for the production of aggregates by CCB, which uses a certain amount (13,231 tons) of fly ash.

Total	t	4,886,357	5,117,236	5,110,432
Steel	t	1,965	1,708	1,877
Stones	t	25,375	23,778	23,044
Cement	t	12,571	12,317	12,376
Auxiliaries	t	67	56	11
Sand	t	56,576	83,973	47,225
Limestone	t		4,995,404	5,025,899
Non-renewable raw materials other production activities	Unit	2019	2018	2017



# 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. The 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>10</sup>

Operating a quarry leads to the creation of temporary or permanent environments which have become rare in Belgium, such as cliffs, rocky or sandy surfaces, landslides, temporary stretches of water, chalk grasslands or sparse meadows. These habitats, generated by mining activity, can be of considerable interest from an ecosystem point of view as they enable the appearance and 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.

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 involved in the project, including the CCB sites in Guarain (cement production plant and quarry) and Clypot (quarry).



<sup>10</sup> http://www.lifeinquarries.eu/en/project

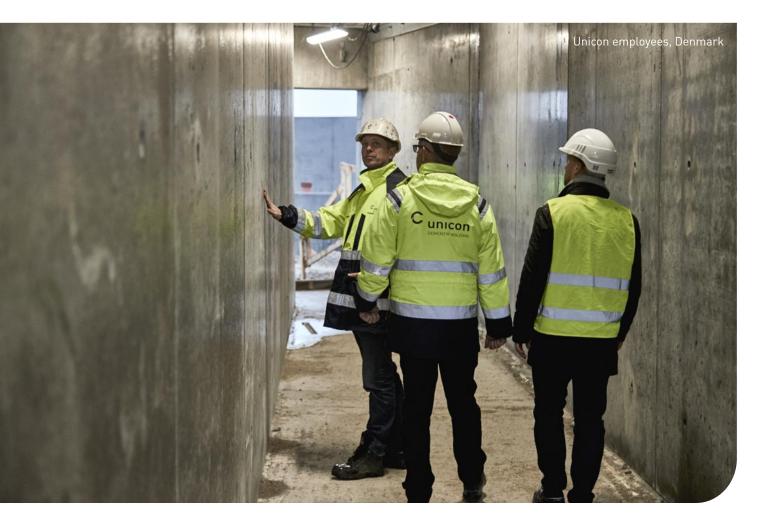
# **WASTE PRODUCED**

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 any 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	Unit	2019	2018	2017
Non-hazardous waste				
Recycling	t	112,017.0	128,311.6	120,152.9
Incineration	t	406.0	703.2	1,021.1
Landfill	t	24,611.3	73,894.7	94,659.2
Total non-hazardous waste	t	137,034.3	202,909.5	215,833.2
Hazardous waste				
Recycling	t	253.4	276.9	641.9
Incineration	t	51.2	59.3	61.6
Landfill	t	211,374.8	57.0	123.0
Oils and chemical waste	t	97.2	85.6	-
Total hazardous waste	t	211,776.6	478.8	826.5
Total waste	t	348,811.0	203,388.3	216,659.7
Total waste Waste generated by destination Ready-mixed concrete production	t Unit	348,811.0 2019	203,388.3	216,659.7
Waste generated by destination				
Waste generated by destination Ready-mixed concrete production				
Waste generated by destination Ready-mixed concrete production Non-hazardous waste	Unit	2019	2018	2017
Waste generated by destination Ready-mixed concrete production Non-hazardous waste Recycling	Unit t	<b>2019</b> 317,754.8	<b>2018</b> 199,470.7	<b>2017</b> 199,826.5
Waste generated by destination Ready-mixed concrete production Non-hazardous waste Recycling Incineration	Unit t	<b>2019</b> <u>317,754.8</u> <u>328.1</u>	<b>2018</b> 199,470.7 296.5	<b>2017</b> 199,826.5 244.9
Waste generated by destination Ready-mixed concrete production Non-hazardous waste Recycling Incineration Landfill	Unit t t	<b>2019</b> <u>317,754.8</u> <u>328.1</u> 47,466.1	<b>2018</b> 199,470.7 296.5 67,680.5	<b>2017</b> 199,826.5 244.9 40,406.9
Waste generated by destination Ready-mixed concrete production Non-hazardous waste Recycling Incineration Landfill Total non-hazardous waste	Unit t t	<b>2019</b> <u>317,754.8</u> <u>328.1</u> 47,466.1	<b>2018</b> 199,470.7 296.5 67,680.5	<b>2017</b> 199,826.5 244.9 40,406.9
Waste generated by destination Ready-mixed concrete production Non-hazardous waste Recycling Incineration Landfill Total non-hazardous waste Hazardous waste	Unit t t t	<b>2019</b> 317,754.8 328.1 47,466.1 <b>365,549.1</b>	<b>2018</b> 199,470.7 296.5 67,680.5 <b>267,447.7</b>	<b>2017</b> 199,826.5 244.9 40,406.9 <b>240,478.3</b>
Waste generated by destination Ready-mixed concrete production Non-hazardous waste Recycling Incineration Landfill Total non-hazardous waste Hazardous waste Recycling	Unit t t t	<b>2019</b> 317,754.8 328.1 47,466.1 <b>365,549.1</b> 3.7	<b>2018</b> 199,470.7 296.5 67,680.5 <b>267,447.7</b> 15	<b>2017</b> 199,826.5 244.9 40,406.9 <b>240,478.3</b> 23.5
Waste generated by destination Ready-mixed concrete production Non-hazardous waste Recycling Incineration Landfill Total non-hazardous waste Hazardous waste Recycling Incineration	Unit t t t t	<b>2019</b> 317,754.8 328.1 47,466.1 <b>365,549.1</b> 3.7 0.8	<b>2018</b> 199,470.7 296.5 67,680.5 <b>267,447.7</b> 15 2	<b>2017</b> 199,826.5 244.9 40,406.9 <b>240,478.3</b> 23.5 1.3
Waste generated by destination Ready-mixed concrete production Non-hazardous waste Recycling Incineration Landfill Total non-hazardous waste Hazardous waste Recycling Incineration Landfill	Unit t t t t t t	<b>2019</b> <u>317,754.8</u> <u>328.1</u> <u>47,466.1</u> <u>365,549.1</u> <u>3.7</u> <u>0.8</u> <u>1.7</u>	<b>2018</b> 199,470.7 296.5 67,680.5 <b>267,447.7</b> 15 2 1	<b>2017</b> 199,826.5 244.9 40,406.9 <b>240,478.3</b> 23.5 1.3

2 SUSTAINABILITY REPORT 2019 THE 4 PILLARS

Waste generated by destination - Other	Unit	2019	2018	2017
Non-hazardous waste				
Recycling	t	38.1	6.6	44.0
Incineration	t	34.7	21.2	34.2
Landfill	t	60.0	-	60.0
Total non-hazardous waste	t	132.9	27.8	138.2
Hazardous waste				
Recycling	t	3.8	4.1	123.2
Incineration	t	9.3	4.7	6.3
Landfill	t	-	-	6.8
Oils and chemical waste	t	128.4	159	-
Total hazardous waste	t	141.5	167.8	136.3
Total waste	t	274.4	195.6	274.5



# 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.

# **RESPONSIBILITY FOR OUR CARBON FOOTPRINT**

We want to build a better tomorrow, creating value for society and for our company. Progress offers multiple opportunities but poses important challenges such as the increase in carbon emissions, the depletion of natural resources and the production of waste. The world's climate experts agree that the world must take urgent action to bring down emissions.

# **CLIMATE CHANGE STRATEGY**

In order to support in the fight against climate change, Cementir Group has developed a strategy which aims at mitigating climate change and which is focused on the following pillars:

- fossil fuels and clinker replacement with alternative fuels and alternative mineral additives. The Group targets
  have differentiated goals for grey and white cement and these have been deployed in each single plant.
  Concerning grey cement, by 2030 Cementir will use 77% of alternative fuels and will lower the clinker ratio to
  69%, while for white cement alternative fuels will amount to 6% and the clinker ratio will be lowered to 80%;
- development of low-carbon cement (FUTURECEM<sup>™</sup>), which allows CO<sub>2</sub> emissions to be reduced by 30%.
   FUTURECEM<sup>™</sup> is a proprietary patented technology which uses limestone and calcined clay to such an extent as to significantly reduce the amount of clinker in cement. The Group decided to reduce 30% of CO<sub>2</sub> emissions per ton of cement by 2030;
- technological innovation and development of special products that complete the existing portfolio, developing new business models with downstream integration projects or strategic partnerships and promoting innovative applications and products including ultra-high-performance concrete (UHPC), glassfibre reinforced concrete (GRC), magnetic concrete and 3D printing;
- energy recovery. The Aalborg plant recovers excess heat from cement production to provide district heating to local inhabitants. The recovered thermal energy is used to heat the homes of about 36,000 families in the city of Aalborg, with a saving of CO<sub>2</sub> emissions equal to 300 kg CO<sub>2</sub>/t compared to the use of a coal-fired power plant. We are investing to expand the heating to 50,000 families, to cover almost half of the Aalborg population;





/

# **CLIMATE CHANGE TARGETS**

Together with the strategy in 2019 the Group has also defined targets, differentiated between grey and white cement, which have as their final aim the reduction of CO<sub>2</sub> emissions and the mitigation of climate change. The Group decided to reduce CO<sub>2</sub> emissions per ton of cement of about 30% by 2030. The target, which differentiates between grey cement (31% by 2030) and white cement (35% by 2030) will be achieved through greater use of alternative fuels and renewable resources, and reduction of thermal consumption and clinker ratio of cements. Specific targets for alternative fuels, clinker ratio and CO<sub>2</sub> emissions have been established in order to accomplish the 2030 goals.

Details below:

### **Grey Cement**

Reduction comparing 1990		-3%	-10%	-20%	-31%
CO <sub>2</sub> emission (kg CO <sub>2</sub> /ton cement)	721	696	652	574	500
Clinker Ratio	82%	82%	80%	73%	69%
Use of alternative fuel in %	0%	31%	36%	43%	77%
Use of traditional fuel in %	100%	69%	64%	57%	23%
Years	1990	2019	2022	2025	2030

### White Cement

Reduction comparing 1990		-25%	-31%	-32%	-35%
CO2 emission incl. (kg CO2/ton cement)	1.238	926	859	847	808
Clinker Ratio	93%	84%	84%	82%	80%
Use of alternative fuel in %	0%	4%	4%	5%	6%
Use of traditional fuel in %	100%	96%	96%	95%	94%
Years	1990	2019	2022	2025	2030

The climate change targets established by the Group have been deployed in each single plant and per year and were included in the Industrial Plan 2020-2022 approved by the Board of Directors of Cementir Holding.

# **INCENTIVES PROVIDED FOR THE MANAGEMENT OF CLIMATE-RELATED ISSUES**

The monetary incentive plan adopted by Cementir is based on a short-term incentive (STI) system. The system maintains the proper ratio between its components and adequate incentives to achieve continuously improving performance levels within the sustainable value creation structure. The STI is based on the Group's and/or subsidiaries' financial targets and includes objectives based on indicators linked to company performance and to managerial roles actually held within the Company.

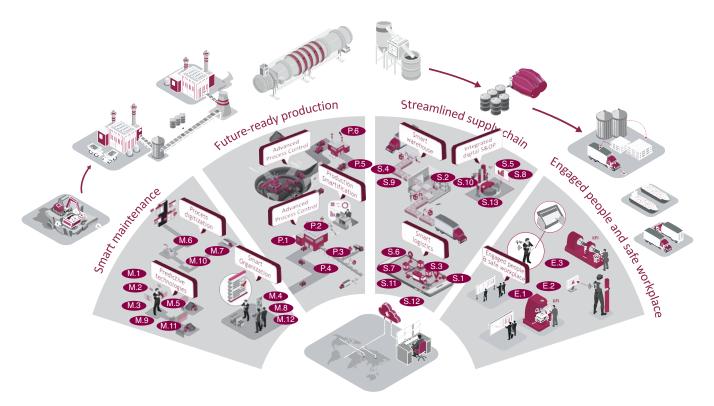
The STI is a tool with which Cementir promotes also the fulfilment of various climate change-related objectives (especially CO<sub>2</sub> emissions, alternative fuels and alternative raw materials). Managers from all organisational levels participate and share in this incentive system, so that fulfilling defined goals results in the receipt of annual monetary incentives.

# **INVESTMENTS IN SUSTAINABILITY AND DIGITIZATION**

To guarantee the development of the Group's Climate Change Strategy and to achieve the Group's Sustainability Targets, in the 2020 - 2022 Industrial Plan we have planned an investment of EUR 100 million which will include, among other things:

- construction of an 8 MW wind farm to adequately supply the Aalborg plant;
- waste heat recovery in our Danish and Turkish plants;
- expansion of district heating to 50,000 families in Aalborg;
- increase in the use of alternative fuels from the current 40% to 80% in Belgium;
- digitalisation of industrial processes with the "Cementir 4.0 programme", to improve industrial processes in cement production plants through new digital technologies. Digital transformation focuses on the entire value chain, from procurement to production processes, maintenance and logistics.

Cementir 4.0 is a digitalisation programme focused on four different manufacturing areas:



### **Smart Maintenance**

The digital monitoring of equipment and processes with the collection of unique and specific data in real time allows for a rationalisation of maintenance. This ultimately helps productivity by reducing downtime and optimises energy costs.

### **Future-Ready Production**

Automation, remote control, production "smartification" and advanced production process control allow for systems monitoring and continuous complex parameter setting optimisation, thus guaranteeing high output quality.

### Streamlined Supply Chain

Smart logistics based on real-time information about shipment orders, smart warehousing, integrated digital sales and operations planning (S&OP). Improvement of tendering and requests for quotations (RFQ) processes and physical inventory streamlining.

### Engaged People And Safe Workplace

All automation and technology will increase employees' safety and boost their engagement level.

/

## OUR COMMITMENT ON CARBON-RELATED PUBLIC POLICY

Cementir actively participates in global and national industry policy discussions on issues related to Climate Change, Sustainable Infrastructure, Innovation & Digital Transformation, Operational Efficiency, Health & Safety, Circular Economy, Alternative Fuels, and Waste Management Frameworks, among others.

**Cementir is a member of the Global Cement and Concrete Association** (GCCA), with the aim of fostering innovation and collaboration with industry associations and inspiring architects, engineers and innovators across the globe and along the length of the built environment value chain. Through the GCCA, in 2019, Cementir is a member of the Global Cement and Concrete Association (GCCA), with the aim of fostering innovation and collaboration with industry associations

Cementir joined Innovandi, a network connecting cement industry and scientific institutions to drive new ways of working and innovations.

In 2019, the Group became **member of the Carbon Disclosure Project (CDP)** in order to improve the Group's accountability for climate change and **joined the ACT Project**.

The ACT - Assessing low Carbon Transition initiative, co-founded by the French Energy and Environmental Agency (ADEME) and the CDP, is an accountability framework and provides methodologies to assess how companies' strategies and actions are contributing to the Paris Agreement mitigation goals of remaining considerably below a 2°C temperature increase above pre-industrial levels. The objective of the project is to develop an assessment methodology for the cement sector to drive companies to act and lead them on a relevant low-carbon pathway in terms of their climate strategy, business model, product and services, investments, operations, GHG emissions and GHG management.

**Cementir is also member of the European Cement Research Academy (ECRA)**. ECRA's most important research projects are related to the carbon capture and storage (CCS) technology.

Through the **CEMBUREAU (European Cement Association)**, Cementir is directly involved in dedicated working groups that are coming up with proposals for revising the EU Emissions Trading System and sustainable construction legislation.

In 2019, through Aalborg Portland, the Group was involved in the most ambitious CO<sub>2</sub> reduction project sponsored by a national government. In autumn 2019 the Danish government made a broad political agreement with the main political parties to define a binding climate law with the target of reducing Danish CO<sub>2</sub> emissions by 70% by 2030, from a 1990 baseline.

In December 2019, the Danish Prime Minister appointed the Managing Director of Aalborg Portland as head of the climate partnership for energy-intensive industry in Denmark. This climate partnership, led by Aalborg Portland and composed by the main refining, chemicals and food Danish companies, will provide the Danish government with the technical forecast of all potential CO<sub>2</sub> reduction achievable and will define the prerequisites (policy, research, innovation, subsidies, etc.) for such reductions.



# **RISK ANALYSIS AND POLICIES ADOPTED**

In addition to the risks described in the previous chapter, 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 quotas (set by the EU Emissions Trading System, EU ETS), especially in the medium and long-term period. These annually permitted emission quotas are also being discussed in other countries where the Group operates, like China, where the introduction of a system comparable to the EU one should have started in 2017 but has been postponed. The Chinese carbon emissions trading in the thermal power sector may be implemented by the end of 2020. As for the cement industry, carbon emissions trading will be carried out later on, due to the characteristics of cement production. However, the authorities are collecting and verifying emissions data.



To mitigate these risks, the Group constantly monitors its emissions and compliance with regulations, planning the availability of  $CO_2$  emissions quotas.

Cementir has committed that all operating companies in the cement production, concrete production and waste management sectors have to operate with a certified environmental management system (i.e. ISO 14001). This foresees the commitment of Senior Management to set policies, objectives and initiatives for the continuous improvement of performances concerning the main environmental impacts identified. As well as aiding in

constant performance monitoring, the systems establish management procedures and operating instructions to guide plant operations.

As of 2019, 14 operating companies (8 cement plants, 2 RMC companies and all 4 companies operating in the waste business) have adopted a UNI EN ISO 14001 certified management system, representing 67% of all operating companies. The goal is to reach 86% of coverage in 2025 and 100% in 2030.

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

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).

Cemen	t	Ready-mixed co and other activ		Waste mar and proc	
Aalborg	Х	Çimbeton		Süreko	Х
Al Arish		Unicon DK	Х	Recydia	Х
Anqing	Х	Unicon NO		Neales	Х
Edirne	Х	AbSydsten		Hereko	Х
Elazığ	Х	CCB Brussels	Х		
Gaurain	Х	CCB France			
lpoh	Х				
İzmir	Х				
Kars	Х				
Waco					
York					

### Plants with certified Environmental Management System ISO 14001

/

# **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 plant's average clinker/cement ratio. This choice was made because **the production of clinker**, **the main constituent of cements**, is the phase of production where the environmental impacts are greatest.

**In 2019, the cement production plants used 29,062,794 GJ of thermal energy and 4,278,324 GJ of electricity**. The energy intensity indices have suffered small changes compared to the previous reporting year, with a total energy consumption coefficient on equivalent ton of cement produced at 4.01 (GJ/tTCE).

### Energy consumed to produce cement

Туре	Unit	2019	2018	2017
Thermal energy	GJ	29,062,794.34	35,767,573.77	35,597,264.92
of which: from alternative fuel	GJ	6,816,410.24	7,138,691.09	5,997,533.44
Thermal energy sold	GJ	-1,521,827.00	-1,185,306.00	-1,449,809.00
Electricity	GJ	4,278,323.88	4,323,044.42	4,527,158.42
Total energy	GJ	31,819,291.23	38,905,312.19	38,674,614.34
Thermal energy per t of Total Cement Equivalent	GJ/tTCE	3.47	3.52	3.38
Thermal energy produced by alternative sources per t of Total Cement Equivalent	GJ/tTCE	0.86	0.73	0.59
Electricity per t of Total Cement Equivalent	GJ/tTCE	0.54	0.44	0.45
Total energy per t of Total Cement Equivalent	GJ/tTCE	4.01	3.96	3.83

### Energy consumed for White and Grev Cement production

for white and Grey Cement production		White	Grey	
Туре	Unit	2019	2019	
Thermal energy	GJ	8,437,706.34	20,625,088.00	
of which: from alternative fuel	GJ	356,901.00	6,459,509.24	
Thermal energy sold	GJ	-1,521,827.00	0.00	
Electricity	GJ	1,280,579.19	2,997,744.70	
Total energy	GJ	8,196,458.53	23,622,832.70	
Thermal energy per t of Total Cement Equivalent	GJ/tTCE	2.82	3.74	
Thermal energy produced by alternative sources per t of Total Cement Equivalent	GJ/tTCE	0.15	1.17	
Electricity per t of Total Cement Equivalent	GJ/tTCE	0.52	0.54	
Total energy per t of Total Cement Equivalent	GJ/tTCE	3.35	4.28	

14/1-14-

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 heating requirements of about 36,000 households which will become 50,000 in the near future, covering about half of its urban population.

In 2019, the Aalborg Plant provided 1,6 milion GigaJoule of thermal energy to the local community.

In 2019, 7 cement plants adopted the EN ISO 50001 certification for energy management systems, in line with our goal of increasing the level of energy efficiency.

Cementir has committed that all operating companies in the cement production, concrete production and waste management sectors have to operate with a certified energy management system (i.e. ISO 50001).

As of 2019, the 33% of all operating companies are certified ISO 50001, in 2025 the percentage will be double to 71% while in 2030 the goal is that all operating companies will be certified.

### Plants with certified Energy Management System ISO 50001

Cemen	t	Ready-mixed concrete and other activities	Waste management and processing
Aalborg	Х	Çimbeton	Süreko
Al Arish		Unicon DK	Recydia
Anqing	Х	Unicon NO	Neales
Edirne	Х	AbSydsten	Hereko
Elazığ	Х	CCB Brussels	
Gaurain		CCB France	
lpoh	Х		
İzmir	Х		
Kars	Х		
Waco			
York			

The ready-mixed concrete production plants, which have an energy requirement that is far lower than cement plants, used about 70,000 GJ of electricity and 284,000 GJ of thermal energy. The energy intensity index for these plants was calculated using tons of concrete and aggregates produced during the year as the denominator.

### Energy consumed to produce ready-mixed concrete

Electricity per t of ready-mixed concrete and aggregates	GJ/t	0.010	0.009	0.006
	GJ/t	0.03	0.03	0.02
Thermal energy per t of ready-mixed concrete and aggregates	- · /			
Total energy	GJ	354,688	370,070	384,778
Electricity	GJ	69,983	77,729	72,651
Thermal energy	GJ	284,705	292,341	312,127
Туре	Unit	2019	2018	2017

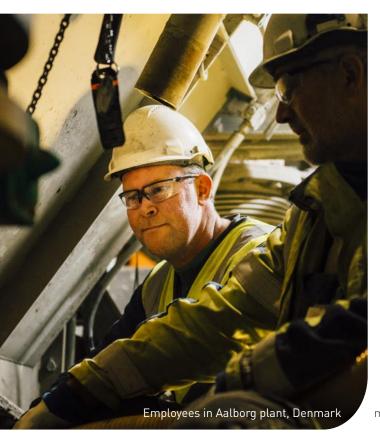
### Energy usage of other activities

Total energy per t of product made	0.1/1	0.00	0.00	0.00
Electricity per t of product made	GJ/t	0.01	0.01	0.01
Thermal energy per t of product made	GJ/t	0.01	0.02	0.02
Total energy	GJ	268,141.63	271,157.94	333,682.40
Electricity	GJ	60,628.73	65,538.27	96,625.43
Thermal energy	GJ	207,512.90	205,619.67	237,056.97
Туре	Unit	2019	2018	2017

**Energy consumption** in the **waste management sector** has decreased compared to 2017 and has remained in line with the 2018 data, trend in line with the one observed also for the energy intensity index (calculated using tons of waste collected as the denominator).

### Energy used in the waste management sector

Туре	Unit	2019	2018	2017
Thermal energy	GJ	20,990.69	19,532.92	38,649.8
Electricity	GJ	29,437.94	30,492.00	29,641.18
Total energy	GJ	50,428.63	50,024.92	68,290.98
Thermal energy per t of waste collected	GJ/t	0.05	0.05	0.10
Electricity per t of waste collected	GJ/t	0.07	0.08	0.08
Total energy per t of waste collected	GJ/t	0.12	0.13	0.18



# **CO<sub>2</sub> EMISSIONS**

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

The Cementir Group is striving to find economically sustainable solutions to limit GHG emissions from the combustion of raw materials (responsible for approximately 40% of  $CO_2$  emissions). This mainly involves the use of alternative fuels with a high calorific value to replace fossil fuels. Early-stage experimental projects are also ongoing to reduce  $CO_2$  emissions that are defined as process emissions because they are associated with limestone decarbonisation; this chemical reaction is responsible for about 60% of cement production emissions, which are difficult to curtail with current technology.

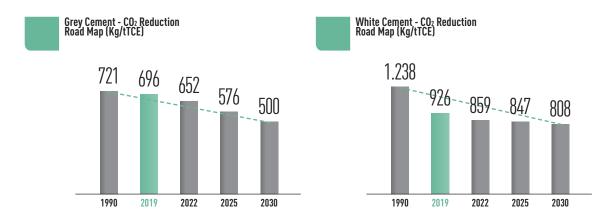
To curb this latter aspect, studies on cement mixes are ongoing, to establish whether clinker, the fundamental component of cement production, could be partly replaced with innovative materials with a lower environmental impact without altering product quality.

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 of managed waste to be sent for treatment and an increased production of refuse-derived fuel (RDF) by companies operating in the recycling management sector.

In 2019, total CO<sub>2</sub> equivalent emissions (direct and indirect) from the production of cement amounted to about 7.8 million tons and about 92% of these were direct emissions (Scope 1).

CO <sub>2</sub> emissions - Cement Production	Unit	2019	2018	2017
CO2 eq emissions (Scope 1) <sup>11</sup>	t	7.099.110	7.435.268	7.655.167
CO2 eq emissions (Scope 2) <sup>12</sup>	t	607.028	644.250	669.868
Total CO2 eq emissions	t	7.706.138	8.079.518	8.325.035

Cementir has set CO<sub>2</sub> emission reduction targets, using a 1990 baseline, for grey and white cement production. The 2030 target includes a 35% reduction for white cement (equivalent to 808 kg/TCE in 2030) and 31% reduction for grey cement (equivalent to 500 kg/TCE in 2030).



The above-mentioned targets will be achieved through greater use of alternative fuels, reduction of thermal consumption and lowering the clinker content of cement through the use of alternative raw materials (as described in the "In waste, we see resources: we promote a circular economy" chapter).

In the production of ready-mixed concrete, CO<sub>2</sub> equivalent emissions are significantly lower. Emissions generated by the production of ready-mixed concrete were in line with the previous years.

CO <sub>2</sub> emissions - Concrete Production	Unit	2019	2018	2017
CO2 eq emissions (Scope 1)	t	38.574	37.237	34.324
CO2 eq emissions (Scope 2)	t	5.076	6.812	5.391
Total CO₂ eq emissions	t	43.651	44.049	39.714

Following the data relating to CO<sub>2</sub> equivalent emissions of the other productive sectors (manufacture of aggregates, concrete prefabricated products and distribution). It has been an increase in the total value comparing last year, however, emissions from these activities are residual compared to the other Group activities.

<sup>12</sup> Indirect emissions from the generation of purchased electricity consumed in the company's owned or controlled equipment.

<sup>&</sup>lt;sup>11</sup> Direct emissions from our operations: decarbonation of raw materials and fuel consumption for cement production.

CO2 emissions - Other	Unit	2019	2018	2017
CO2 eq emissions (Scope 1)	t	22.601	19.082	18.887
CO2 eq emissions (Scope 2)	t	12.392	12.037	11.428
Total CO2 eq emissions	t	34.993	31.119	30.315

Finally, the 2019 CO<sub>2</sub> equivalent emissions generated by the waste collection and treatment sector. The data are in line with 2018.

CO2 emissions - Waste sector	Unit	2019	2018	2017
CO2 eq emissions (Scope 1)	t	1.565	1.452	2.865
CO2 eq emissions (Scope 2)	t	5.618	5.820	5.640
Total CO2 eq emissions	t	7.183	7.272	8.505

# **OTHER AIR EMISSIONS**

The environmental impact of cement production also involves other air emissions, mainly sulphur oxides (SO2) and nitrogen oxides (NOx). 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 is periodically communicated to the competent authorities, which verify compliance with the limits in the plants.

In 2019, NOx emissions from the Cementir Group plants amounted to 9,598 tonnes, with an emission index per ton of cement (kg/t TCE) of 0.98, while SO<sub>2</sub> emissions originating from sulphur in the fuels and raw materials used in Group plants amounted to 1,431 t, with an emissions index per ton of cement (g/t TCE) of 146.

The CO emissions amounted to 13,304 t with an emission index per ton of cement (kg/tTCE) of 1.35, with a slight increase compared to the previous year (1.24 kg/tTCE).

Finally, dust emissions reached 348 t with a dust emissions index per ton of cement (g/t TCE) of 35, lower than 2018 (45 g/TCE). To reduce their impact, some plants updated their technologies for reducing air emissions.

Air emissions for cement production <sup>13</sup>	Unit	2019	2018	2017
NOx	t	9,598	9,119	11,606
SOx	t	1,431	1,427	1,787
CO	t	13,304	12,183	9,861
Hcl	t	39	35	37
VOC	t	145	118	101
Dust	t	348	439	576
Coefficients of emissions - Cement production	Unit	2019	2018	2017
NOx	kg/tTCE	0.98	0.93	1.15
S02	gr/tTCE	146	145	177
CO	kg/tTCE	1.35	1.24	0.98
Dust	gr/tTCE	35	45	57.00

<sup>13</sup> For the company LWCC, data start from 2018 - first year of consolidation scope after acquisition.

# WATER CONSUMPTION

The cement and concrete production processes do 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 as the water is vaporised during the production process. The water discharge is not significant in quantity or in pollutant concentration.

The increase in 2019 data is mainly due to the inclusion of water withdrawal at the US plant of LWCC (the American company acquired in 2018). Below are the consumption data:

Total	m³	9,071,778.2	8,556,126.9	8,450,412.3
Other sources	m <sup>3</sup>	2,602,775.4	2,602,211	2,573,892.8
Public aqueduct	m <sup>3</sup>	309,772.3	288,155.1	448,707.1
Rain water	m <sup>3</sup>	717,162.8	693,602.6	679,975.5
Ground water	m <sup>3</sup>	4,900,898.7	4,366,530.2	4,018,243.9
Surface water	m <sup>3</sup>	541,169.0	605,628.0	729,593.0
Water withdrawals - Cement production	Unit	2019	<b>2018</b> <sup>14</sup>	2017

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

Water withdrawals - Cement production	Unit	2019	2018	2017
Volume of reused water	m <sup>3</sup>	5,925,391.4	5,382,867.4	5,180,347.9
% of reused water	%	65%	63%	61%

In the production of ready-mixed concrete, water is one of the most relevant resource in the production process as it represents an input resource. Water consumption decreased during the last year.

Water withdrawals Ready-mixed concrete production	Unit	2019	2018	2017
Surface water	m <sup>3</sup>	67,272.0	37,683.2	67,833.5
Ground water	m <sup>3</sup>	238,633.0	563,235.4	573,185.6
Rainwater	m <sup>3</sup>	110,209.9	84,457.7	99,778.8
Public aqueduct	m <sup>3</sup>	340,350.0	361,758.1	329,485.4
Total	m <sup>3</sup>	756,464.9	1,047,134.4	1,070,283.3
Water reuse Ready-mixed concrete production	Unit	2019	2018	2017
Volume of reused water	m <sup>3</sup>	60,914.6	85,245.9	191,116.2
% of reused water	%	8%	8%	18%

In the Group's other activities, water consumption is more or less irrelevant, as it is not linked to production processes<sup>15</sup>.

<sup>&</sup>lt;sup>14</sup>The data for 2018 were restated due to an erroneous allocation of municipal water supplies or other public or private water utilities from CCB (cement & aggregates plants).

<sup>&</sup>lt;sup>15</sup> The Clypot quarry in the material extraction phase collects a volume of water that is entirely reused (626,843 m<sup>3</sup> in 2019). While companies operating in the waste management sector have significantly lower water withdrawals compared to the cement and ready-mixed concrete sectors. In 2019, the water consumption for waste management sector was about 10.000 m<sup>3</sup> (in 2018 the water consumption was about 12.000 m<sup>3</sup>.

# We value our people

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

# **RISK ANALYSIS AND POLICIES ADOPTED**

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. The Cementir Group identified a specific risk related to people management, namely the loss of knowledge and professional skills that leads to a discontinuity in work. To monitor this risk, Cementir Group is evaluating the adoption of a specific KPI and targets.

In 2019, the Group finalised the growth plan of its organisational strategy, launched during the previous years, in order to make its structure better suited to achieving targets set in the 2019-2021 Business Plan and to respond more effectively to market trends and corporate changes. In particular, we have secured several key processes by adopting a dedicated policy and procedure (e.g. Investment management procedure, Group privacy policy, Group diversity policy) and we have finalised some Corporate and local organisational structures (Finance, HR, Audit, Legal, North America).

Furthermore, we have renewed the European Works Council agreement for the next 4 years and we have launched the Cementir 4.0 Programme in order to improve our operational efficiency in Technical and Logistic organisation in two pilot plants, Gaurain and Aalborg.

The Group carried on strengthening the Holding, further developing the professional families model and enhancing integration and synergy between the different Group structures. The integration and management process was carried forward by the Group Chief Operating Officer (COO) supported by the Corporate Human Resources department. The COO is responsible for the main business operating levers reporting directly to the Group's CEO, who performs a more strategic role.

During 2019, we have started a digitalisation journey of core HR processes at Group level, with the implementation of the Human Capital Management system based on SAP technology. This system will improve the efficiency of HR processes and enable HR data analytics.



# GROUP PEOPLE SURVEY

Cementir Group's HR Strategy as the enabler of our Group's Business Strategy is focused on three main pillars; «Group Integration and Identity», «Organizational Effectiveness and Agility», «People Development and Engagement». In line with its Group HR Strategy, Cementir Group launched its first Global People Survey, "Your Voice" in 2019. The objective is to ensure structured and comprehensive feedback on the three pillars of our strategy from our employees to gather actionable insights and ideas to define the right developmental areas for our improvement journey.

All Cementir Employees working in offices and in production environments were in scope of the survey. The comprehensive communication strategy deployed, together with the ownership of the management teams, engaged our employees in the initiative with an overall participation rate of 83%.

The results are communicated back to the whole organization, analysed and discussed within the Action Teams with

the voluntary participation of our employees across the organization. Global, Regional and BU level actions plans have been defined and will be implemented and followed up during 2020 - 2021, with the sponsorship of Global Senior Management Team.

# TALENT REVIEW AND SUCCESSION PLANS FOR GROUP KEY POSITIONS

In 2019 a Group Talent Review was conducted with the aim of obtaining an overview on the quality of the Group management team in terms of performance trend and potential/readiness to step up into higher or more complex



roles. The process also allowed us to identify a pool of emerging talents with good performance and potential to succeed in leadership/coordination roles and to be mapped as mid and long-term successors.

In 2019, 23% of personnel involved in the Group Talent Programme were female and 16% of successors to key positions were female (double with respect to 2018). Moreover, in 2019, 30% of new/vacant key positions were filled by internal successors.

Work on the Group Succession Planning process for critical positions continued to build a strong leadership bench. The list of critical positions has been reviewed and enlarged according to the Industrial Plan and the main strategic goals. A further

measurement of the results obtained by mapping internal successors highlighted the improvement of some KPIs with a mitigation of the potential risk of business discontinuity and led to some personnel development decisions (e.g. Group leadership development programmes, changes in management and international mobility programmes).

# **TALENT ACQUISITION**

Concerning Talent Acquisition and assessment processes, we involved selected experienced HRs at central and local level in the Training Programme "Assessment Academy", aimed at acquiring specific skills and abilities to be handled with psychometric tools - adopted at Group level - and assessment techniques, in order to neutralise cognitive biases and make better decisions both for external hiring and internal promotions.

With regard to employer branding, we redesigned and implemented a new Company website with a new section dedicated to "people", which aims at making our culture, organisation and employees more visible and at attracting talented people.

# **PEOPLE EVALUATION AND DEVELOPMENT**

The OSTA (Organisation and Skills Team Assessment) was applied to all cement plants with a twofold objective:

- detecting deviations and aligning local organisational structures to the Group standard model;
- evaluating people's technical skills, role-related competencies, individual engagement and retention risk in order to identify strengths and improvement areas and to draw up specific action plans.

The OSTA framework (mapping of roles, job-related technical skills at the expected levels and core competencies) was extended to the rest of the professional families, to gather all relevant data with a view to incorporate this process into the new Group Performance Management System.

In 2019 we also started working on the design of a Group Performance Management System for all office workers to be launched within the Group by 2020. This will enable us to monitor and align employees' objectives, skills, competencies and development plans with our Group strategic objectives. The design was driven by the intent to develop a new way of looking at performance evaluation not only as a tool for aligning people with business strategy but also as a process that can stimulate constant development of organisational and people skills as well as competencies. In 2019, personnel involved in local performance evaluation processes remained the same as in previous years.

Employees who receive regular	2019			2018			2017		
performance reviews <sup>16</sup>	Men	Women	Total	Men	Women	Total	Men	Women	Total
Executives	92%	75%	<b>91</b> %	91%	67%	89%	89%	100%	89%
Manager	79%	71%	78%	98%	92%	97%	94%	98%	95%
Employees	82%	77%	80%	60%	63%	61%	61%	62%	61%
Blue collars	47%	90%	48%	45%	88%	46%	47%	87%	48%

## **CEMENTIR ACADEMY**

The Cementir Academy continued its extended mission to support Cementir strategy and business results, to develop current and future global leaders, to accelerate the Group transformation and to foster diversity and inclusion across the Group. We designed and delivered key training and development initiatives which include: • the completion of the first edition of the Lead Programme for Group senior leaders;



- the implementation of the 2-year Group Technical Training Programme at Aalborg consisting of several online preliminary training courses, on site courses, plant visits and external open classrooms;
- the launch of some additional new online courses to our Academy catalogue (i.e. Handling procedure for the management of privileged information; Cybersecurity);
- the transposition and deployment of the existing online courses in local languages (i.e. Danish, Norwegian);
- the deployment of "EvOCEM" (Evolved Office for Cementir) training to all eligible Group population by relying on about 20 Group ambassadors;
- the deployment of functional and technical training to upskill professional Group families and sub-communities.

Employee development is also supported through internal and external local training courses, accompanied by a series of other initiatives such as participation in work projects involving multiple departments and, in some cases, work experience abroad.

More than 50.000 hours of training were supplied in 2019, almost 17 hours per capita. The measures put in place involved the entire Group population in a cross-functional and balanced way covering various roles, as can be seen from the summary table of training hours by professional category.

Hours of training <sup>17</sup>	Unit		2019			2018		2017		
		Men	Women	Total	Men	Women	Total	Men	Women	Total
Executives	Hours	976	100	1,076	1,100	8	1,108	151	-	151
Manager	Hours	5,188	913	6,101	5,266	688	5,954	4,711	555	5,266
Employees	Hours	13,863	4,174	18,037	12,738	3,194	15,932	11,870	2,994	14,864
Blue collars	Hours	24,684	659	25,343	37,415	796	38,211	34,077	848	34,925
Total	Hours	44,710	5,846	50,556	56,519	4,686	61,205	50,809	4,396	55,206
Executives	h/per	19.5	25.0	19.9	23.4	2.5	22.1	2.8	-	2.7
Manager	h/per	18.9	18.3	18.8	20.9	16.4	20.3	20.8	13.5	19.6
Employees	h/per	25.0	14.7	21.5	22.4	11.6	18.8	21.7	11.6	18.4
Blue collars	h/per	14.1	16.1	14.1	21.4	20.4	21.3	19.6	21.7	19.7
Total	h/per	17.0	15.5	16.8	21.6	13.0	20.5	19.0	12.0	18.2

<sup>16</sup>The data for the following companies is not available (in brackets the number of employees), so they are excluded from the scope of reporting:

Aalborg Portland France (2), CCB France (26), Aalborg Portland Belgium (3), Alborg Portland 000 (1), Gaetano Cacciatore (2), Quercia (35). <sup>17</sup> The data for the following companies is not available (in brackets the number of employees), so they are excluded from the scope of reporting: Illion Cimento (1), Quercia (35), Neales (10), AP Islandi (11), AP France (2), AP Polska (8), AP Belgio (3), Alborg Portland 000 (1), Gaetano Cacciatore (2). For LWCC figures are starting from 2018, year in which it joined the reporting scope.

## **DIVERSITY AND INCLUSION**

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 87% of employees are male. This is widely linked to a net prevalence of men amongst workers (the main personnel component).



In the last years, the Group has developed measures to promote equal gender treatment and opportunities in the entire organisation, starting by defining Group Values and a Leadership competency model in which the concepts of inclusion and diversity appreciation are well represented. Specifically, work has been done to define and implement a structured communication plan on Group Identity in all company structures and to design and implement an online training course on Group Values and Leadership Model. This involved all Group managers and all Corporate employees and will be progressively rolled out to the entire company population.

Furthermore, the organisation has always been committed to appreciating and valuing diversity in all HR processes such as people hiring, management, evaluation and development, by avoiding any discriminatory approach, starting from the management of recruiting processes and on leadership and talent development programmes. Here below is a breakdown of personnel by professional category and age range.

		31/12/2019	)		31/12/201818			
	Men	Women	Total	Men	Women	Total		
Executive Manager								
<30	0	0	0	-	-	-		
30-50	16	4	20	16	3	19		
>50	35	0	35	34	-	34		
Manager								
<30	11	1	12	9	-	9		
30-50	153	41	194	142	37	179		
>50	113	9	122	117	7	124		
Employees								
<30	35	32	67	42	35	77		
30-50	352	202	554	361	195	556		
>50	184	60	244	180	58	238		
Blue collars								
<30	173	3	176	184	7	191		
30-50	1,048	34	1,082	1,079	30	1,109		
>50	561	4	565	580	2	582		

As the Cementir Group operates internationally, managing diversity also means paying attention to cultural and religious differences. The Group deals in some countries with issues that are sensitive from a religious point of view: in Malaysia, for example, special prayer rooms have been set up in the plant, according to the differing religious beliefs of employees. Moreover, consumption of certain foods has been forbidden out of respect for cultural differences.

Finally, the fundamental conventions of the International Labour Organization (ILO), concerning the abolition of forced labour, collective bargaining, and the elimination of child labour and discrimination, have been ratified<sup>19</sup> in most of the countries where the Group operates. In those countries where they have not been ratified, the Group has defined clear policies relating to these agreements in the Code of Ethics, which states:

<sup>&</sup>lt;sup>18</sup> The figures for 2018 have been restated due to a different allocation of employee by category and Headcount by age from LWCC, CCB and SCT.

<sup>&</sup>lt;sup>19</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).

"The Group offers the same opportunities to all workers and expressly forbids any form of abuse by those in positions of authority or coordination. Abuse means any behaviour that results in requesting, or persuading to offer, services, personal favours or other benefits detrimental to the dignity, professionalism or independence of others. All recipients of this Code, defined by national and international legislations, are required to refrain from engaging in illicit behaviour that is harmful to an individual, such as, but not limited to, offences against the individual, child labour, people trafficking and child pornography".

In addition, our Group Diversity Policy has been published now and we are working on the Group Human Rights Policy in order to raise awareness of these important topics in our personnel and in our suppliers.

### WORKFORCE NUMBER AND COMPOSITION

The Cementir Group workforce comprises 3,071 employees, spread across 18 countries and 5 continents, as well as 547 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 workforce is mainly composed of personnel hired with indefinite and full-time contracts.

The table below summarises<sup>20</sup> the main workforce figures by personnel as of 31 December 2019:

Cementir Group		<b>31/12/2018</b> <sup>21</sup>				
	Men	Women	Total	Men	Women	Total
Employees	2,681	390	3,071	2,747	374	3,121
Contractors	541	6	547	537	3	540
Professional category						
Executives	51	4	55	51	3	54
Manager	277	51	328	270	45	315
Employees	571	294	865	583	287	870
Blue collars	1,782	41	1,823	1,843	39	1,882

Considering the Group structure reorganisation, that began at the end of 2017 with the sale of the Italian production activities and continued with acquisition of the production plants in the United States, a negative turnover balance was recorded in the year.

Group turnover	2019	2019 (absolute value)			(absolute va	lue)22	2017 (absolute value)		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Incoming									
Under 30	80	11	91	103	20	123	91	14	105
30-50	181	39	220	184	35	219	180	30	210
Over 50	69	12	81	32	4	36	36	3	39
Total	330	62	392	319	59	378	307	47	354
Outgoing									
Under 30	65	6	71	74	3	77	62	15	77
30-50	210	33	243	209	45	254	166	28	194
Over 50	121	6	127	103	21	124	71	8	79
Total	396	45	441	386	69	455	299	51	350

<sup>20</sup>The appendix contains detailed tables divided by country.

<sup>21</sup> The figures for 2018 have been restated due to an erroneous allocation of employee by category and Headcount by age from LWCC, CCB and SCT.
<sup>22</sup> For the Turnover the figures for 2018 have been restated due to an erroneous for the calculation. For LWCC figures are only available for 2018, year in which it joined the scope of reporting.

## **SAFETY FIRST**

Cementir considers the health and safety of its employees at work as crucially important. That is why it continues to invest resources that 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 by ISO 45001 or OHSAS 18001 international standards awarded by accredited external parties. Cementir has also defined that all operating companies in the cement production, concrete production and waste management sectors have to operate with a certified health and safety management system (i.e. ISO 45001). As of 2019, 55% of all operating companies are certified ISO 45001 or OHSAS 18001. The goal set by the Group is to reach 80% coverage by 2025 and 100% by 2030.



#### Plants with certified H&S System ISO 45001 / OHSAS 18001

Ceme	nt	Ready-mixed concrete and other activities	Waste management and processing
Aalborg	45001	Çimbeton 18001	Süreko 18001
Al Arish	18001	Unicon DK	Recydia 18001
Anqing	45001	Unicon NO	Hereko 18001
Edirne	18001	AbSydsten	Neales
Elazığ	18001	CCB Brussels	
Gaurain		CCB France	
lpoh	45001		
İzmir	18001		
Kars	18001		
Waco			
York			

A work Group has also been set up to create a system to standardise safety actions and best practices. The following are the main measures implemented to ensure compliance with laws, regulations and directives applicable in EU countries and to minimise accidents:

- analysis and ongoing update of all health and safety risks and hazards related to each task carried out in the Group plants and offices;
- suitable management, update 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. In 2019, over 18, 796 hours of specific health and safety training were provided. Personnel engaged in production activities were the main beneficiary of these specific training programmes;
- 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;
- development of Risk Awareness / Assessment processes at individual employee level in order to minimise chances of accident.

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 machineries. The system, applied at the Aalborg and İzmir plants, has been improved to become an example of best practice in the Group's cement plants and was added to the health and safety training courses.

For the 2019 reporting period, the Group has updated the data collection criteria in respect of lost time incidents, in order to increase the transparency and perform a more accurate analysis on data gathered from the companies. For this reason, the numbers between 2019 and the previous reporting years cannot be fully comparable. Below are the updated common definitions applied in the Group for the monitoring of health and safety KPIs from 2019 onwards.

#### Common definition applied in the Group

Safety	KPI	Unit	Definition
	ncident (LTI)		n. of accidents that cause more than one day off
Fre	equency rate	n	(LTI/ total worked hour) x 200.000
	Severity rate	n	(Lost time (days) / total worked hour) x 200.000
Average lost time	per accident	days	Lost time (days) / LTI (n)

In 2019, 59 injuries were recorded at Group level with an overall frequency rate equal to 2.13 and a gravity rate equal to 62.82.

Accident rates - Group data <sup>23</sup>		2019			2018	2017	
Accident indexes	Men	Women	Total	Men	Women	Total	Total
LTI	58	1	59	93	-	93	72
Frequency rate	2.39	0.04	2.13	6.0	-	5.4	2.5
Severity rate	70.58	6.56	62.82	51.0	-	45.7	37.8

#### Accident indexes

Nordic & Baltic Region <sup>24</sup>		2019			2018		2017
Accident indexes	Men	Women	Total	Men	Women	Total	Total
LTI	28	0	28	54	-	54	32
Frequency rate	3.4	0.0	3.0	4.6	-	4.2	3.9
Severity rate	90.9	0.0	79.7	72.3	-	65.8	36.1

#### **Accident indexes**

Asia & Pacific		2019			2018		2017
Accident indexes	Men	Women	Total	Men	Women	Total	Total
LTI	1	1	2	2	-	2	4
Frequency rate	0.27	1.15	0.43	0.6	-	0,5	1.0
Severity rate	7.48	25.33	10.85	18.4	-	14.9	54.7

<sup>23</sup>The 2019 data for the following companies is not available and so they are excluded from the scope of reporting: Aalborg Portland Islandi (11), Aalborg Portland France (2), Aalborg Portland Polska (8), Aalborg Portland Belgium (3) and Alborg Portland 000 (1). 2018 did not include Vianini Pipe, Gaetano Cacciatore and LWCC because the latter was not yet part of the Group scope.

<sup>24</sup> The 2019 data for the following companies is not available and so they are excluded from the scope of reporting: Aalborg Portland Islandi (11), Aalborg Portland France (2), Aalborg Portland Polska (8), Aalborg Portland Belgium (3), Alborg Portland 000 (1).

#### Accident indexes

East Mediterranean		2019			2018		2017
Accident indexes	Men	Women	Total	Men	Women	Total	Total
LTI	15	0	15	14	-	14	16
Frequency rate	1.9	0	1.7	1.9	-	1.7	1.9
Severity rate	60.6	0	55.4	32.9	-	30.5	21.6

#### **Accident indexes**

North America		2019			2018		2017
Accident indexes	Men	Women	Total	Men	Women	Total	Total
LTI	3	0	3	10	-	10	N/A
Frequency rate	2.5	0.0	2.2	11.7	-	11.1	N/A
Severity rate	157.5	0.0	138.2	79.5	-	75.5	N/A

#### **Accident indexes**

Belgium		2019			2018		2017
Accident indexes	Men	Women	Total	Men	Women	Total	Total
LTI	11	0	11	12	0	12	20
Frequency rate	3.6	0.0	3.2	3.6	0.0	3.2	4.5
Severity rate	85.0	0.0	75.2	73.8	0.0	65.8	33.8

#### **Accident indexes** Corporate 2019 2017 2018 Accident indexes Women Total Women Total Total Men Men 0 Number of accidents 0 0 1 0 1 0 Frequency rate 0 0 0 1.9 0 1.4 0 0 0 Severity rate 0 11.2 0 8.5 0

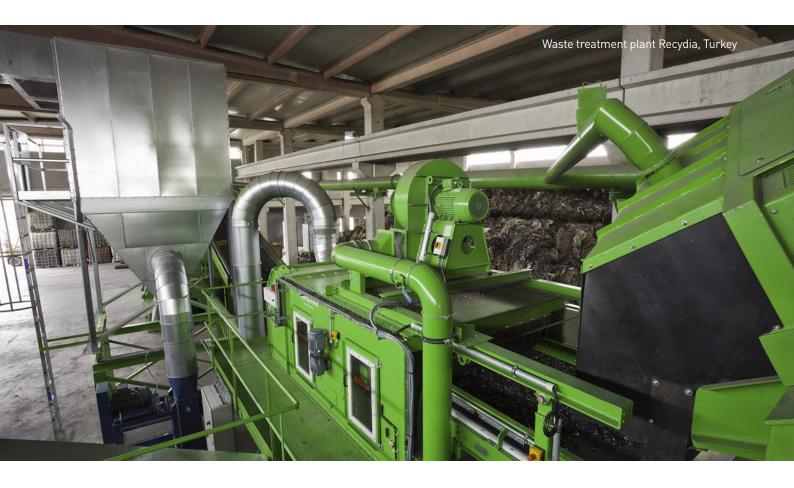
During the year, 19 accidents occurred to contractors and contract staff who worked in the Group plants (for a total of 295 working days lost), a lower number compared to that of 2018 (27). We also regret to report two fatalities within subcontractors. The circumstances surrounding these accidents have been examined in detail. Our focus is on ensuring appropriate actions and lessons learned are communicated across the Group.

#### **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.

About 67% 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 on the job classification categories. Therefore, even the minimum of prior notice weeks that has to be guaranteed to workers for organisational changes varies according to country and the professional categories (some countries do not have any minimum prior notice, while in countries where they do have it, it can vary according to the organizational type). The Cementir Group maintains an ongoing, structured dialogue with the representatives of its companies' European workers, in compliance with EU regulations and with the layout adopted by the Group's About 67% 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 on the job classification categories

European Company Committee (CAE). During the year, management informed and consulted employees and trade unions on transnational issues concerning the status of its activities and other significant decisions that the Group has taken in relation to the business and its employees. Representatives from Belgium, Denmark and Norway attended the meetings held in Rome.



## 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 POLICIES ADOPTED**

The Cementir Group is looking 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 critical and/or contrary attitudes from local communities and local stakeholders, resulting in a deterioration of the company's image.

The actions to mitigate this risk, particularly present 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 unions 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, particularly in Turkey. For this reason, specific tools have been adopted in the East Mediterranean region to map the stakeholders that should be involved in defining actions to be implemented and in communicating important aspects regarding the plants' operations. These tools also enable companies in the region in analysing stakeholders' complaints, in order to provide the necessary information or to plan, specifically focused actions.

## **DIALOGUE AND SUPPORT OF LOCAL COMMUNITIES**

Against this backdrop, the most debated topics with local stakeholders in 2019 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 to the plants, dust levels and polluting emissions. Regarding members of the community we focused, in some cases, in organising meetings with groups of residents in order to provide them with detailed information on the work and operations taking place at Group sites.

The Elazığ and İzmir plants' proximity to residential areas involves a constant dialogue with the local communities, which are particularly sensitive to the plants' landscape and visual impact. To face these specific aspects, Çimentaş 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 involving opinion leaders, experts and members of the community in regular meetings, the use of multimedia channels and digital media to provide information on how waste is managed, and meetings and interaction with families living near the plants.

## **EARTHQUAKE IN ELAZIG**

On 24 January 2020, a magnitude 6.8 earthquake occurred in Elazığ province, in Turkey. More than 30 people were killed and more than 1,600 injured.

In the following hours after the earthquake, Çimentaş donated 1 million Turkish lira (approx. EUR 150,000) to the local authorities and opened the plant to provide accommodation to people whose houses had been damaged. The guest house at the Elazığ plant was opened to the evacuated people. As of March 2020, Çimentaş management in Elazığ is in close coordination with local authorities to give support to the local community.

## **CORONAVIRUS OUTBREAK**

Between December 2019 and February 2020, a fast-moving virus originating in China and known as the "new coronavirus" has infected tens of thousands of Chinese citizens and spread to more than 30 countries. In February 2020, our Chinese plant has been temporary closed and a donation has been made to the local authorities that are facing this public health emergency. The health and well-being of our employees and partners are our priority, for this reason, the Chinese plant will gradually restart the operations in close consultation with the suppliers and public health experts.

#### **Cimentas Education and Health Foundation**

In Turkey, Cementir Group maintains close ties with the most vulnerable groups through the Çimentaş Education and Health Foundation, established in 1986 and committed to providing financial assistance and educational materials to families and schools. Since its establishment, the Foundation has sponsored over 500 scholarships for high school pupils and university students and has contributed to the renovation of various school buildings close to the plant in Elaziğ, Turkey. In 1998, the Çimentaş Education and Health Foundation established the Işıkkent High School. This high school is recognised for its innovative approach to education and research and can accommodate up to 770 pupils a year. As part of this project, education is provided at all educational levels from nursery to high school. https://www.isikkent.k12.tr/en-US.



## **RECOVERY OF HEAT FROM KILN FUEL**

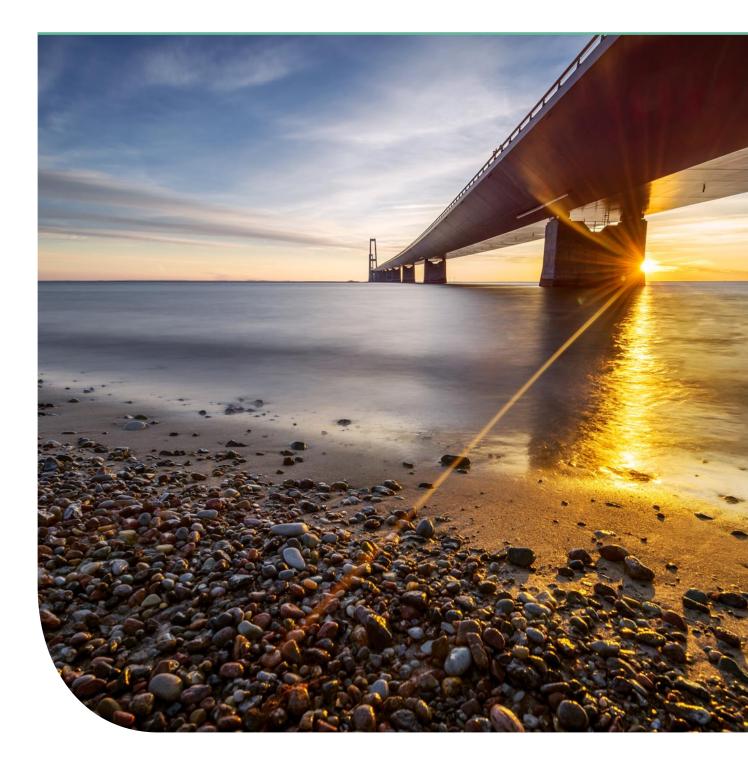
As described above, the Aalborg plant recovers surplus production heat to supply district heating to the population of Aalborg. In 2019, the heat supplied corresponded to the annual consumption of approx. 36,000 households. In addition to this initiative, the Aalborg plant has decided to use the cold water from the chalk lake used for cement



production to provide a cooling system for 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 the heat from the buildings and is pumped back for cooling, which in this case is performed by the lake's cold water.

According to the local companies of utility services (Aalborg Utility), the district cooling from Aalborg Utility is expected to be at least five times as efficient as conventional cooling solutions and far less space consuming. With the new facility, Aalborg Utility expects that the hospital will be able to save around 80 percent of their current electricity use as compared with the old cooling facility. Additionally, they estimate yearly emissions savings of around 500-700 tonnes CO<sub>2</sub>.

Finally, some Group companies, particularly those whose plants are in areas of greater social marginalisation, have made donations to local communities. These were in the form of cash and goods donations, including over 1,300 tons of cement mostly allocated to the restoration and to the renovation of schools and public infrastructure.



# **3** LOOKING AT THE VALUE CREATED

- 82 Earnings and financial results
- 83 Economic value generated and distributed
- 84 Table of correlation between European Directive 95/2014/EU material issues GRI Standards

## **86 APPENDIX**

- 86 Tables on the composition of personnel by country
- **102** GRI CONTENT INDEX
- 108 Glossary
- 109 Emission factors used
- 110 Independent Auditor's Report on the Consolidated Non-Financial Statement

## EARNINGS AND FINANCIAL RESULTS<sup>25</sup>

In 2019, cement and clinker volumes reached 9.5 million tons, down by 3.4%. On a like-for-like basis, cement and clinker volumes were down 5% due to the negative performance in Turkey which was partially offset by the good performance in Belgium and Denmark.

Ready-mixed concrete volumes reached 4.1 million cubic metres, down 16.4% due to the drop in Turkey. Aggregates volumes reached 9.7 million tons, down by 2.4% after the excellent result in 2018.

Group revenues reached EUR 1,211.8 million, up 1.3% compared to EUR 1,196.2 million in 2018. The increase was due to the line-by-line consolidation of the US company Lehigh White Cement Company (LWCC) from 1 April 2018, which brought an increase in revenue of EUR 33.0 million.

On a like-for-like basis, revenue fell 1.4% due to the significant drop in revenue in Turkey, which was largely offset by the performance in other regions.

At constant 2018 exchange rates, revenue would have reached EUR 1,219.7 million, up 2% on the previous year. EBITDA reached EUR 263.8 million, up 10.6% on EUR 238.5 million in 2018. The change in EBITDA was driven by the introduction of IFRS 16, which had a positive impact of EUR 25.5 million, as well as the additional EUR 3.7 million contribution from LWCC. However, EBITDA was pulled down by the EUR 25.5 million drop in Turkey. At constant exchange rates with the previous year, EBITDA would have remained unchanged at EUR 263.8 million. EBITDA also benefited from a non-recurring income (EUR 6.4 million compared to EUR 11.5 million in 2018) due to the revaluation of land and buildings in Turkey.

The EBITDA margin was 21.8%, improving the incidence on revenue by 1.8% on 2018.

Considering EUR 112.0 million of amortisation, depreciation, write-downs and provisions (EUR 85.3 million in 2018), EBIT reached EUR 151.7 million compared to EUR 153.2 million in the previous year. The introduction of IFRS 16 had an impact of EUR 24.5 million on amortisation and depreciation. Amortisation, depreciation, write-downs and provisions include EUR 3.0 million for impairment of fixed assets and EUR 1.4 million for provisions for risks.

At constant exchange rates, EBIT would have been EUR 151.2 million, down 1.3% compared to 2018.

Net financial debt as at 31 December 2019 was EUR 239.6 million, with a decrease of EUR 15.8 million compared to EUR 255.4 million as at 31 December 2018. The change in the net debt was affected by an additional EUR 84.3 million due to the introduction of IFRS 16. Net of this impact, the reduction of net financial debt would have been EUR 100.1 million. In addition, EUR 63.4 million of investments were made and EUR 22.3 million of dividends were paid out in May.

Financial highlights (EURO Millions)	2019	2018	Change %
Revenue from sales and services	1,211.8	1,196.2	1.3%
EBITDA	263.8	238.5	10.6%
EBITDA/Revenue from sales and services (%)	21.8%	19.9%	
EBIT	151.7	153.2	-1.0%
Sales Volumes ('000)	2019	2018	Change %
Grey and White Cement (metric tons)	9,489	9,828	-3.4%
Ready-Mixed Concrete (m³)	4,116	4,921	-16.4%
Aggregates (metric tons)	9,710	9,853	-2.4%
Net Financial Debt (EURO Millions)		31/12/2019	31/12/2018
Net financial debt		239.6	255.4

<sup>25</sup> Please note that the 2018 figure benefits from the contribution of Lehigh White Cement Company, consolidated in full as of 1 April 2018.

## **ECONOMIC VALUE GENERATED AND DISTRIBUTED<sup>26</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 into account 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 value-added distribution is based on economic value generated, distributed and retained by the company, calculated by restating the items on the income statement of the Cementir Group's consolidated financial statements. This analysis produces a quantitative assessment of direct socio-economic impact, by looking at the various items that comprise the wealth created and distributed in the form of costs.

('000)	2019	2018	<b>2017</b> <sup>27</sup>
Direct economic value generated <sup>28</sup>	1,243,951	1,299,237	1,183,048
Total operating revenue	1,243,392	1,239,670	1,170,044
Financial income	4,636	70,835	13,468
Foreign exchange rate gains (losses)	(4,387)	(12,318)	(5,249)
Share of net profits of equity-accounted investees	310	1,050	4,785
Economic value distributed	1,064,870	1,092,585	1,030,300
Operating costs	783,419	813,759	763,567
Raw materials costs	466,387	479,283	444,161
Other operating costs	317,032	334,476	319,406
Value distributed to employees	184,897	176,326	174,748
Personnel costs	184,897	176,326	174,748
Value distributed to capital providers	52,906	49,115	44,072
Financial expense	25,654	28,145	26,916
Dividends	27,252	20,970	17,156
Grants to local communities	-		
Value distributed to Government	43,648	53,385	47,913
Current taxes (income taxes)	32,366	42,304	38,881
Other non-income-related taxes	11,282	11,081	9,032
Economic value retained	173,972	214,384	153,023
Profit (loss) for the year, of which:	63,177	114,690	60,010
Profit (loss) from discontinued operations		13,109	33,094
Amortisation and depreciation	106,483	78,093	72,590
Provisions	1,412	4,091	3,865
Impairment losses	4,156	3,107	5,677
Deferred tax liabilities (assets)	1,256	1,294	22,213

<sup>&</sup>lt;sup>26</sup> Please note that the 2018 figure benefits from the contribution of Lehigh White Cement Company, consolidated in full as of 1 April 2018. The results of the Cementir Italia Group were 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.

<sup>&</sup>lt;sup>27</sup> With Cementir Italia group amongst discontinued operations.

<sup>&</sup>lt;sup>28</sup> The economic value withheld is not exactly the difference between the economic value generated and distributed. That slightly different is a cash effect, linked mainly to taxes.

# TABLE OF CORRELATION BETWEEN EUROPEAN DIRECTIVE 95/2014/EU -MATERIAL ISSUES - GRI STANDARDS

lssue of European Directive 95/2014/EU	Cementir material issue	ldentified risks and managing methods	Policies adopted	Relevant GRI standards	Reported disclosure	Notes
Environmental	Use of alternative	Energy Risk of	Chap. "In waste we	GRI 103:	302-1	
	fuels and materials	unavailability of raw materials	see resources"	Management approach	302-3	
				GRI 302: Energy	301-1	
				GRI 301: Materials		
	Climate Change	Risks connected	Chap. "We respect	GRI 103:	305-1	
		to climate change	the environment in all our operations"	Management approach	305-2	
			·	GRI 305: Emissions	305-4	
	Channelled emissions	Please see: Chap. "In waste, we see resources"	Chap. "We respect the environment in all our operations"	GRI 103: Management approach	305-7	
		"We respect the environment in all		GRI 305: Emissions		
	Water	our operations"	Chap. "We respect the environment in	GRI 103: Management	303-1	
	management		all our operations"	approach	303-3	
				GRI 303: Water		
	Community Risks related to engagement licences and operating permits		Chap. "We support our communities"	GRI 103: Management approach	413-2	
		Please see: Chap. "We support our communities"		GRI 413: Local Communities		
	Fair competition	Compliance risks Please see:	Chap. "Integrity and competition"	GRI 103: Management approach	206-1	
		Chap. "Integrity and competition"		GRI 206: Anti- competive behavior		
	Logistic and supply chain	Risk of unavailability of raw materials. Health and Safety Risks Some of the Group's environmental and social risks extend to the supply chain	Chap. "How is cement made" and Chap. "We value our people"	GRI 103: Management approach	-	The Group is implementing indicators to monitor on this aspect. In this reporting cycle, data on accidents and injuries recorded in logistics activities have already been monitored and presented. Additional indicators will be included in the next reporting cycles.

follow						
Issue of European Directive 95/2014/EU	Cementir material issue	ldentified risks and managing methods	Policies adopted	Relevant GRI standards	Reported disclosure	Notes
Staff-related	Health and Safety	Health and Safety Risks Please see: Chap. "We value our people"	Chap. "We value our people"	GRI 103: Management approach GRI 403: Occupational health & safety	403-2	Data on absenteeism and professional disease rate are recorded differently in the countries where the Group operates, due to the different regulations]. The Group undertakes to adopt actions to be able to report information in a solid, uniform manner in the next reporting cycles. The section dedicated to the subject specifically indicates limits to scope These limitations do not affect the understanding of the company's activities, its performance, its results and the impact produced.
	People management and development	Risks of loss of key personnel Please see: Chap. "We value our people"	Chap. "We value our people"	GRI 103: Management approach GRI 401: Employment GRI 404: Training and Education	401-1 404-1 404-2 404-3	The section dedicated to the subject specifically indicates limits to scope. These limitations do not affect the understanding of
	Diversity management		Chap. "We value our people"	GRI 103: Management approach GRI 405: Diversity and Equal opportunities	405-1	the company's activities, its performance, its results and the impact produced.
	Industrial relations		Chap. "We value our people"	GRI 103: Management approach GRI 402: Labor/Management Relations	402-1	
Respect for human rights	Human rights	Compliance risks Please see: Chap. "We value our people"	Chap. "We value our people"	GRI 103: Management approach GRI 406: Non- discrimination	406-1	In 2019, no reports or complaints were received concerning possible discrimination in the workplace.
The fight against corruption	Ethics, anti- corruption and compliance	Compliance risks Please see: Chap. "The commitment to fight corruption"	Chap. "The commitment to combating corruption"	GRI 103: Management approach GRI 205: Anti- corruption	205-3	

## APPENDIX TABLES ON THE COMPOSITION OF PERSONNEL BY COUNTRY

Turkey	31/12/2019				31/12/2018		31/12/2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	671	53	724	716	59	775	711	54	765
Contractors	222	5	227	216	2	218	225	4	229
Professional category									
Executives	9	2	11	8	1	9	9	1	10
Manager	34	4	38	35	6	41	35	5	40
Employees	135	45	180	138	48	186	138	43	181
Blue collars	493	2	495	535	4	539	529	5	534
Age range									
<30	47	6	53	71	9	80	62	4	66
30-50	565	44	609	599	48	647	597	48	645
>50	59	3	62	46	2	48	52	2	54
Type of contract									
Permanent	661	49	710	709	56	765	709	54	763
Temporary	10	4	14	7	3	10	2	0	2
Full-time	671	53	724	716	59	775	711	54	765
Part-time	0	0	0	-	-	-	-	-	-

Turkey		31/12/2019		31/12/2018			
	Men	Women	Total	Men	Women	Total	
Executive Manager							
<30	-	-	-	-	-	-	
30-50	3	2	5	2	1	3	
>50	6	-	6	6	-	6	
Manager							
<30	-	-	-	-	-	-	
30-50	26	4	30	30	6	36	
>50	8	-	8	5	-	5	
Employees							
<30	8	6	14	18	9	27	
30-50	114	37	151	108	38	146	
>50	13	2	15	12	1	13	
Blue collars							
<30	39	-	39	53	-	53	
30-50	422	1	423	459	3	462	
>50	32	1	33	23	1	24	

Egypt		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	60	8	68	58	7	65	65	7	72
Contractors	282	-	282	282	-	282	326	-	326
Professional category									
Executives	2	-	2	1	-	1	8	-	8
Manager	21	-	21	21	-	21	19	-	19
Employees							21	7	28
Blue collars	14	-	14	15	-	15	17	-	17
Age range									
<30	1	-	1	-	-	-	-	-	-
30-50	54	8	62	52	7	59	58	7	65
>50	5	-	5	6	-	6	7	-	7
Type of contract									
Permanent	59	7	66	58	7	65	65	7	72
Temporary	1	1	2	-	-	-	-	-	-
Full-time	60	8	68	58	7	65	65	7	72
Part-time	-	-	-	-	-	-	-	-	-

Egypt		31/12/2019		31/12/2018			
	Men	Women	Total	Men	Women	Total	
Executive Manager							
<30	-	-	-	-	-	-	
30-50	1	-	1	-	-	-	
>50	1	-	1	1	-	1	
Manager							
<30	-	-	-	-	-	-	
30-50	18	-	18	17	-	17	
>50	3	-	3	4	-	4	
Employees							
<30	1	-	1	-	-	-	
30-50	22	8	30	21	7	28	
>50	-	-	-	-	-	-	
Blue collars							
<30	-	-	-	-	-	-	
30-50	13	-	13	14	-	14	
>50	1	-	1	1	-	1	

China		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	167	47	214	168	49	217	164	46	210
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	1	-	1	1	-	1	1	-	1
Manager	16	1	17	15	1	16	14	1	15
Employees	45	24	69	46	26	72	44	24	68
Blue collars	105	22	127	106	22	128	105	21	126
Age range									
<30	16	7	23	22	12	34	20	6	26
30-50	99	39	138	95	36	131	112	39	151
>50	52	1	53	51	1	52	32	1	33
Type of contract									
Permanent	145	27	172	147	33	180	140	29	169
Temporary	22	20	42	21	16	37	24	17	41
Full-time	167	47	214	168	49	217	164	46	210
Part-time	-	-	-	-	-	-	-	-	-

China		31/12/2019		31/12/2018			
	Men	Women	Total	Men	Women	Total	
Executive Manager							
<30	-	-	-	-	-	-	
30-50	-	-	-	-	-	-	
>50	1	-	1	1	-	1	
Manager							
<30	-	-	-	-	-	-	
30-50	8	1	9	8	1	9	
>50	8	-	8	7	-	7	
Employees							
<30	3	5	8	5	7	12	
30-50	30	18	48	30	18	48	
>50	12	1	13	11	1	12	
Blue collars							
<30	13	2	15	16	5	21	
30-50	61	20	81	57	17	74	
>50	31	-	31	33	_	33	

Malaysia	31/12/2019				31/12/2018		31/12/2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	165	36	201	161	38	199	152	36	188
Contractors	37	-	37	37	-	37	35	-	35
Professional category									
Executives	2	-	2	2	-	2	2	-	2
Manager	12	3	15	12	3	15	9	2	11
Employees	43	33	76	44	35	79	44	34	78
Blue collars	108	-	108	103	-	103	97	-	97
Age range									
<30	36	4	40	30	5	35	30	4	34
30-50	94	26	120	94	26	120	85	26	111
>50	35	6	41	37	7	44	37	6	43
Type of contract									
Permanent	146	36	182	147	38	185	138	36	174
Temporary	19	-	19	14	-	14	14	-	14
Full-time	165	36	201	161	38	199	151	36	187
Part-time	-	-	-	-	-	-	1	-	1

Malaysia		31/12/2019			31/12/2018			
	Men	Women	Total	Men	Women	Total		
Executive Manager								
<30	-	-	-	-	-	-		
30-50	1	-	1	1	-	1		
>50	1	-	1	1	-	1		
Manager								
<30	-	-	-	-	-	-		
30-50	10	3	13	9	3	12		
>50	2	-	2	3	-	3		
Employees								
<30	6	4	10	4	5	9		
30-50	24	23	47	25	23	48		
>50	13	6	19	15	7	22		
Blue collars								
<30	30	-	30	26	-	26		
30-50	59	-	59	59	-	59		
>50	19	-	19	18	-	18		

Denmark		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	628	86	714	645	75	720	655	81	736
Contractors	0	0	0	-	-	-	-	-	-
Professional category									
Executives	3	0	3	3	-	3	3	-	3
Manager Employees									
Employees	143	69	212	138	63	201	137	63	200
Blue collars	435	7	442	460	4	464	466	6	472
Age range									
<30	31	7	38	29	5	34	28	6	34
30-50	252	52	304	266	48	314	280	53	333
>50	345	27	372	350	22	372	347	22	369
Type of contract									
Permanent	625	83	708	645	75	720	651	81	732
Temporary	3	3	6	-	-	-	4	-	4
Full-time	623	82	705	642	74	716	650	77	727
Part-time	5	4	9	3	1	4	5	4	9

Denmark		31/12/2019			31/12/2018			
	Men	Women	Total	Men	Women	Total		
Executive Manager								
<30	-	-	-	-	-	-		
30-50	1	-	1	1	-	1		
>50	2	-	2	2	-	2		
Manager								
<30	-	-	-	-	-	-		
30-50	24	7	31	23	6	29		
>50	23	3	26	21	2	23		
Employees								
<30	9	7	16	6	5	11		
30-50	69	41	110	71	39	110		
>50	66	22	88	61	19	80		
Blue collars								
<30	22	1	23	23	-	23		
30-50	161	6	167	171	3	174		
>50	268	2	270	266	1	267		

Norway		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	131	19	150	122	19	141	127	16	143
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	-	-	-	-	-	-	-	-	-
Manager	21	5	26	15	4	19	18	3	21
Employees	25	11	36	32	13	45	29	13	42
Blue collars	85	3	88	75	2	77	80	-	80
Age range									
<30	9	-	9	7	1	8	5	2	7
30-50	64	14	78	64	13	77	72	9	81
>50	58	5	63	51	5	56	50	5	55
Type of contract									
Permanent	131	19	150	122	19	141	127	16	143
Temporary	-	-	-	-	-	-	-	-	-
Full-time	128	19	147	120	19	139	127	16	143
Part-time	3	-	3	2	-	2	-	-	-

Norway		31/12/2019		31/12/2018			
	Men	Women	Total	Men	Women	Total	
Executive Managers							
<30	0	0	0	-	-	-	
30-50	0	0	0	-	-	-	
>50	0	0	0	-	-	-	
Manager							
<30	0	0	0	-	-	-	
30-50	8	3	11	5	2	7	
>50	7	1	8	10	1	11	
Employees							
<30	1	0	1	1	1	2	
30-50	16	8	24	17	9	26	
>50	17	4	21	14	4	18	
Blue collars							
<30	8	0	8	6	-	6	
30-50	42	3	45	42	2	44	
>50	34	0	34	27	-	27	

Great Britain		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	37	8	45	37	7	44	101	19	120
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	1	-	1	2	-	2	1	-	1
Manager Employees									
Employees	1	6	7	5	6	11	16	11	27
Blue collars	33	-	33	28	-	28	77	6	83
Age range									
<30	4	1	5	5	-	5	22	1	23
30-50	14	4	18	13	3	16	41	9	50
>50	19	3	22	19	4	23	38	9	47
Type of contract									
Permanent	37	7	44	36	6	42	100	18	118
Temporary	0	1	1	1	1	2	1	1	2
Full-time	37	7	44	37	5	42	101	19	120
Part-time	-	-	-	-	2	2	-	-	-

Great Britain		31/12/2019			31/12/2018	
	Men	Women	Total	Men	Women	Total
Executive Manager						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	1	-	1	1	-	1
Manager						
<30	-	-	-	-	-	-
30-50	2	1	3	2	-	2
>50	-	1	1	1	1	2
Employees						
<30	-	1	1	1	-	1
30-50	-	3	3	1	3	4
>50	1	2	3	3	3	6
Blue collars						
<30	4	-	4	4	-	4
30-50	12	-	12	10	-	10
>50	17	-	17	14	-	14

France		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	26	2	28	27	2	29	25	1	26
Contractors	-	1	1	-	-	-	-	-	-
Professional category									
Executives	-	-	-	-	-	-	-	-	-
Manager	13	1	14	12	1	13	9	-	9
Employees	13	1	14	15	1	16	16	1	17
Blue collars	-	-	-	-	-	-	-	-	-
Age range									
<30	3	-	3	1	-	1	-	-	-
30-50	16	2	18	18	2	20	19	1	20
>50	7	-	7	8	-	8	6	-	6
Type of contract									
Permanent	26	2	28	27	2	29	25	1	26
Temporary	-	-	-	-	-	-	-	-	-
Full-time	26	2	28	27	2	29	25	1	26
Part-time	-	-	-	-	-	-	-	-	-

France		31/12/2019			31/12/2018	
	Men	Women	Total	Men	Women	Total
Executive Manager						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	-	-	-	-	-	-
Manager						
<30	-	-	-	-	-	-
30-50	7	1	8	5	1	6
>50	6	-	6	7	-	7
Employees						
<30	3	-	3	1	-	1
30-50	9	1	10	13	1	14
>50	1	-	1	1	-	1
Blue collars						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	-	-	-	-	-	-

Belgium		31/12/2019			31/12/2018 <sup>2</sup>	9	31/12/2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	431	59	490	433	56	489	438	53	491
Contractors	2	1	3	2	1	3	-	-	-
Professional category									
Executives	1	-	1	1	-	1	1	-	1
Manager	55	12	67	54	10	64	51	10	61
Employees	78	46	124	84	45	129	79	42	121
Blue collars	297	1	298	294	1	295	307	1	308
Age range									
<30	37	3	40	34	2	36	36	3	39
30-50	249	47	296	235	43	278	240	40	280
>50	145	9	154	164	11	175	162	10	172
Type of contract									
Permanent	404	58	462	415	55	470	419	53	472
Temporary	27	1	28	18	1	19	19	-	19
Full-time	403	42	445	400	40	440	408	38	446
Part-time	28	17	45	33	16	49	30	15	45

Belgium		31/12/2019			31/12/2018	
	Men	Women	Total	Men	Women	Total
Executive Manager						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	1	-	1	1	-	1
Manager						
<30	9	1	10	7	-	7
30-50	20	10	30	16	9	25
>50	26	1	27	31	1	32
Employees						
<30	1	2	3	3	2	5
30-50	43	36	79	45	33	78
>50	34	8	42	36	10	46
Blue collars						
<30	27	-	27	24	-	24
30-50	186	1	187	174	1	175
>50	84	-	84	96	-	96

<sup>29</sup> The figures for 2018 have been restated due to an error in allocation of employee by category and Headcount by age from CCB and SCT.

3

USA <sup>30</sup>		31/12/2019			31/12/2018 <sup>3</sup>	1		31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	187	20	207	192	15	207	68	3	71
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	3	-	3	3	-	3	2	-	2
Manager	38	2	40	35	3	38	4	-	4
Employees	19	18	37	18	12	30	5	3	8
Blue collars	127	-	127	136	-	136	57	-	57
Age range									
<30	20	3	23	22	2	24	10	-	10
30-50	66	9	75	70	5	75	12	-	12
>50	101	8	109	100	8	108	46	3	49
Type of contract							-	-	-
Permanent	187	20	207	192	15	207	-	-	-
Temporary	-	-	-	-	-	-	-	-	-
Full-time	186	20	206	189	15	204	67	3	70
Part-time	1	-	1	3	-	3	1	-	1

USA		31/12/2019			31/12/2018	
	Men	Women	Total	Men	Women	Total
Executive Manager						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	3	-	3	3	-	3
Manager						
<30	2	-	2	1	-	1
30-50	13	1	14	10	2	12
>50	23	1	24	24	1	25
Employees						
<30	1	3	4	-	2	2
30-50	6	8	14	8	3	11
>50	12	7	19	10	7	17
Blue collars						
<30	17	-	17	21	-	21
30-50	47	-	47	52	-	52
>50	63	-	63	63	_	63

<sup>30</sup> LWCC was included starting from 2018, first year of consolidation.
 <sup>31</sup> The figures for 2018 have been restated due to an error in the allocation of employee by category and Headcount by age from LWCC.

Sweden		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	110	24	134	115	26	141	109	25	134
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	2	-	2	2	-	2	1	-	1
Manager	5	3	8	6	3	9	6	2	8
Employees	24	17	41	26	17	43	25	16	41
Blue collars	79	4	83	81	6	87	77	7	84
Age range									
<30	14	3	17	13	3	16	13	2	15
30-50	49	12	61	46	16	62	44	18	62
>50	47	9	56	56	7	63	52	5	57
Type of contract									
Permanent	107	24	131	112	25	137	107	24	131
Temporary	3	-	3	3	1	4	2	1	3
Full-time	110	23	133	115	25	140	109	24	133
Part-time	0	1	1	-	1	1	-	1	1

<30		31/12/2019			31/12/2018	
	Men	Women	Total	Men	Women	Total
Executive Manager						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	2	-	2	2	-	2
Manager						
<30	0	-	0	1	-	1
30-50	3	1	4	3	2	5
>50	2	2	4	2	1	3
Employees						
<30	1	2	3	1	1	2
30-50	10	8	18	12	10	22
>50	13	7	20	13	6	19
Blue collars						
<30	13	1	14	11	2	13
30-50	36	3	39	31	4	35
>50	30	-	30	39	-	39

Italy		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	51	22	73	54	18	72	58	24	82
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	27	2	29	28	2	30	27	1	28
Manager	14	9	23	13	5	18	13	6	19
Employees	10	11	21	13	11	24	18	17	35
Blue collars	-	-	-	-	-	-	-	-	-
Age range									
<30	1	4	5	2	3	5	2	2	4
30-50	27	18	45	30	15	45	35	22	57
>50	23	-	23	22	-	22	21	-	21
Type of contract									
Permanent	50	22	72	54	17	71	58	20	78
Temporary	1	-	1	-	1	1	-	4	4
Full-time	51	22	73	54	18	72	58	24	82
Part-time	-	-	-	-	-	-	-	-	-

30 30-50 50 Manager 30 30-50 50 Employees 30 30-50 30 50		31/12/2019			31/12/2018	
	Men	Women	Total	Men	Women	Total
Executive Manager						
<30	-	-	-	-	-	-
30-50	10	2	12	12	2	14
>50	17	-	17	16	-	16
Manager						
<30	-	2	2	-	-	-
30-50	11	7	18	11	5	16
>50	3	-	3	2	-	2
Employees						
<30	1	2	3	2	3	5
30-50	6	9	15	7	8	15
>50	3	-	3	4	-	4
Blue collars						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	-	-	-	-	-	-

Iceland		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	9	2	11	10	-	10	10	1	11
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	-	-	-	-	-	-	-	-	-
Manager	1	-	1	1	-	1	-	1	1
Employees	2	1	3	2	-	2	3	-	3
Blue collars	6	1	7	7	-	7	7	-	7
Age range									
<30	-	1	1	-	-	-	-	-	-
30-50	6	-	6	10	-	10	-	-	-
>50	3	1	4	-	-	-	-	-	-
Type of contract									
Permanent	-	-	-	10	-	10	9	-	9
Temporary	-	-	-	-	-	-	1	1	2
Full-time	9	2	11	10	-	10	10	1	11
Part-time	-	-	-	-	-	-	-	-	-

<ul> <li>30</li> <li>30-50</li> <li>50</li> <li>Manager</li> <li>30</li> <li>30-50</li> <li>50</li> <li>50</li> <li>Employees</li> <li>30</li> </ul>		31/12/2019			31/12/2018	
	Men	Women	Total	Men	Women	Total
Executive Manager						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	-	-	-	-	-	-
Manager						
<30	-	-	-	-	-	-
30-50	1	-	1	1	-	1
>50	-	-	-	-	-	-
Employees						
<30	-	-	-	-	-	-
30-50	-	-	-	2	-	2
>50	2	1	3	-	-	-
Blue collars						
<30	-	1	1	-	-	-
30-50	5	-	5	7	-	7
>50	1	-	1	-	-	-

Poland		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	5	3	8	5	3	8	5	3	8
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	-	-	-	-	-	-	-	-	-
Manager	1	-	1	1	-	1	1	-	1
Employees	4	3	7	1	3	4	2	3	5
Blue collars	-	-	-	3	-	3	2	-	2
Age range									
<30	-	-	-	-	-	-	-	-	-
30-50	5	3	8	5	3	8	-	-	-
>50	-	-	-	-	-	-	-	-	-
Type of contract									
Permanent	5	3	8	5	3	8	-	-	-
Temporary	-	-	-	-	-	-	-	-	-
Full-time	5	3	8	5	3	-	-	-	-
Part-time	-	-	-	-	-	-	-	-	-

30 0-50 <b>Manager</b> 30 0-50 50 <b>Employees</b> 30 0-50 50		31/12/2019			31/12/2018	
	Men	Women	Total	Men	Women	Total
Executive Manager						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	-	-	-	-	-	-
Manager						
<30	-	-	-	-	-	-
30-50	1	-	1	1	-	1
>50	-	-	-	-	-	-
Employees						
<30	-	-	-	-	-	-
30-50	1	3	4	1	3	4
>50	-	-	-	-	-	-
Blue collars						
<30	-	-	-	-	-	-
30-50	3	-	3	3	-	3
>50	-	-	-	-	-	-

Russia		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	1	-	1	1	-	1	1	-	1
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	-	-	-	-	-	-	-	-	-
Manager	1	-	1	1	-	1	1	-	1
Employees	-	-	-	-	-	-	-	-	-
Blue collars	-	-	-	-	-	-	-	-	-
Age range									
<30	-	-	-	-	-	-	-	-	-
30-50	1	-	1	1	-	1	-	-	-
>50	-	-	-	-	-	-	-	-	-
Type of contract									
Permanent	1	-	1	1	-	1			
Temporary	-	-	-	-	-	-	-	-	-
Full-time	1	-	1	1	-	1	-	-	-
Part-time	-	-	-	-	-	-	-	-	-

30 0-50 50 <b>Manager</b> 30 0-50 50 <b>mployees</b> 30 0-50 50 50 8 <b>Rue collars</b> 30		31/12/2019			31/12/2018	
	Men	Women	Total	Men	Women	Total
Executive Manager						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	-	-	-	-	-	-
Manager						
<30	-	-	-	-	-	-
30-50	1	-	1	1	-	1
>50	-	-	-	-	-	-
Employees						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	-	-	-	-	-	-
Blue collars						
<30	-	-	-	-	-	-
30-50	-	-	-	-	-	-
>50	-	-	-	-	-	-

Australia		31/12/2019			31/12/2018			31/12/2017	
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	4	-	4	3	-	3	3	-	3
Contractors	-	-	-	-	-	-	-	-	-
Professional category									
Executives	-	-	-	-	-	-	-	-	-
Manager	3	-	3	3	-	3	3	-	3
Employees	1	-	1	-	-	-	-	-	-
Blue collars	-	-	-	-	-	-	-	-	-
Age range				-	-	-	-	-	-
<30	-	-	-						
30-50	2	-	2	3	-	3	-	-	-
>50	2	-	2	-	-	-	-	-	
Type of contract				3	-	3	-	-	-
Permanent	4	-	4						
Temporary	-	-	-	-	-	-	-	-	-
Full-time	4	-	4	3	-	3	-	-	-
Part-time	-	-	-	-	-	-	-	-	-

Australia	31/12/2019		
	Men	Women	Total
Executive Manager			
<30	-	-	-
30-50	-	-	-
>50	-	-	-
Manager			
<30	-	-	-
30-50	1	-	1
>50	2	-	2
Employees			
<30	-	-	-
30-50	1	-	1
>50	-	-	-
Blue collars			
<30	-	-	-
30-50	-	-	-
>50	-	-	-

## **GRI CONTENT INDEX**

GRI Standard	Disclosure	Number of page or link	Omissions
General Disclosure	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"	-
	102-9 Supply chain	"How cement is made"	-
	102-10 Significant changes to the organization and its supply	"The Cementir Group" "Methodological Note"	-
	chain 102-11 Precautionary Principle or approach	"Internal control and risk management risk"	_
	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 its market develops	-
	102-14 Statement from senior decision-maker	"Letter to the Stakeholder"	-
	102-16 Values, principles, standards, and norms of behavior	"Our principles"	-
	102-18 Governance structure	"The Cementir Group" and any reference to the Financial Report	-
	102-40 List of stakeholder groups	"Group's stakeholders"	-
	102-41 Collective bargaining agreements	"Industrial relations"	-
	102-42 Identifying and selecting stakeholders	"Group's stakeholders"	-
	102-43 Approach to stakeholder engagement	"Group's stakeholders" "We support our communities"	-
		"Customer management"	
	102-44 Key topics and concerns raised	"Group's 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"	-
	102-56 External assurance	Independent auditor's report on the Consolidated Non-Financial Statement	_

3 SUSTAINABILITY REPORT 2019 LOOKING AT THE VALUE CREATED

follow			
GRI Standard	Disclosure	Number of page or link	Omissions
Material Topics			
Economic Performance (Business performances, expansion and consolidation)			
GRI 103:	103-1 Explanation of the material	"Methodology note"	-
Management approach	topic and its Boundary	"The economic-financial results"	
		"The economic value generated and distributed"	
	103-2 The management approach	"The economic-financial results"	
	and its components	"The economic value generated and distributed"	-
	103-3 Evaluation of the	"The economic-financial results"	
	management approach	"The economic value generated and distributed"	-
GRI 201: Economic Performances	201-1 Direct economic value generated and distributed	"The economic value generated and distributed"	-
Anti-corruption (Ethics, Anti-corruption and Compliance; Transparency and Accountability)			
GRI 103:	103-1 Explanation of the material	"Methodology note"	_
Management approach	topic and its Boundary	"Our principles"	
		"The commitment to combating corruption"	
	103-2 The management approach	"Our principles"	
	and its components	"The commitment to combating corruption"	-
	103-3 Evaluation of the	"Our principles"	
	management approach	"The commitment to combating corruption"	-
GRI 205: Anti-corruption	205-3 Confirmed incidents of corruption and actions taken	"The commitment to combating corruption"	-
Anti-competitive behaviour			
(Fair Competition; Transparency and Accountability)		"NA	
GRI 103:	103-1 Explanation of the material topic and its Boundary	"Methodology note"	-
Management approach		"Our principles"	
		"Integrity and competition"	
	103-2 The management approach and its components	"Our principles"	-
		"Integrity and competition"	
	103-3 Evaluation of the	"Our principles"	_
	management approach	"Integrity and competition"	
	206-1 Legal actions for anti-	"Our principles"	
GRI 206: Anti-competitive behaviour	competitive behavior, anti-trust, and monopoly practices	"Integrity and competition"	-
fuels and materials) GRI 103:	103-1 Explanation of the material	"Methodology note"	
fuels and materials) GRI 103:	103-1 Explanation of the material topic and its Boundary	"Methodology note" "In waste we see resources"	-
fuels and materials) GRI 103:	topic and its Boundary 103-2 The management approach		-
fuels and materials) GRI 103:	topic and its Boundary	"In waste we see resources"	-
fuels and materials) GRI 103:	topic and its Boundary 103-2 The management approach	"In waste we see resources" "In waste we see resources"	-
fuels and materials) GRI 103:	topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the	"In waste we see resources" "In waste we see resources" "The use of alternative fuels"	-
fuels and materials) GRI 103:	topic and its Boundary 103-2 The management approach and its components	"In waste we see resources" "In waste we see resources" "The use of alternative fuels" "Alternative raw materials"	-
<b>Materials (Use of alternative fuels and materials)</b> GRI 103: Management approach	topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the	"In waste we see resources" "In waste we see resources" "The use of alternative fuels" "Alternative raw materials" "In waste we see resources"	-

follow

follow

follow GRI Standard	Disclosure	Number of page or link	Omissions
Material Topics 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"	-
Management approach		"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"	
	management approach	"We respect the environment in all our operations"	-
GRI 302:	302-1 Energy consumption within	"Energy consumption"	
Energy	the organization	"Use of alternative fuels"	-
	302-3 Energy intensity	"Energy consumption"	-
Water (Water management)			
GRI 103: Managamant annaach	103-1 Explanation of the material	"Methodology note"	-
Management aproach	topic and its Boundary	"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"	-
Water	303-3 Water recycled and reused	"Water consumption"	-
Emissions (Climate Change e Channeled emissions)			
GRI 103:	103-1 Explanation of the material	"Methodology note"	
Management approach	topic and its Boundary	"We respect the environment in all our operations"	-
		"Commitment against climate change"	
	103-2 The management approach and its components	"We respect the environment in all our operations"	
		"Commitment against climate change"	-
	103-3 Evaluation of the management approach	"We respect the environment in all our operations"	
		"Commitment against climate change"	-
GRI 305: Emissions	305-1 Direct (Scope 1) GHG emissions	"CO2 emissions"	-
	305-2 Energy indirect (Scope 2) GHG emissions	"CO2 emissions"	-
	305-4 GHG emissions intensity	"CO2 emissions"	-
	305-7 Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	"Other air emissions"	-

SUSTAINABILITY REPORT 2019 Looking at the value created

3

follow GRI Standard	Disclosure	Number of page or link	Omissions
Material Topics			
Employment (People managemer and development)	nt		
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note"	-
Management approach		"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	"Workforcenumber and consistency"	_
Labor/Management relations Industrial Relations)			
GRI 103:	103-1 Explanation of the material	"Methodology note"	-
Management approach	topic and its Boundary	"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:	103-1 Explanation of the material	"Methodology note"	-
Management approach	topic and its Boundary	"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"	The section dedicated to the subject, specifically indicates limits to scope. For contractors just the numbers of injuries and lost days due to injuries are reported (not the injury rate and the severity rate).
Training and education (People management and development)			
GRI 103:	103-1 Explanation of the material	"Methodology note"	-
Management approach	topic and its Boundary	"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"	The section dedicated to the subject specifically indicates limits to scope
	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"	The section dedicated to the subject, specifically indicates limits to scope.

follow

GRI Standard Material Topics	Disclosure	Number of page or link	Omissions
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:	405-1 Diversity of governance	"Diversity e inclusione"	
Diversity and Equal Opportunity	bodies and employees	"Appendix"	-
Non discrimination (Human Rights)			
GRI 103:	103-1 Explanation of the material	"Methodology note"	-
Management approach	topic and its Boundary	"We value our people"	
		"Diversity e inclusione"	
	103-2 The management approach	"We value our people"	
	and its components	"Diversity e inclusione"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 406: Non discrimination	406-1 Incidents of discrimination and corrective actions taken	In 2019, no reports or complaints were received concerning possible discrimination in the workplace	-
Local Communities (Community Engagement)			
GRI 103:	103-1 Explanation of the material	"Methodology note"	-
Management approach	topic and its Boundary	"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 local community engagement, impact assessments, and development programs	"Dialogue and support for local communities"	Qualitative description of the involvement of local communitie and of the programs developed.
	413-2 Operations with significant actual and potential negative impacts on local communities	"Dialogue and support for local communities"	-
Customer Management			
GRI 103:	103-1 Explanation of the material topic and its Boundary	"Methodology note"	-
Management approach		"Customer management"	
	103-2 The management approach and its components	"Customer management"	-
	103-3 Evaluation of the management approach	"Customer management"	-
n.a.	No disclosure of the GRI applicable. The document presents a qualitative description of the subject and actions taken by the Group	"Customer management"	-

SUSTAINABILITY REPORT 2019 LOOKING AT THE VALUE CREATED

3

follow			
GRI Standard	Disclosure	Number of page or link	Omissions
Material Topics			
White Cement applications and quality			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"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.	No disclosure of the GRI applicable. The document presents a qualitative description of the subject and actions taken by the Group	"Leader in white cement"	-
nnnovation			
GRI 103:	103-1 Explanation of the material	"Methodology note"	-
Management approach	topic and its Boundary	"Pursuing Innovation"	
	103-2 The management approach and its components	"Pursuing Innovation"	-
	103-3 Evaluation of the management approach	"Pursuing Innovation"	-
n.a.	No disclosure of the GRI applicable. The document presents a qualitative description of the subject and actions taken by the Group	"Pursuing Innovation"	-
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	"Methodology note"	
	management approach	"Raw materials and product logistics"	-
ı.a.	No specific disclosure of the GRI is associated to the topic. Nevertheless, the number of incidents and injuries occurred to the people involved in logistics are reported (please see the Disclosure 403-2)	"Safety first"	-

Rome, 5 March 2020

Francesco Caltagirone Jr. Chairman of the Board of Directors

## **GLOSSARY**

**Cement equivalent (TCE - Total Cement Equivalent):** an indicator related to the plant's production of clinker, calculated based on the produced clinker and on 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 it 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 meter). A gigajoule (Gj) is equal to 1\*109 joules, while a terajoule (TJ) is equal to 1\*1012 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, a factor enabling presentation of the number of work accidents every 100 full time workers, working over one year (with the assumption that a full-time worker works about 2,000 hours per year).

**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, a factor enabling presentation of the severity of the number of work accidents every 100 full time workers, working over one year (with the assumption that a full-time worker works about 2,000 hours).

**Accident**<sup>32</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**): translation of the English acronym 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)**: translation of the English acronym 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/organization that decides to establish/implement/maintain/improve its environmental management system. Adopting the ISO 14001 standard it allows an organization 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 the achievement of specific environmental goals.

**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 organization of a system that guarantees sufficient control of occupational health and safety, as well as compliance with mandatory regulations.

**ISO 45001**: is an ISO standard for management systems of occupational health and safety (OH&S), published in March 2018. It includes elements that are additional to BS OHSAS 18001 which it is replacing over a three-year migration period from 2018 to 2021.

**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 organization to use a systematic approach to continuously improve its energy performance, including energy efficiency as well as energy consumption and use.

<sup>32</sup>Accidents during travels are excluded.

**Eco-Management and Audit Scheme (EMAS)**: a voluntary scheme created by the European Community which can be joined voluntarily by organizations (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 creating 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 performed by an Accredited Auditor, and have the same auditor validating 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 organizations 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.
- $\mathbf{NO}_2$ : Nitrogen dioxide.
- NO<sub>x</sub>: Nitrogen oxides (NO and NO<sub>2</sub>).
- **SO**₂: Sulphur dioxide.

**Emissions "Scope 1":** are all the direct emissions from the company's own sources or those controlled by the company.

**Emissions "Scope 2":** are the indirect emissions of the company, those linked to the purchase of energy from sources controlled by another subject.

#### **EMISSION FACTORS USED**

To calculate the direct emissions of CO<sub>2</sub> equivalents (Scope 1), the emission factors of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines) were used.

To calculate the indirect emissions of  $CO_2$  equivalents (Scope 2), the emission factors provided by Ecoinvent 3.3 were used. The Database Ecoinvent 3.3 is a database that has emission factors linked to the electricity production mix of several countries in the world.

## *Independent auditor's report on the Sustainability Report of Cementir Holding NV at 31 December 2019*

To the Board of Directors of Cementir Holding NV

pwc

We have been engaged to perform a limited assurance engagement on the Sustainability Report of Cementir Holding NV and its subsidiaries (the "Group") for the year ended 31 December 2019, approved by the Board of Directors on 5 March 2020 (the "SR" or "Report").

#### Responsibility of the Directors for the Sustainability Report

The Directors are responsible for preparing the Report in compliance with the "GRI-Sustainability Reporting Standards" defined in 2016, (the "GRI Standards"), as indicated in the paragraph "Methodology note" of the Report, and for that part of internal control that they consider necessary to prepare a sustainability report that is free from material misstatement, whether due to fraud or unintentional behaviours or events.

The Directors are also responsible for defining the sustainability performance targets of the Group, for reporting the sustainability results, as well as for identifying the stakeholders and the significant aspects to be reported.

#### Auditor's 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, confidentiality and professional behaviour. Our audit firm adopts the International Standard on Quality Control 1 ("ISQC Italy 1") and, accordingly, maintains an overall quality control system which includes processes and procedures for compliance with ethical and professional principles and with applicable laws and regulations.

#### Auditor's responsibilities

We are responsible for expressing a conclusion, on the basis of the work performed, regarding the compliance of the SR with the GRI Standards. We conducted our engagement in accordance with International Standard on Assurance Engagements ISAE 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 apply procedures in order to obtain limited

PricewaterhouseCoopers SpA

Sede legale e amministrativa: Milano 20149 Via Monte Rosa 91 Tel. 0277851 Fax 027785240 Cap. Soc. Euro 6.890.000,00 i.v., C.F. e P.IVA e Reg. Imp. Milano 12979880155 Iscritta al nº 119644 del Registro dei Revisori Legali - Altri Uffici: Ancona 60131 Via Sandro Totti 1 Tel. 0712132311 - Bari 70122 Via Abate Gimma 72 Tel. 0805640211 - Bergamo 24121 Largo Belotti 5 Tel. 035229691 - Bologna 40126 Via Angelo Finelli 8 Tel. 0516186211 - Brescia 25121 Viale Duca d'Aosta 28 Tel. 030505701 - Catania 95129 Corso Italia 302 Tel. 0957532311 - Firenze 50121 Viale Gramsci 15 Tel. 0552482811 - Genova 16121 Fiazza Piccapietra 9 Tel. 01029041 - Napoli 80121 Via dei Mille 16 Tel. 08156181 -Padova 35138 Via Vicenza 4 Tel. 049873481 - Palermo 90141 Via Marchese Ugo 60 Tel. 091349737 - Parma 43121 Viale Tanara 20/A Tel. 0521275911 - Pescara 65127 Fiazza Ettore Troilo 8 Tel. 0854545711 - Roma 00154 Largo Fochetti 29 Tel. 055205691 - Torino 10122 Corso Palestro 10 Tel. 01155771 - Trento 38122 Viale della Costituzione 33 Tel. 0461237004 - Treviso 3100 Viale Felissent 90 Tel. 042656911 Trieste 34125 Via Cesare Battisti 18 Tel. 0403480781 - Udine 33100 Via Poscolle 43 Tel. 043225789 - Varese 21100 Via Albuzzi 43 Tel. 0332285039 - Verona 37135 Via Francia 21/C Tel. 0458263001 - Vicenza 36100 Piazza Pontelandolfo 9 Tel. 0444393311

www.pwc.com/it



assurance that the SR is free of material misstatement. 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 that we have become aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.

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

In particular, we performed the following procedures:

- 1. analysis, through inquiries, of the governance system and the process for managing the sustainability issues relating to the Group's strategy and operations;
- 2. analysis of the relevant matters reported in the Report relating to the activities and features of the Group, in order to assess the reasonableness of the selection process used, in accordance with the reporting standards adopted;
- 3. analysis and assessment of the criteria used to identify the consolidation area;
- 4. understanding of the processes underlying the preparation, collection and management of the significant qualitative and quantitative information included in the SR. In particular, we have held meetings and interviews with management of Cementir Holding NV, Aalborg Portland A/S, Unicon A/S, Compagnie des Ciments Belges SA and Société des Carrières du Tournaisis SA and we have performed limited documentary validation procedures, to gather information about the processes and procedures for the collection, consolidation, processing and submission of the non-financial information to those responsible for the preparation of the SR.

Moreover, for significant information, considering the activities and characteristics of the Group:

- at a holding level,
  - a) with reference to the qualitative information included in the SR we carried out interviews and acquired supporting documentation to verify their consistency with available evidence;
  - b) with reference to quantitative information, we performed analytical procedures and limited testing, in order to assess, on a sample basis, the accuracy of the consolidation process.
- with reference to the companies, Aalborg Portland A/S, Unicon A/S, Compagnie des Ciments Belges SA and Société des Carrières du Tournaisis SA, which were selected on the basis of their activities, their contribution to the performance indicators at a consolidated level and their location, we carried out site visits during which we met local management and gathered supporting documentation regarding the correct application of the procedures and calculation methods used for the key performance indicators.

2 of 3



#### Conclusions

Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report of Cementir Holding NV as of 31 December 2019 has not been prepared, in all material respects, in compliance with the GRI Standards.

Rome, 6 March 2020

PricewaterhouseCoopers SpA

Mariliard

Massimiliano Loffredo (Partner)

look J Paolo Bersani (Authorised signatory)

3 of 3



#### Cementir Holding N.V.

**Registered Office:** 36, Zuidplein, 1077 XV, Amsterdam, The Netherlands P: +31 (0) 20 799 7619 **Secondary and operational office:** 200, Corso di Francia, 00191 Rome, Italy P: +39 06 324931

*Share capital:* € 159,120,000 *VAT number:* 02158501003 *Tax number:* 00725950638 *CCI number:* 76026728 - Netherlands Chamber of Commerce

www.cementirholding.com

Design, Layout and Printing
PRC

