



# SUSTAINABILITY REPORT 2020

Cementir Group

## Non-Financial Statement

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



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## LETTER TO THE STAKEHOLDERS



Dear Stakeholders,

a year ago, the coronavirus began to quickly spread across the world. The cost on human lives and the economy has been immense. To say that the pandemic has changed the world would be an understatement. In few months since the virus emerged it has upended day-to-day lives across the globe. The pandemic has changed how we work, learn and interact as social distancing guidelines have led to a more virtual existence, both personally and professionally.

Our actions in this unprecedented time represent a deep commitment to our role and our responsibilities in our communities.

Following the advice of the World Health Organization along with governments and public health authorities, we put in place safety protocols guidelines for each location. Social distancing, utilization of protective masks, regular cleaning and disinfecting of work stations, awareness training to equip employees and partners with the knowledge they need to combat this invisible threat have been the cornerstones of Cementir pandemic emergency management system.

Covid-19 forced governments worldwide to put in place restrictions that softened the human footprint to a level not seen in decades. Months of empty roads, empty skies and sluggish economic activity reduced the year's global greenhouse gas discharges by an estimated 7%, the sharpest annual fall ever recorded. However, the UN stated that the impact of the coronavirus lockdown on climate has lowered 2050 temperature projections by 0.01 degrees Celsius and the Earth is still on course for catastrophic 3.2 degrees of warming by end of century.

For this reason, Cementir decided to take more disruptive actions for fighting climate change by defining a 10-year roadmap to maximize the deployment of existing technologies and laying the groundwork for the breakthrough innovations that will lead to the production of 'net zero emissions' cement.

Our industry is changing radically, and we want us in the driver's seat.

By 2030, we will reduce our direct emissions to less than 500 kg CO<sub>2</sub> per ton of grey cement produced, while for white cement, which is a specialty product with niche applications and markets (0,5% of total worldwide cement production), the plan is to reduce emissions to 800 kg CO<sub>2</sub> per ton of white cement.

On 1 January 2021, we began distributing our new low-carbon cement, named FUTURECEM™. The launch of FUTURECEM™ constitutes a significant contribution to both the green transition of Cementir Group and the construction industry in general. FUTURECEM™ has a carbon footprint that is up to 30 percent lower compared to traditional Portland cement and will play a pivotal role in our CO<sub>2</sub> reduction strategy. The low carbon benefits of FUTURECEM™ have been achieved without compromising strength and quality. From 2014-2020, together with research institutions and a range of stakeholders and customers from the construction industry, Cementir tested FUTURECEM™ at full-scale in infrastructure as well as in an indoor floor and wall in the new concrete laboratory at the Danish Technological Institute. Those demo projects demonstrate that FUTURECEM™ can be implemented in the concrete industry using conventional production and execution technologies.

In the 10-years Roadmap, the Group planned the main investment needed until 2030, out of which 107 million included in the 2021-2023 Industrial Plan, approved by the Cementir Board of Directors in February 2021.

In the 2021-2023 period, the major investments will be as follows:

- the kiln upgrade in the Belgian plant to increase alternative fuel use from the current 40% to 80%;
- the construction of a new calcination plant aimed at the production of FUTURECEM™. As already mentioned, through FUTURECEM™ technology, the clinker in cement will be partially replaced by limestone and calcined clay. The creation of a plant for the calcination of clay will support the shifting of our product portfolio from tradition Portland cement to low carbon cement (FUTURECEM™);
- the installation of 2 Wind Turbine Generators (2 WTG with 4,200 kW) in the Aalborg plant. The energy produced will be used by the plant;
- the extension of district heating supply in Aalborg from the current 36,000 to over 50,000 households. The Aalborg plant recovers excess heat from cement production to provide district heating to local inhabitants;
- the utilization of natural gas in Aalborg. The switching to natural gas, a fossil fuel with emissions lower than petcoke (estimated reduction of 20% of CO<sub>2</sub>), is a transitional solution for Cementir's path to net-zero emissions.

Our commitment to a low-carbon economy and to transparency around our environmental impact has been also recognized by CDP, the gold standard of environmental reporting. In December 2020, we achieved "B" rating for climate change. This result puts Cementir amongst the top players in the cement industry and much better than the average company, considering a CDP European and Global average rating of "C".

We are fully aware that, throughout the value chain, our activities can have a direct or indirect impact on our stakeholders. That is why our targets are aligned with the inspirational principles that drive the United Nations Sustainable Development Goals (SDGs) initiative, which addresses the global challenge of sustainable

development. Our Group adheres to the internationally recognized principles for the respect and support of fundamental human rights in every geographic area where we operate, and we want to inspire our suppliers, contractors and other business partners to adhere to the same standards.

In 2020, the Human Rights assessment, based on Cementir Code of Ethics, UN Declaration on Human Rights, ILO Conventions and UK Slavery Act was performed on the main legal entities with a coverage of 79% of the Cementir workforce worldwide, involving the following countries: France, Belgium, Denmark, Norway, Turkey, United States, China, Malaysia, Italy and Poland.

The first step in cement production, the extraction of raw materials, inevitably impacts on the surrounding natural and social environment. For this reason, the 95% of quarries used by the Group has a rehabilitation plan in place. Each plan defines the goal and timetables for the reintegration of a quarry into the surrounding landscape. The rehabilitation processes start when the quarry is still in operation, by reclaiming the areas that are no longer used.

In Denmark, the purpose of the rehabilitation plan is to transform the chalk pit into a "Family Lake Park", a recreational area close to Aalborg with a variety of leisure and sporting amenities for the local population. 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. In China, our plan has been included in Anhui Province 2018-2025 Green Mine Plans. This project targets to rehabilitate and reintegrate the benches of the quarry not used anymore into the surrounding landscape as well as establishing dust and noise monitoring systems and construction of new surface water drainage systems in and around the quarry site.

Over the years, the Group plants have also adopted technical solutions in order to reuse or use water resources more efficiently. In 2020, the percentage of reused water reached 40% of the total.

Occupational safety is a core value of Cementir's culture of sustainability, as it is the protection of workers' health. The implementation and maintenance of effective and efficient management systems for accident prevention is one of the key health and safety objectives at Group level. During 2020, all certified cement production plants completed the migration process to the ISO 45001 standard and were found to be in full compliance. At the end of 2020, certified cement plants accounted for 73% of the total. The Group plans to certify all cement production plants by 2022.

As you read on, you will find more information on these and other initiatives, together with the ambitious targets that we have set for future years.

We have achieved satisfactory results, but we understand that we have to do even more.

Finally, I wish to thank all our people around the world who delivered prime performances despite one of the most difficult and challenging years ever faced by the Group.

Rome, 9 March 2021

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



CCB  
CEMENT HOLDING

Ready Mix Plant in Brussels, Belgium

## 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 with 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 2020 - 31 December 2020, 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, over 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 and subsequent updates. This report has been prepared in accordance with the GRI Standards: Core 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 includes all Sustainability KPIs (see "Cementir Data Tables") and also 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>1</sup> For the Group details see the Group Annual report.

## THE DEFINITION OF THE MATERIAL ISSUES

For the 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. Each year, Cementir conducts an analysis of sustainability-related topics which may be considered material to the company.

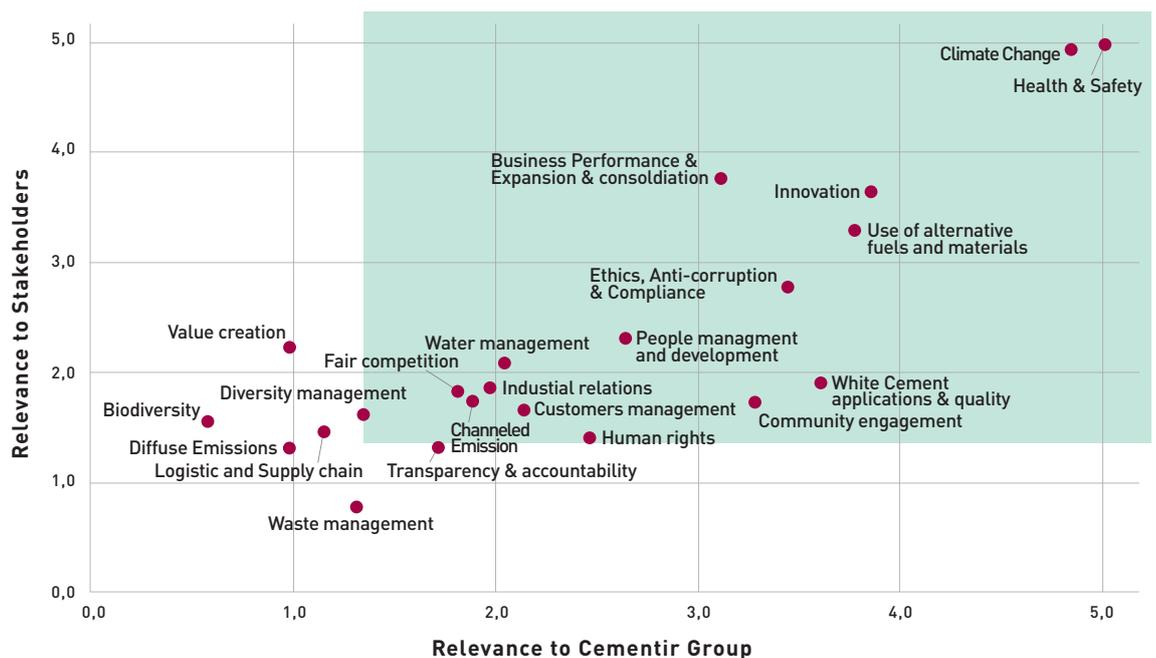
In 2020, the materiality matrix was updated following a benchmark with a panel of companies operating in the sector and a survey on the context and the challenges the sector must deal with. The review also considered the relevant topics coming from investors and ESG rating companies.

The materiality matrix was submitted for assessment and approval by Upper Management and reviewed by the Sustainability Committee.

The results of the analyses generally confirmed the topics that Cementir identified in the previous years, with the topics of ‘Climate Change’ and ‘Health and Safety’ increasingly more significant, both for the business and its stakeholders. Most climate experts agree that the escalating climate crisis is the defining issue this lifetime and that the world must take urgent action to cut CO<sub>2</sub> emissions and we cannot deny that cement manufacturing is a process that makes intensive use of thermal energy, releasing both direct and indirect CO<sub>2</sub> emissions into the atmosphere. Climate action is at the heart of the European Green Deal and EU Taxonomy, an ambitious European package of measures for cutting greenhouse gas emissions. Climate change is thus reshaping the cement sector.

In Cementir, health and safety has always been a core value. However, in the last year, Covid-19 changed how we live and how we work in many different and unimaginable ways. As described in the dedicated section (see ‘Covid-19 emergency management system’), following the advice of the World Health Organization along with governments and public health authorities, Cementir put in place a new range of global and local measures to contain the spread of the coronavirus between our employees and partners. Health and safety is therefore a top priority for everyone.

The 2020 materiality matrix is presented below. 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.



## 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 style="list-style-type: none"> <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 style="list-style-type: none"> <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>• Fair competition</li> </ul>
Shareholders	<ul style="list-style-type: none"> <li>• Business performance, expansion and consolidation</li> <li>• Ethics, anti-corruption and compliance</li> <li>• Climate change</li> </ul>
Trade Unions	<ul style="list-style-type: none"> <li>• Health and Safety</li> <li>• Industrial relations</li> <li>• Human rights</li> <li>• Climate change</li> </ul>
Local communities and local committees	<ul style="list-style-type: none"> <li>• Use of alternative fuels and materials</li> <li>• Channelled emissions</li> <li>• Involvement of local communities</li> </ul>
Customers	<ul style="list-style-type: none"> <li>• White cement (quality and application)</li> <li>• Customer management</li> <li>• Fair competition</li> <li>• Innovation</li> </ul>
Suppliers and contractors	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Climate change</li> <li>• Conveyed emissions</li> <li>• Use of alternative fuels and materials</li> <li>• Biodiversity</li> </ul>
Financiers	<ul style="list-style-type: none"> <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> <li>• Climate change</li> </ul>



Louisiana State Museum and Sports Hall of Fame, Natchitoches, USA

# 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:

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

**ii. We respect the environment in all our operations**

**iii. We value our people**

**iv. We support our communities**

The Group established a series of sustainability targets covering the four pillars of the Group and aligned with the inspirational principles that drive the United Nations Sustainable Development Goals (SDGs).

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 2020.

Hybrid truck of Unicon, Norway



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

UN SDGs	Target	Detailed description	2020 Results	Deadline and progress	Pages	
 	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 2020, 28% of alternative fuels used to produce grey cement	2022 2025 2030	Target in line with planned roadmap	Use of alternative fuels (pag. 61)
 	6% of alternative fuels for white cement production by 2030	The demand for consistency in the colour of white cement is much higher than for grey as there is a high attention to the purity of the colour. Alternative fuels affect the colour and for this reason their utilization is drastically limited in the production of white cement	In 2020, 3% of alternative fuels were used to produce white cement	2022 2025 2030	Target in line with planned roadmap	Use of alternative fuels (pag. 61)
	Waste recycling	Since 2009, Cementir has been operating in the urban and industrial waste management and processing sector	In 2020, the Group's plants recycled, through mechanical selection and treatment processes almost 7,500 tons of materials	ongoing	Target in line with planned roadmap	Waste processed in 2020 (pag. 40)
 	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) emissions	In 2020, the Group's treatment plants produced a total of 80,000 tons of fuel from waste	ongoing	Target in line with planned roadmap	Waste processed in 2020 (pag. 40)

**>ENVIRONMENT Pillar II: We respect the environment in all our operations**

UN SDGs	Target	Detailed description	2020 Results	Deadline and progress	Pages	
	CO <sub>2</sub> reduction target for grey and white cement	Cementir's plan is to reduce its Scope 1 emissions to less than 500 kg CO <sub>2</sub> per ton of grey cement (equivalent to a 30% reduction of CO <sub>2</sub> emissions per ton of cement by 2030, compared to 1990). For white cement, which is a specialty product with niche applications and markets (0,5% of total worldwide cement production), the plan is to reduce emissions to 800 kg CO <sub>2</sub> per ton of white cement	In 2020, the CO <sub>2</sub> emission for grey was 718 KG/TCE, while for white was 915 Kg/TCE	2022 2025 2030	Target in line with planned roadmap	Our 2030 commitment in numbers (pag. 41)
  	107 million green investments in the 2021-2023 period	In the 2021-2023 Industrial Plan, we have planned green investments for 107 million euros, which include, among others: <ul style="list-style-type: none"> <li>- the construction of a new calcination plant aimed at the production of FUTURECEM™</li> <li>- the installation of wind turbines with an installed capacity of 8.4 MW</li> <li>- district heating allowing an extension of district heating supply from 36,000 to over 50,000 households and other energy efficiency</li> <li>- increase in the use of alternative fuels from current 40% to 80% in Belgium</li> <li>- utilization of natural gas in Aalborg.</li> </ul> The switching to natural gas, a fossil fuel with emissions lower than petcoke (estimated reduction of 20% of CO <sub>2</sub> ), is a transitional solution for Cementir's path to net-zero emissions	In February 2021, the BoD approved the 2021-2023 Industrial Plan	2023	Target in line with planned roadmap	Main investments to achieve CO <sub>2</sub> reduction targets (pag. 43)

## &gt;ENVIRONMENT

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

UN SDGs	Target	Detailed description	2020 Results	Deadline and progress		Pages
	Lowering clinker content of grey cement to 68%	Development of a new low-carbon cement, FUTURECEM™, a patented technology which allows for more than 35 % of the energy intensive clinker in cement to be replaced by limestone and calcined clay. In the 2021-2023 period, the Group has planned the sales of about 1 million ton of FUTURECEM™. Starting from 2023, its annual production is expected to grow year by year. According to current estimates, by 2030 Futurecem™ volumes sold are expected to reach around 51% of total volumes sold in Europe and 60% of grey cement volumes	In 2020, the Clinker ratio for grey cement was 82%  On January 2021, Cementir started the distribution of FUTURECEM™	2022 2025 2030	Target in line with planned roadmap	Our key actions and related investments for the 2021-2030 period (pag. 42)
	Lowering clinker content of white cement to 80%	The demands for consistency of colour of white cement is much higher than for grey as no nuances of white or coloured surfaces can be accepted. Alternative minerals affect the colour and for this reason their utilization is drastically limited for white cement	In 2020, the clinker / cement ratio for white cement was 82%	2022 2025 2030	Target in line with planned roadmap	Our key actions and related investments for the 2021-2030 period (pag. 42)
	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 2020, the Aalborg Plant provided 1,8 million Gigajoules of thermal energy to the local community. In the industrial Plan 2021-2023, we included the project to expand the heat recovery system	2023 2025	Target in line with planned roadmap	Recovery of heat from kiln fuel (pag. 89)
	All operating companies have to operate with a certified environmental management system (i.e. ISO 14001)	Cementir has committed that all operating companies in the cement and concrete production must operate with a certified environmental management system (i.e. ISO 14001), by 2025	As of 2020, 8 cement plants (accounting for the 93% of the total cement production), 2 RMC companies (accounting for the 25% of the total RMC production) and 3 waste management companies (accounting for the 100% of the waste managed by the group) have adopted a ISO 14001 certified management system	2025	Target in line with planned roadmap	We respect the environment in all our operations (pag. 70)
	All cement plants must operate with a certified energy management system (i.e. ISO 50001)	Cementir has committed to all cement plants operating with a certified energy management system (i.e. ISO 50001) by 2025	In 2020, 7 cement plants, accounting for the 76% of the total cement production, adopted the ISO 50001 certification for energy management systems	2025	Target in line with planned roadmap	Energy consumption (pag. 71)
	Reuse water in production	Cementir Group aims to reuse water in production by recycling process water and capturing rainwater from selected areas	In 2020, 40% of water used in the cement production plants was reused	ongoing	Target in line with planned roadmap	Water consumption (pag. 74)

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## &gt;ENVIRONMENT

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

UN SDGs	Target	Detailed description	2020 Results	Deadline and progress	Pages
	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 2020, Aalborg Portland committed to a CO <sub>2</sub> reduction target of 30% by 2030 (an annual saving of 660,000 tons of CO <sub>2</sub> in 2030 compared to current emissions). As part of this strategy, Aalborg Portland has entered into an agreement with the state gas distribution company, Evida, to connect the plant to the gas distribution grid on 1 April 2022	2030 Target in line with planned roadmap	Our key actions and related investments for the 2021-2030 period (pag. 42)

## &gt;PEOPLE

## Pillar III: We value our people

UN SDGs	Target	Detailed description	2020 Results	Deadline and progress	Pages
	Sustainable talent management	Key positions are filled internally with top-class candidates worldwide	In 2020, 30% of new/vacant key positions filled via internal recruitment	ongoing Target in line with planned roadmap	We value our people (pag. 76)
	Promoting diversity in the workforce	Cementir is committed to promoting diversity in the workforce	In 2020, 17% of personnel involved in the Group Talent Programme are female	ongoing Target in line with planned roadmap	We value our people (pag. 76)
	People engagement	Increase people engagement across the Group by listening, engaging and implementing improvement plans	In 2019, Group staff survey 'Your Voice' conducted to assess staff engagement across the group. Participation rate of 83% at Group level. Following the survey, global, regional and BU level actions plans have been defined and approved by the Global Senior Management Team, to be executed in 2020-2021. In 2020, 50% of the defined actions were implemented	ongoing Target in line with planned roadmap	Group People Survey (pag. 77)
	Human rights awareness	Promoting sensibility, awareness & education about Human rights across the Group	In 2020 we designed and launched an online training course mainly focused on the principles described in the Cementir Human Rights Policy and further detailed in local Procedures. The first wave of training provided in English involved the 36% of the employees. As soon as the transposition into local languages is available, the participation will be extended to the rest of the population	2020 Target in line with planned roadmap	Commitment in Human Rights (pag. 55)

follow

## &gt;PEOPLE

## Pillar III: We value our people

UN SDGs	Target	Detailed description	2020 Results	Deadline and progress	Pages
 	Zero accidents	Group-wide training initiative on the importance of management responsibility in occupational health and safety. Analysis of the causes of accidents and near misses and implementation of appropriate preventive measures	Zero fatalities and high-consequence injuries to employees in 2020	ongoing	Target in line with planned roadmap Concretely safe (pag. 82)
	All cement plants must operate with a certified health and safety management system (i.e. ISO 45001)	The Group plans to certify all cement plants by 2022	During 2020, all certified cement plants completed the migration process to the ISO 45001 standard, finding full compliance with the standard's requirements. By the end of 2020, 73% of all cement plants were ISO 45001 certified	2022	Target in line with planned roadmap Concretely safe (pag. 82)
	Quality Education for the employees	In 2018, the Group launched the Cementir Academy, a training hub that aims to develop and enhance the technical, behavioural and managerial skills of all our employees	More than 35,000 hours of training were supplied in 2020, almost 11.7 hours per capita	ongoing	Target in line with planned roadmap Cementir Academy (pag. 78)
	Link between employee's remuneration and sustainability targets	The sustainability targets defined by the Group are included in the monetary incentive plan adopted by Cementir	The monetary incentive plan adopted by Cementir is based on a short-term incentive (STI) system. The STI is based on the Group's and/or subsidiaries' financial and non-financial targets and includes objectives based on indicators linked to company performance and to managerial roles held within the Company. 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	2020	Target achieved Our key actions and related investments for the 2021-2030 period (pag. 42)
	Promotion of gender equality with an objective of at least 30% of the Board of Directors being composed of women	Implementation of a specific Group Diversity Policy	33% of Board Members are women	ongoing	Target achieved Governance (pag. 47)

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

UN SDGs	Target	Detailed description	2020 Results	Deadline and progress	Pages
	Transparent communication with stakeholders	In 2020, submitting the CDP Climate Change Questionnaire and assurance by the external auditor	In 2020, Cemtir awarded "B" rating from Carbon Disclosure Project (CDP)  Limited assurance engagement on Sustainability Report by external Auditors	2020  Target achieved	10-year roadmap (pag. 41)  Report by external Auditors (pag. 138)
	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	Çimentaş Education and Health Foundation (pag. 89)
	Implementation of monitoring systems to eliminate human rights related risks across the Group	A human rights self-assessment checklist, based on Cemtir 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 2020, Human Rights assessment was performed on the main legal entities with a coverage of 79% of the Cemtir workforce worldwide, involving the following countries: France, Belgium, Denmark, Norway, Turkey, United States, China, Malaysia, Italy and Poland	2022  Target in line with planned roadmap	Commitment in Human Rights (pag. 55)



Cement plant in Ipoh, Malaysia

## COVID-19 EMERGENCY MANAGEMENT SYSTEM

Although the Covid-19 pandemic has impacted the various countries in which the Group operates differently, the priority of the Company's Management Team has always been the safety of personnel operating at all company sites, defining and adopting infection risk containment and prevention measures in line with directives issued.

The health and well-being of our employees and partners is our priority. For this reason, Cementir Group put in place a range of global and local measures to contain the spread of the coronavirus (Covid-19).

In the first quarter of 2020, a HR team at Group level and focal points at country level were established to meet this challenge. The country focal points are coordinated by the central team and each company must comply with their national health regulatory requirements and must execute the guidance given by the Group.

Cementir is following the advice of the World Health Organization along with governments and public health authorities in each country where the Group operates. An extensive range of business continuity and precautionary measures have been put in place across our operations globally.

With regards to the countermeasures adopted by Group companies, the first action implemented and strongly encouraged is social distancing: this is the main element which all other countermeasures are based on. The rule of maintaining a distance greater than 1-1.5 meters from other people is the most common form of this.

Awareness and training are then further cornerstones of a clearly implemented pandemic emergency management system, as well as the washing of hands, contact surface cleaning and smart working, along with the reduction of workforce presence in offices. Specific training courses have been arranged for the employees and posters and toolbox talks have been posted to stress the importance of basic hygiene measures, such as the frequent hand washing and the constant wearing of face masks.

Working from home has also been encouraged as much as possible.

In 2020, all business travel was banned and in the first quarter of 2021, this limitation is still in force.

The Group strongly promoted digital initiatives (i.e. contactless) in each country. Because of the emergency, there was increased adoption of digital tools for collaboration, document sharing and reporting, which the company already had, but which saw an exponential growth in use. Some processes that were managed manually are also now carried out digitally. At the same time, a significant proportion of Cementir's staff has increased their level of knowledge and mastery of digital tools, making the most of the agile work model that has ensured operational continuity and production efficiency for the business.

From the beginning of the emergency, the Group HR Department has been tracking the impact of Covid-19 on our employees daily. Each company must immediately notify the local and Group HR department of any Covid-19 case, which must then evaluate the proper response.

As of December 2020, starting from the beginning of the pandemic, 175 employees (5.8% of average headcount in 2020) contracted Covid-19, 163 employees fully recovered and 12 are still positive according to swab tests. So far, Covid-19 has not caused any fatalities in the Group. Our employees all around the world, have been mobilised to support our local communities. In Denmark, our plant donated more than 2,000 face masks to the local hospital. In the United Kingdom, the company donated laptops to local schools to help pupils who did not have a device so that they could participate in home learning. Moreover, all staff have access to an Employee Assistance Programme where they can speak confidentially to an external counsellor about financial difficulties or mental health concerns. In Turkey, the Elazig plant donated disinfection material to local schools.



Çimbeton concrete mixer truck, Turkey

# THE CEMENTIR GROUP

1



Cement plant in Edirne, Turkey

# 1 THE CEMENTIR GROUP

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



Cement plant in Aalborg, Denmark

Cementir Holding is a multinational Group with its registered office 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 specialises 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 founded 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 sales 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



**3,009**  
PEOPLE  
**1,225**  
BILLION EUROS  
IN REVENUE  
**18**  
COUNTRIES

## SALES VOLUMES



**7.9**  
MILLION TONS  
OF GREY CEMENT  
**2.8**  
MILLION TONS  
OF WHITE CEMENT  
**4.4**  
MILLION CUBIC METRES  
OF READY-MIXED CONCRETE  
**9.5**  
MILLION TONS  
OF AGGREGATES

## PLANTS



**6**  
WHITE CEMENT PLANTS  
**5**  
GREY CEMENT PLANTS  
**32**  
TERMINALS  
**100**  
READY-MIXED CONCRETE  
PLANTS  
**10**  
QUARRIES  
**1**  
CEMENT PRODUCT PLANT  
**2**  
WASTE TREATMENT AND  
RECYCLING PLANTS

<sup>2</sup> 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, which was 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 controls LWCC with a 63.25% share as of 31 December 2018, with the remaining 36.75% 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 organised on a regional basis in seven geographical areas: Nordic & Baltic, Belgium, North America, Turkey, Egypt, Asia-Pacific and Italy.

The vertically integrated aggregate, cement and concrete production platforms are 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 sales sector.



Employee in cement plant, Aalborg, Denmark



Employee in workshop, Izmir, Turkey

## 2020 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: **33**
- Terminals: **9**
- Quarries: **3**

##### Norway

- Ready-mixed concrete plants: **28**
- Terminals: **1**

##### Sweden

- Ready-mixed concrete plants: **9**
- Quarries: **4**

##### 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: **1**
- Ready-mixed concrete plants: **9**
- Terminals: **1**
- Quarries: **3**

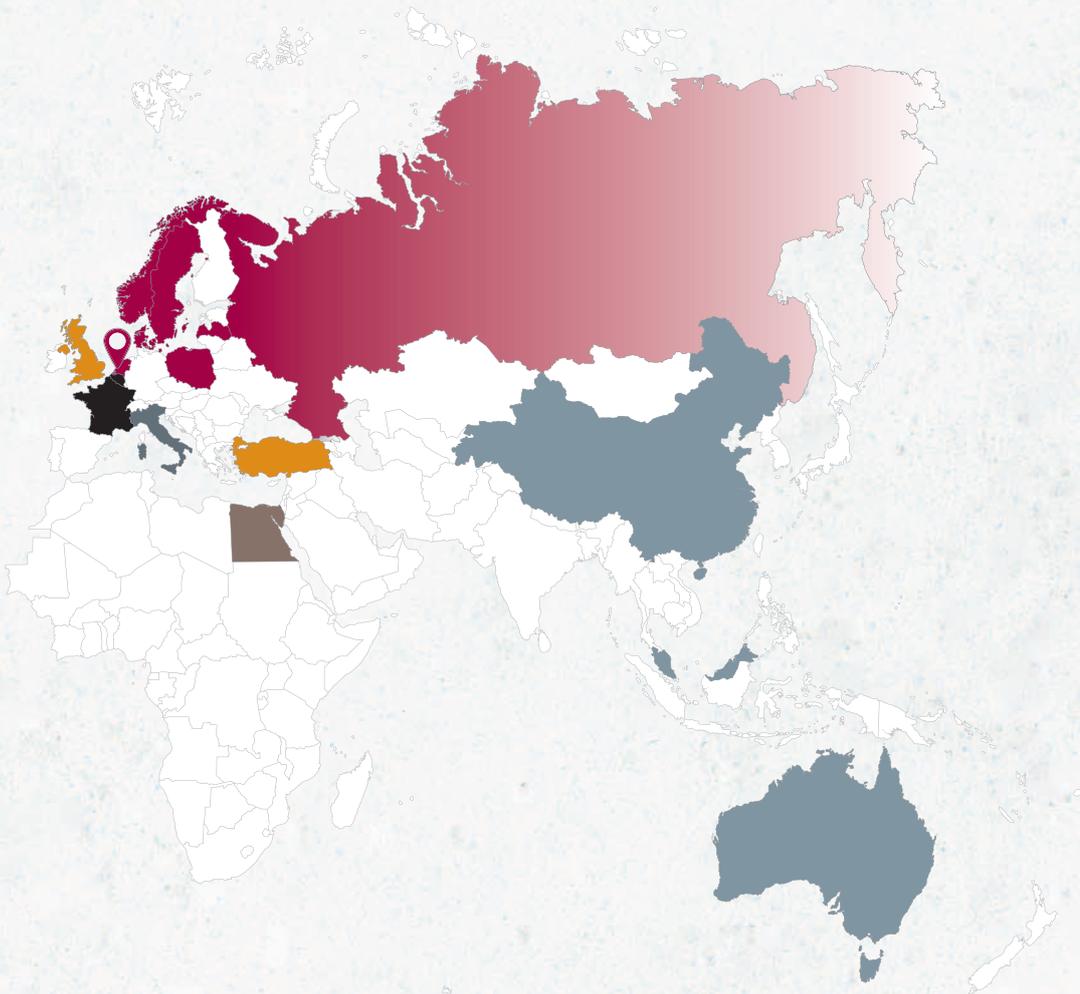
##### France

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

#### NORTH AMERICA

##### USA

- White cement production capacity: **0.26 million t**
- Cement plants: **2**
- Cement product plants: **1**
- Terminals: **3**



**TURKEY**

**Turkey**  
 Grey cement production capacity: **5.4 million t**  
 Cement plants: **4**  
 Ready-mixed concrete plants: **16**  
 Waste management facilities: **1**

**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: **4**

**Malaysia**  
 White cement production capacity: **0.35 million t**  
 Cement plants: **1**  
 Terminals: **2**

**Australia**  
 Terminals: **4**

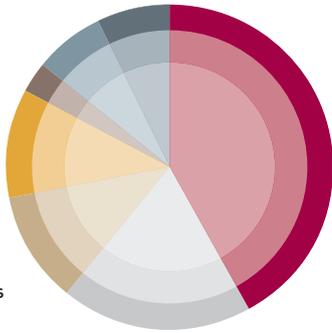
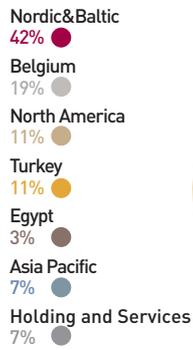
**ITALY - HOLDING AND SERVICES**

**Italy**  
 Trading activities  
 IT and technical services  
 Secondary and operational office of Cementir Holding N.V.

## TURNOVER COMPOSITION BY REGION/BU

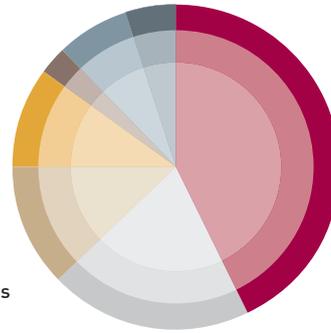
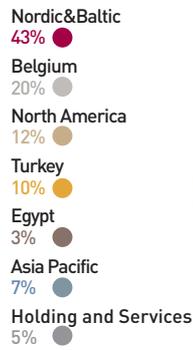
### Revenue from sales and services by geographical segment

2020



Total revenue from sales and services  
1,224,793 (EUR '000)

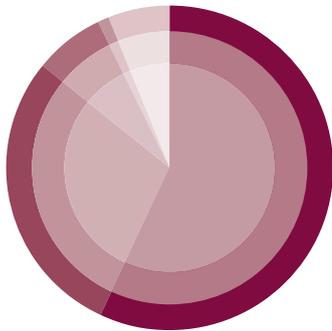
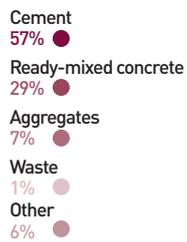
2019



Total revenue from sales and services  
1,211,828 (EUR '000)

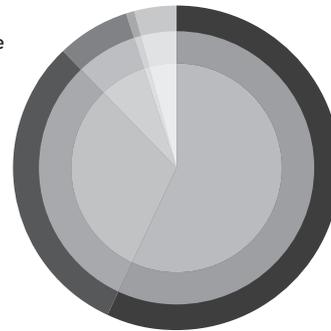
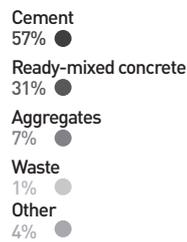
### Revenue from sales and services by business segment

2020



Total revenue from sales and services  
1,224,793 (EUR '000)

2019



Total revenue from sales and services  
1,211,828 (EUR '000)

Shilien Chemical Plant, new Salt Industrial Park of Huai'An City, Jiangsu Province, China



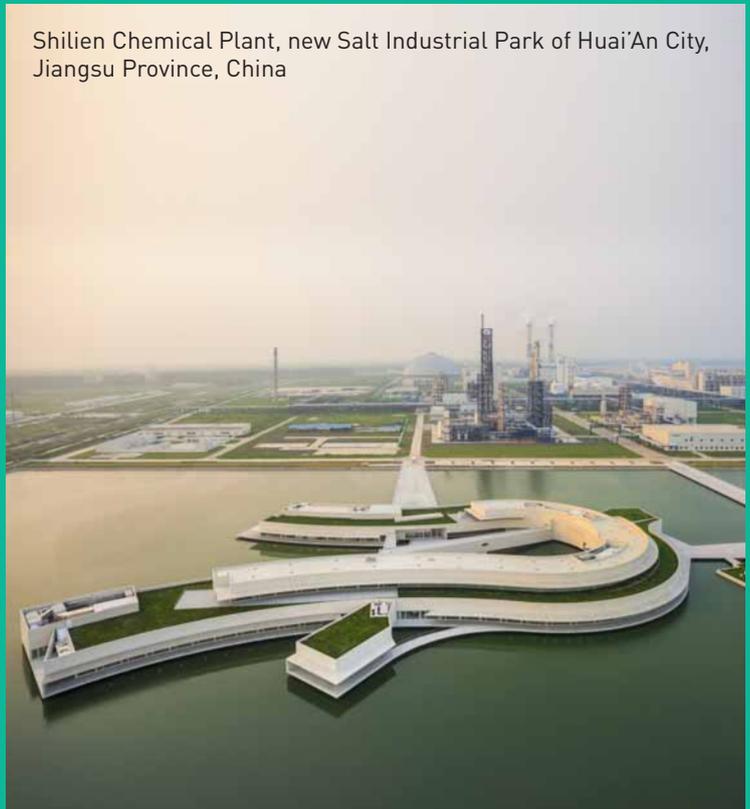
# How cement is made

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 then 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.

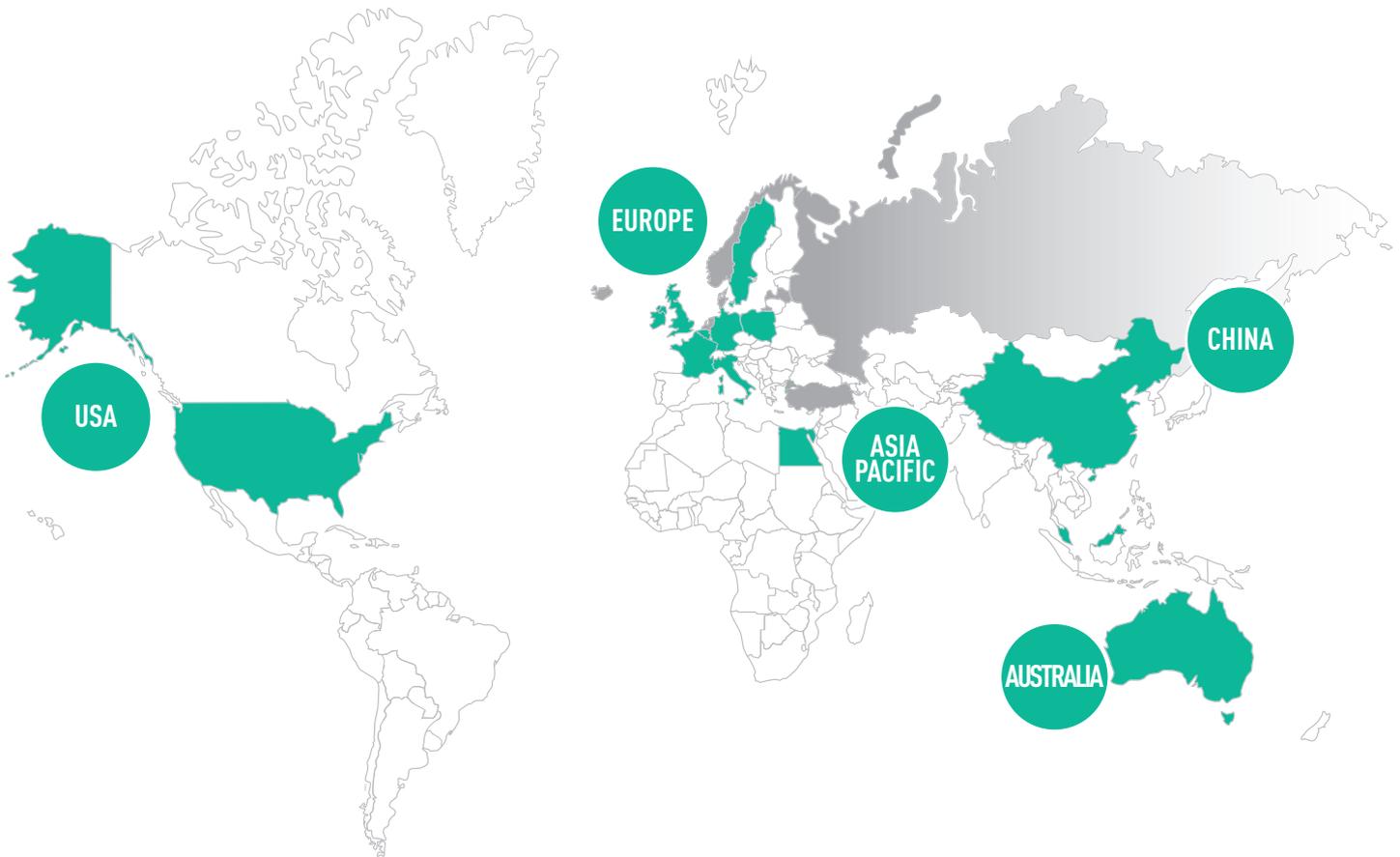
Thanks to its strong industrial capacity and a comprehensive presence on international markets, in 2020 Cementir Holding distributed worldwide over 7.9 million tons of grey cement and around 2.8 million tons of white cement of various types and classes, produced in 11 plants located in Denmark, Belgium, Turkey, Egypt, China, Malaysia and the US.

Shilien Chemical Plant, new Salt Industrial Park of Huai'An City, Jiangsu Province, China



## LEADER IN WHITE CEMENT

The Cementir Group is the world's leading producer and exporter of white cement, with a 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 and 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. The whiteness is obtained thanks to very pure and carefully selected 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. What is particular about the limestone used for manufacturing AALBORG WHITE® is the lack of contamination from sand and clay, which makes it very pure and 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 strictest international standards. Our industrial processes are inspired by the Group's consolidated best practices that guarantee our customers 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. White cement should therefore be viewed as a separate product for the following reasons:

- Applications of white cement are different from the uses of grey cement. White cement is mainly used for high performance applications, dry-mix products, mortars, special products and decorative purposes. The main uses for grey cement are heavy construction, such as in-situ or precast concrete. White cement enhances the development of future sustainable cement-based technologies and products, responding to megatrends in construction such as the circular economy where, among others, enhanced durability, modularisation of construction, reduced work processes and reduced material usage, are essential.
- White cement is a specialty product produced at a limited number of facilities and traded widely across borders inside and outside of the EU, as well as internally within Europe. Grey cement is a commodity which is often used close to the production site.
- The energy consumption to produce white clinker is higher than for grey clinker. This is because of the different raw materials and production technology. However, a clear and incremental pathway has been identified which will enable white cement production to be produced with net-zero CO<sub>2</sub> emissions by 2050.
- White cement applications have a number of benefits related to climate change.
  - The light colour reflects sunlight and thus reduces the 'heat island effect' in cities as well as the need for artificial cooling in buildings. White surfaces also reduce the need for lighting in tunnels.
  - The chemical purity of white cement, as a result of the refined raw materials used and strict production process management, enables the growth of unique, low-carbon concrete solutions and products such as high and ultra-high-performance concrete and glassfibre-reinforced concrete, where the usage of material is minimised to unprecedented levels (large cladding and structural wall components reduced to as little as 12 to 35 mm in thickness). These technologies are essential for the efforts to reduce clinker consumption in buildings, by minimising material consumption.



Navitas Science and Innovation building,  
Aarhus, Denmark



House of Music, Aalborg Denmark

The many differences are summarised in the following table:

	White cement	Grey cement
Applications (est. EU market share)*	<ul style="list-style-type: none"> <li>• Dry mix/mortars/specialty products (50-70%)               <ul style="list-style-type: none"> <li>- Cement-based paint</li> <li>- Plaster</li> <li>- Grout, putty</li> <li>- Decorative concrete panels</li> <li>- Sealing products</li> </ul> </li> <li>• Bricks, blocks and tiles (20-30%)               <ul style="list-style-type: none"> <li>- Terrazzo (up to 15% in Mediterranean countries)</li> <li>- Decorative bricks and tiles</li> </ul> </li> <li>• In-situ and pre-cast concrete (10-20%)               <ul style="list-style-type: none"> <li>- Facade elements</li> <li>- Iconic buildings and other aesthetic applications</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• In-situ and pre-cast concrete (55-65%)               <ul style="list-style-type: none"> <li>- Mass concrete for infrastructure works: dams, harbours, bridges, tunnels, culverts, road surface</li> <li>- Dwellings and industrial buildings</li> </ul> </li> <li>• Bricks, blocks and tiles (30-40%)               <ul style="list-style-type: none"> <li>- Pipes</li> <li>- Paving stones, kerbs</li> <li>- Roofing tiles</li> </ul> </li> <li>• Dry mix/mortars and other applications (5-10%)</li> </ul>
Global production (2019)	< 20 million tons annually	> 4 billion tons annually
EU27 sales (2019)	~2.5 million tons	~170 million tons
Market position	Niche product	Commodity product
International trade position	Large import/export proportion to domestic consumption (2007: 46-60%)	Medium import/export proportion to domestic consumption (2007: 8-10%)
Raw materials	<ul style="list-style-type: none"> <li>• High grade, iron-poor chalk, limestone or marble</li> <li>• Kaolin, bauxite</li> <li>• Iron-poor sand (quartz sand, shifting sand etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Locally available limestone or marl</li> <li>• Clay, shale, fly ash</li> <li>• Low-grade sand</li> <li>• Iron oxide, pyrite ash</li> </ul>
Quality targets, raw materials	Fe2O3: 0.1% (in limestone) Fe2O3: 0.35% (of total content in clinker) Cr2O3: 0.003% (of total content in clinker) Mn2O3: 0.03% (of total content in clinker)	Fe2O3: 0.3-1% (in limestone) Fe2O3: 4-6% (of total content in clinker) Cr2O3: no limit Mn2O3: no limit
Burning zone temperature	1500-1600°C	1400-1500°C
Conditions in burning zone	Incipient reducing conditions	Oxidizing
Cooling method	Quenching by water	Air cooling
Energy consumption for clinker production*	5438 MJ/ton clinker	3200 MJ/ton clinker
Reasons for higher energy consumption of white clinker production compared to grey	<ul style="list-style-type: none"> <li>• Low content of iron makes combination of raw mix into the final composition difficult</li> <li>• Reducing conditions increase energy consumption</li> <li>• Quenching reduces possibility of preheating combustion air</li> </ul>	<ul style="list-style-type: none"> <li>• High amount of flux in raw mix</li> <li>• Oxidising conditions</li> <li>• Thermal energy used to heat secondary and tertiary combustion air</li> </ul>

\*10% best EU performers.

## MARKET DIFFERENTIATION BETWEEN WHITE AND GREY

### Applications

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

White cement is differentiated from grey in term of:

1. White colour and capacity for being combined with different pigments in order to produce uniformly coloured products.
2. Much more consistent product quality than grey cement with less variation and fewer impurities makes white cement a preferred component of dry-mix construction formulations.

Typical applications for white and grey cement differ significantly. Grey cement is a commodity product, used for mass construction, such as civil works, dwellings and industrial estates (Fig. 1).

**Fig. 1:** Examples of grey cement applications.



White cement, on the other hand, 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:

### High and ultra-high-performance concrete, and glassfibre-reinforced concrete

Responding to the megatrends in construction such as fast-rise, mass-customisation, the circular economy, maximised energy efficiency, minimising on-site operations, maximising performance and durability at reduced material consumption, etc., advanced technologies previously regarded as 'unnecessary' are rapidly growing in terms of applications and volumes, providing unique value propositions. These are empowered by the purity and high performance of white cement and bringing solutions to the market with unprecedented performance. A few examples are joint systems for windmill foundations (on- and off-shore), UHPC overlays on bridges for enhanced durability and load-bearing capacity, ultra-thin modular energy-efficient wall panels, durable and material-usage optimised 3D printed objects...



### White and coloured mortars

Cement-based plasters and mortars are used for covering facades, swimming pools and in general to reduce painting requirements, and maximising possibilities in terms of surface texture and expression. Because of its high durability, much less maintenance is needed than painted surfaces.

Without white cement it would be impossible to produce these materials, which need a homogeneous and reactive base product for their preparation. Only white cement satisfies these requirements.

## Renders, joint fillers and tile adhesives

White cement is often used as the 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, such as for bathrooms.

These products have complex formulations involving ten or more ingredients. The regularity and chemical purity of white cement is critical to these applications, both during application and their lifetime.



Tile adhesive, white cement

## Exterior facade panels and decorative coating stones

White cement is also used in products such as floor tiles, kerbstones and prefabricated stairs, balconies and windowsills. Additionally, applications such as white briquette and white press brick, concrete grids and pool edges are also areas of use.

Similar products cannot be made in any practical and durable manner by simply painting grey concrete materials.



Floor tiles, white cement, Norway



Toro: concrete sculpture of bulls by Jouni Punkki, white cement, Finland

## 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) and unbeaten durability.

It is also used for the construction of street furniture, as it is more durable than steel and can take different colours.



Vase of flowers, white cement

## 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 also removes the negative effect of steam curing on the final strength of concrete. It has been used in iconic buildings and remarkable public constructions (bridges, railway stations, stadiums, etc.).

## Terrazzo and artificial stones

In the production of terrazzo, the external coloured layer in the panels is a fine white cement-based mixture that may be colour-pigmented. Production of coloured terrazzo would be impossible without the use of white cement. The same is also true for the production of artificial stones and marble.



Rely bench at Times Square for New York's design week, 3D Printing bench, white cement

### Optimised use of white cement is inherent

White cement, as a direct consequence of using a more refined selection of raw materials and the higher energy consumption for its production, results in a significantly higher cost to the manufacturers than when using grey cement. Hence, users of white cement will optimise its consumption wherever possible. A few examples are:

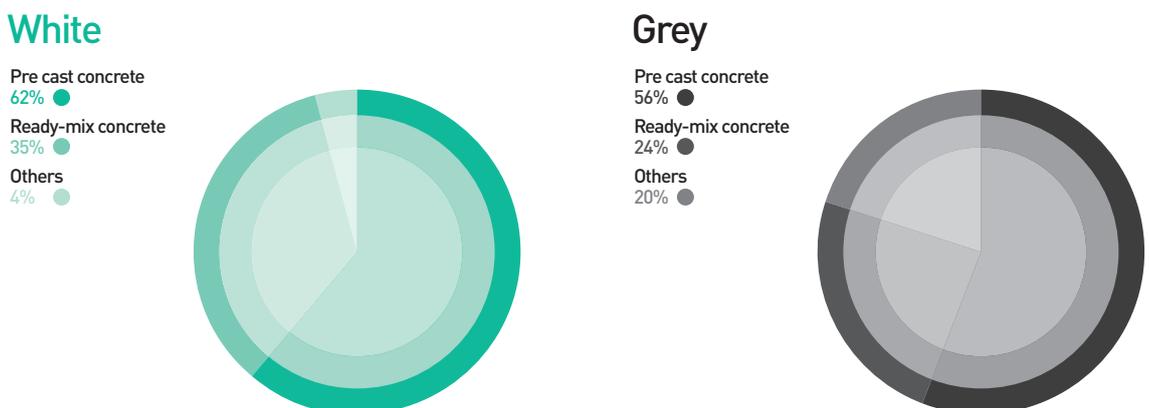
- When colour, high abrasion resistance and durability of the surface of a tile triggers the use of white cement, European manufacturers will either reduce the overall thickness of the tile, increasing the use of white cement attributes, or alternatively, apply face-mix technologies, where only a thin surface layer based on white cement will be applied on top of a 'traditional' grey concrete tile. As a result, there are no aesthetic requirements for the grey concrete part, meaning that the grey cement content can be minimised.
- Sandwich precast concrete facades are generally made of two layers of concrete with insulation in between. One thinner layer, visible to the exterior, can be considered made of white cement to achieve a specific appearance, whilst the internal, thicker loadbearing layer, needing installation and finishing operations on site, is made of conventional grey concrete. Some European pre-casters are even using face-mix technologies to reduce the amount of white cement usage.
- Facade rendering systems are composed of several layers of mortar applied to a wall. Each of these has its unique purpose, from smoothing layers typically based on grey cement, up to the final texture and colour layer, typically composed of white cement, which also provides the waterproofing and durability properties to the entire system.

**White cement is used for the restoration of monuments and archaeological sites, due to the ability of white concrete to be cast in any shape**

### Markets

The different applications for white and grey cement are reflected in the estimated market segments for the two products (Fig. 2). The product applications are also different within the segments, for example terrazzo being a major component in the 'brick, blocks and tiles' segment for white cement, whereas concrete pipes and paving stones comprise a large part of the same segment for grey cement.

**Fig. 2:** Estimated market segments for white and grey cement<sup>3</sup>.

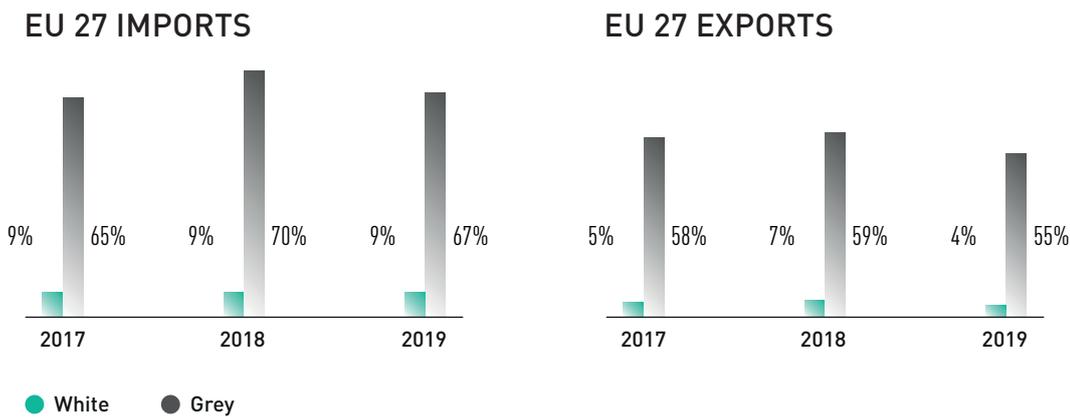


<sup>3</sup> For white, the dry-mix segment has the lion's share in the 'others' group.

## Trade

Grey cement is a commodity product, manufactured at many locations close to the market. On the other hand, white cement is a high-value product which is produced at relatively few, dedicated plants located close to the appropriate raw materials. White cement is therefore traded across borders to a much higher degree than grey (Fig. 3). This is the case for both import/export from the EU as well as between EU countries.

**Fig. 3:** Import/export of white cement vs. cement of all types.



## PRODUCT QUALITY DIFFERENTIATION BETWEEN WHITE AND GREY

From the clinker production process, there are two major differences between white and grey cement:

1. The quality control of the colour.
2. The production process, including the selection of raw materials.

This feature of white clinker production compared to grey leads to significantly higher energy consumption required in the clinker burning process.

### Whiteness as a product differentiation between grey and white clinker

Whiteness is controlled during all the phases of production and is also used as a conditional clause in trade contracts.

Colour is measured with a photometer according to a common standard ISO 7724 (DIN 5033) and is determined using a BaSO<sub>4</sub> standard. The following parameters are determined:

**L\*** - Reflection, e.g. the degree of brightness

**a\*** - Red or green hue

**b\*** - Yellow or blue hue

The reflection (L factor) is tightly controlled in the different production phases, as it is measured for the clinker leaving the kiln and for the cement produced at the grinding installations.

A reflectance of at least 86% is generally required for the white cement to be competitive. The reflectance of grey cement ranges from 30-40%, with a fairly dark colour being preferred. The demand for consistency of colour for white cement is much higher than for grey as varying shades of white or coloured surfaces are not acceptable.

## Production process differences between grey and white clinker

### Raw materials

The characteristic greenish-grey to brown colour of ordinary Portland cement results from a number of its chemical composition. These are, in descending order of colouring effect, chromium, manganese, iron, copper, vanadium, nickel and titanium. The amount of these elements in white cement has to be minimised as far as possible in order to obtain the white colour. Most importantly, Cr<sub>2</sub>O<sub>3</sub> has to be kept below 0.003%, Mn<sub>2</sub>O<sub>3</sub> below 0.03% and Fe<sub>2</sub>O<sub>3</sub> below 0.35% in white clinker.

In order to obtain these chemical purities, specially selected, high-grade raw materials are needed to manufacture white clinker. For example, limestone used in cement manufacture usually contains 0.3-1% Fe<sub>2</sub>O<sub>3</sub>, whereas levels below 0.1% are sought in limestone for manufacture of white cement. Furthermore, typical clays used in grey cement raw mix may contain 5-15% Fe<sub>2</sub>O<sub>3</sub>. Levels below 0.5% are desirable for white clinker and conventional clays are therefore usually replaced with kaolin. Kaolin is fairly low in SiO<sub>2</sub>, and so a large amount of high-grade sand with low iron content is usually also included in the raw mix for white clinker.

Ceramic grinding media are therefore often used in place of chrome steel to reduce contamination. To avoid iron and other undesired elements, coal cannot be used as fuel for white clinker burning.

### Manufacturing

The necessary temperature in the burning zone of the kiln for white clinker is somewhat higher than for grey. In addition, contrary to grey cement production, during white cement production, it is necessary to lower the clinker temperature from 1,200°C to below 600°C in a few seconds, as it leaves the kiln. This usually involves quenching with cold water. This quenching of red-hot clinker needs a reducing atmosphere, as the conversion of ferric oxide to ferrous oxide may take place in the presence of oxygen and this can negatively impact clinker whiteness. In addition,

this process favours the reduction of Cr(VI) to Cr(III) or Cr(II) and consequently leaves white clinker free of soluble Cr(VI), which is always present in grey clinker.

### Clinker properties

White clinker generally has a high level of C<sub>3</sub>S (usually more than 3% higher than in grey clinker). This results in white cement having a higher rate of strength development and higher strength at an early age than grey cement. In addition, white clinker has a high level of C<sub>3</sub>S and C<sub>2</sub>S, which gives a higher potential for late strength than grey clinker. Usually, the total C<sub>3</sub>S + C<sub>2</sub>S percentage in white clinker is at least 6% greater than the corresponding percentage in grey clinker. White cement therefore has stronger binding properties than grey cement of the same type.



Skatepark, Belgium



Cement Bags, Malaysia

## EFFECT OF WHITE CEMENT ON GLOBAL WARMING AND HUMAN SAFETY

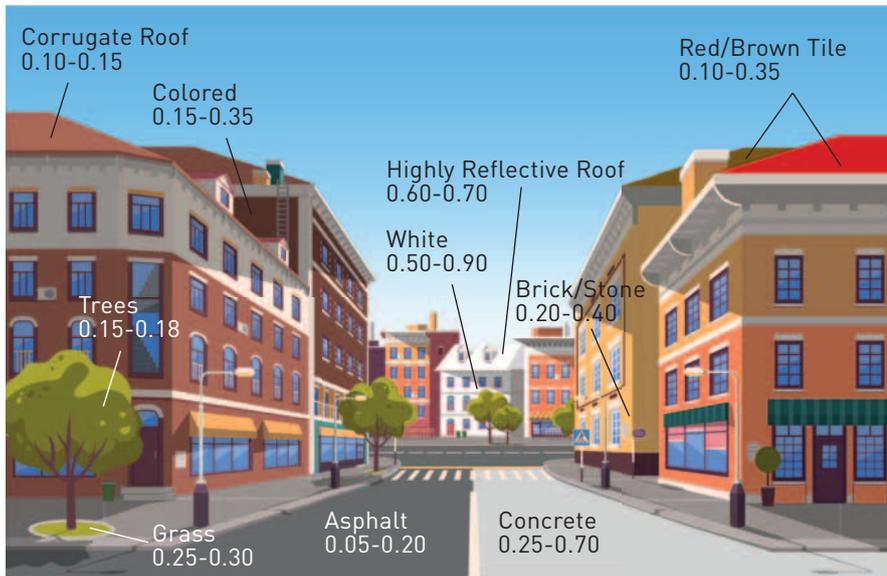
Light-coloured surfaces reflect sunlight much more effectively than dark. Providing more reflective surfaces, such as light-coloured roofs, walls and pavements, will therefore result in more energy reflected back into space, resulting in less warming.

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

Furthermore, it is estimated that 40% of the total energy consumed around the world comes from building air conditioning. This energy consumption can be reduced significantly by lighter colouration of facades and roofs of buildings. This way, more solar energy will be reflected and the temperature of the insides of building will drop, reducing the need of air conditioning. Recent studies have shown that a rise in the albedo (measure of the fraction of reflected incident sunlight) of urban surfaces could save, in the US alone, energy with an economic cost up to 3 billion dollars and reduce the global temperature by 0.01 °C each year (Akbari et al., 2006).

Applying the same methodology as used in Akbari's study to buildings, the energy consumption of a building according to the colour of the facade can be estimated. The result indicates that the CO<sub>2</sub> savings from using white concrete walls in constructing an office building with the dimensions 15 x 15 x 20 m will be approximately 27 tons annually. Assuming that 28 tons of white cement is used for the building and that the CO<sub>2</sub> emission associated with this production is 1.2 tons CO<sub>2</sub> per ton of white cement, the CO<sub>2</sub> savings will be greater than the emissions associated with the cement production after less than two years.

Fig. 5: Illustration of the albedo effect.



Another benefit of using white cement products is in tunnels and industrial warehouses, where increased reflection will result in significant energy savings in artificial lighting. White cement plaster, panels or floorings will also strongly reduce the need for artificial lighting, reducing the need for electricity for this purpose (Fig. 6).

**Fig. 6:** Application of white cement-based panels reduces need for lighting in underground tunnel.



White cement has an important use in road barriers, sound barriers and other road equipment, where the white colour increases visibility. This is especially significant under wet conditions, where grey concrete road barriers will appear almost black (Fig. 7). Painting grey road barriers white is not a safe option, as the paint will wear off and frequent repainting (which rarely happens) is necessary (Fig. 8).

**Fig. 7:** Concrete road barriers based on grey and white cement, respectively, illustrating the improved visibility of white concrete under wet conditions.



**Fig. 8:** Grey concrete road barriers painted white. Illustrates the safety hazard and additional costs needed for repainting the road barriers.



## 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 shale, limestone and secondary ingredients) 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 2020, Cementir Holding produced and distributed 4.4 million cubic metres of ready-mixed concrete of all types and classes. Ready-mixed concrete is used widely in construction and comes from a mixture of cement and aggregates like sand, 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 (using premixers) or during transport using 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 US. **These pre-stressed cement products consist of structural components for the building and transport industries**, and include pipelines, jack pipes, blocks, tiles, railway sleepers, etc., produced using mechanical and hydraulic technologies with cement as a raw material.

In Belgium, Denmark and Sweden, Cementir Holding is also active in the production and distribution of aggregates to third parties. **Aggregates are rocky materials such as gravel, sand and 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.



Cement Plant, Aalborg, Denmark

## 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, urban and industrial waste management and processing sectors**. These operations are conducted through Recydia, which owns the 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.

Through its modern facility located to the west of the city of Izmir, **Sureko** is involved 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 North-West England.

**Cementir Holding was one of the leading industrial players to capitalise on these opportunities and since 2009 has been operating in the renewable energy**

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 an 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 an 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 for years invested in the development and the widespread use of innovative technologies for waste management and fuels from waste, such as sorting, recycling and biodrying.



Unicon trucks, Norway

## WASTE PROCESSED IN 2020

In 2020, the Group's plants collected and processed more than 259,000 tons of waste: 43% solid urban waste and 57% industrial waste.

Waste processed	Unit	2020	2019	2018
Solid urban waste	t	110,659	230,943	260,671
Industrial waste	t	148,879	189,411	134,213
<b>Total</b>	<b>t</b>	<b>259,538</b>	<b>420,354</b>	<b>394,884</b>

In June 2020, Cementir sold fixed equipment owned by Hereko, the division operating in the processing of municipal solid waste in Istanbul. This explains the decrease in the total amount of waste processed, comparing the 2019.

In 2020, the Group's plants recycled, through mechanical selection and treatment processes, about 7,430 tons of materials.

Recycled material produced	Unit	2020	2019	2018
Ferrous material	t	1,843	2,316	2,930
Plastic	t	527	1,807	4,908
Aluminium	t	672	966	1,156
Other materials	t	4,389	1,668	1,348
<b>Total</b>	<b>t</b>	<b>7,431</b>	<b>6,757</b>	<b>10,342</b>

Through biomechanical and drying processes, the Cementir Group's treatment plants produced more than 79,000 tons of fuel from waste in 2020. The decrease comparing to 2019 is related to the sale of fixed equipment owned by Hereko, already mentioned - resulting in a decrease compared to the previous year.

Alternative fuel produced	Unit	2020	2019	2018
Refuse-derived fuel	t	14,335	16,223	21,890
Solid recovered fuel	t	64,772	84,297	83,589
<b>Total</b>	<b>t</b>	<b>79,107</b>	<b>100,520</b>	<b>105,479</b>



Cement Plant, Ipoh, Malaysia

## 10-YEAR ROADMAP

### OUR 2030 COMMITMENT IN NUMBERS

In the last few years, Cementir has been actively committed to pursuing a programme inspired by the principles of the circular economy, which envisages a series of initiatives focused on reducing the environmental impact of its operations and on developing less CO<sub>2</sub>-intensive products.

Cementir has decided to take more disruptive actions for fighting climate change by defining a 10-year roadmap to maximise the deployment of existing technologies and laying the groundwork for the breakthrough innovations that will lead to the production of 'net zero emissions' cement. For this purpose, Cementir established the Sustainability Committee (SC) with the primary objective of assisting the Board of Directors in defining its 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.

Cementir set 25 Sustainability Targets to minimise the environmental impact of its business and help create a healthy, safe and inclusive work environment and establish a constructive and transparent relationship with local communities and business partners.

By 2030, Cementir's plan is to reduce its Scope 1 emissions to less than 500 kg CO<sub>2</sub> per ton of grey cement produced (equivalent to a planned 30% reduction of CO<sub>2</sub> emissions per ton of cement by 2030, compared to 1990).

GREY CEMENT	2019	2020	2022	2025	2030
Use of traditional fuel in %	69%	72%	64%	57%	23%
Use of alternative fuel in %	31%	28%	36%	43%	77%
Clinker Ratio	82%	82%	78%	73%	68%
CO <sub>2</sub> emissions (kg CO <sub>2</sub> /ton cement)	<b>696</b>	<b>718</b>	<b>679</b>	<b>577</b>	<b>494</b>

For white cement, which is a specialty product with niche applications and markets (0,5% of total worldwide cement production, as described in the paragraph 'Difference between grey and white cement'), the plan is to reduce emissions to 800 kg CO<sub>2</sub> per ton of white cement (35% reduction of CO<sub>2</sub> emissions per ton of cement by 2030, compared to 1990). This reduction is lower than the ETS benchmark for white cement (928 kg CO<sub>2</sub> per ton of cement and equal to the EU ETS benchmark for the clinker, 957 kg CO<sub>2</sub>/t clinker, multiplied by the clinker to cement ratio of 0.97).

WHITE CEMENT	2019	2020	2022	2025	2030
Use of traditional fuel in %	96%	97%	96%	95%	94%
Use of alternative fuel in %	4%	3%	4%	5%	6%
Clinker Ratio	84%	82%	82%	82%	80%
CO <sub>2</sub> emissions (kg CO <sub>2</sub> /ton cement)	<b>926</b>	<b>915</b>	<b>915</b>	<b>870</b>	<b>808</b>

Specific targets for alternative fuels, clinker ratio and CO<sub>2</sub> emissions have been established in order to accomplish the 2030 goals. Such targets have been deployed in every single plant and per year and were included in the Industrial Plan 2021-2023 and in our employee short-term incentive system.

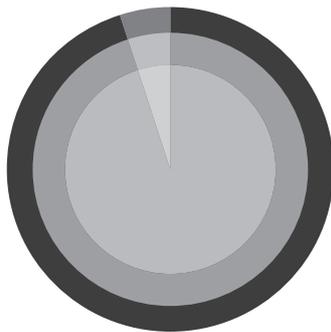
## OUR KEY ACTIONS AND RELATED INVESTMENTS FOR THE 2021-2030 PERIOD

The 10-year roadmap is focused on the following pillars:

- Reduction of clinker content to 68% for grey cement and 80% for white cement.** In the production of cement, the majority of CO<sub>2</sub> emissions occur when the raw materials (mainly limestone) calcinates into clinker in the kiln. The CO<sub>2</sub> results from the chemical reaction that starts when limestone is heating up to 1450°C. This process, called calcination, is responsible for about the 70% of the total Scope 1 emissions generated by Cementir. Cementir will reduce the clinker content through:
  - The *replacement of clinker with alternative decarbonised mineral additives such as fly ash and slag.*
  - The *development of a new low-carbon cement, FUTURECEM™*, an innovative, validated and patented technology which allows for more than 35% of the energy-intensive clinker in cement to be replaced by limestone and calcined clay. This combination of materials in FUTURECEM™ has resulted in a much more sustainable, high-grade cement with a carbon footprint up to 30% lower than regular Portland cement. And the low-carbon benefits of FUTURECEM™ have been achieved without compromising the strength and quality of the cement. Below is the average composition of an ordinary Portland cement and what is achievable with FUTURECEM™.

### Ordinary Portland Cement

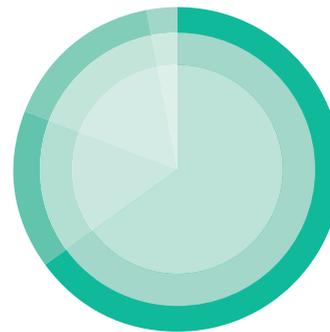
Clinker  
95% ●  
Other  
5% ●



Clinker: -40%  
CO<sub>2</sub>: -30%

### FUTURECEM™

Clinker  
65% ●  
Limestone  
16% ●  
Calcined Clay  
16% ●  
Other  
3% ●



From 2014-2019, Cementir participated, together with researcher institutions and a range of stakeholders and customers from the construction industry, in the Danish project Green Concrete II with the aim of testing FUTURECEM™ in a wide range of actual ready-mix concrete applications. In this project, FUTURECEM™ was tested at full-scale in construction parts for infrastructure (two bridges) as well as in an indoor floor and wall in the new concrete laboratory at the Danish Technological Institute. Those demo projects demonstrate that FUTURECEM™ can be implemented in the concrete industry using conventional production and execution technologies.

Between 2018 and 2020, Cementir performed a survey to explore and figure out the status of the 'green transition' in North Europe (Scandinavia, France, Belgium, Netherlands), then how it will change the construction industry in the coming years and finally what a building materials manufacturer such as Cementir should do when it comes to sustainability. The goal of the survey was to understand the dynamics of the green transition and the role that FUTURECEM™ technology could play in the future.

On January 2021, Cementir started the distribution of FUTURECEM™.

In the 2021-2023 period, the Group has planned the sale of about 1 million ton of FUTURECEM™. Starting from 2023, the annual production is expected to grow year by year. According to current estimates, by 2030 Futurecem™ volumes sold are expected to reach around 51% of total volumes sold in Europe and 60% of grey cement volumes.

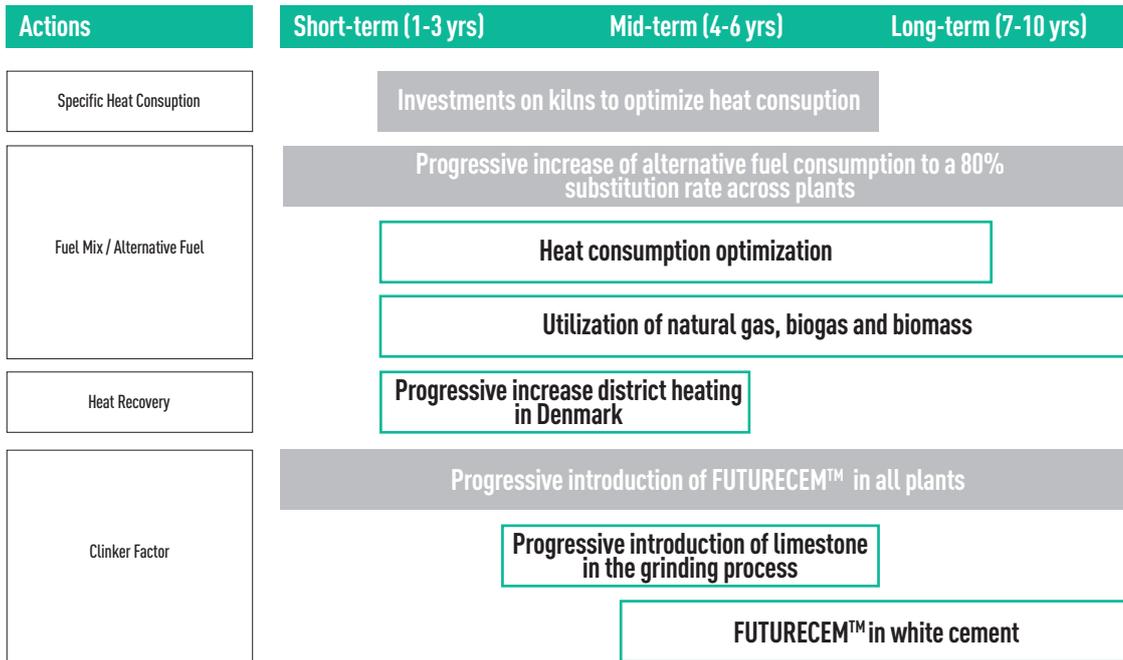
- **Replacement of fossil fuels with alternative fuels.** We will replace fossil fuels with waste-derived fuels and biomass fuels. For grey cement, by 2030, Cementir will use 77% alternative fuel, while for white cement alternative fuels will amount to 6%. As explained previously (see 'Difference between white and grey' section), the demand for consistency in the colour of white cement is much higher than for grey as a great deal of attention is paid to the purity of the colour. Alternative fuels affect the colour and for this reason their use is drastically limited in the production of white cement.
- **The establishment of a natural gas line to the plant located in Denmark and the installation of multi-fuel main burners for the kilns.** For the Danish plant, we plan a partial conversion of fuel consumption from pet coke to natural gas. The switching to natural gas, a fossil fuel with emissions much lower than pet coke (estimated reduction of 20% of CO<sub>2</sub>), is a transitional solution and indispensable for Cementir's transition to net-zero emissions. As part of this strategy, Aalborg Portland (the Danish legal entity of Cementir) has entered into an agreement with the Danish gas distribution company, Evida, to connect the Aalborg plant to the gas distribution grid on 1 April 2022.
- **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, Denmark. The annual CO<sub>2</sub> savings related to this heat recovery system has been estimated at 150,000 tons. This calculation is based on the amount of CO<sub>2</sub> that is not emitted from the local coal-fired power station, because the total needs are partially covered by the heat coming from the Aalborg plant. In this way, the energy that has already been produced during cement production is recycled and delivered to 50,000 families, covering almost half of the Aalborg population.
- **Commitment to carbon-related public policy.** Cementir actively participates in global and national industry policy discussions on issues related to climate change, sustainable infrastructure, the circular economy, alternative fuels, and waste management frameworks, among others. Since November 2019, the Group has been involved in the most ambitious CO<sub>2</sub>-reduction project ever sponsored by a national government. In autumn 2019, the Danish government made a broad political agreement with all political parties, including one at parliamentary level about a binding climate law with the target of reducing Danish CO<sub>2</sub> emissions by 70% by 2030 compared with the 1990 baseline. The Managing Director of Aalborg Portland, Danish Cementir subsidiary, is leading the climate partnership for Danish energy-intensive industry. The working group will provide the Danish government with a technical forecast of all potentially achievable CO<sub>2</sub> reductions and will define the prerequisites (policy, research, innovation, subsidies, etc.) for such reductions.

**77% of alternative fuels for grey cement production by 2030**

## MAIN INVESTMENTS TO ACHIEVE CO<sub>2</sub> REDUCTION TARGETS

The 10-year roadmap describes the main investments needed to support the 2030 targets. To foster the transition of the Group to a low carbon economy, decisions on investments are driven by an internal carbon price (in 2020, €30 per ton has been applied). Cementir also applies an internal carbon price to navigate GHG regulations such as the EU ETS. For the plants located in the EU, we run various scenarios with different prices to anticipate the CO<sub>2</sub> cost the Group will be exposed to until 2030.

Below the main initiatives that have been planned.



In the 10 year Roadmap, the Group planned the main investment needed until 2030, out of which 107 million declared in the Industrial Plan 2021-2023, approved by the Cementir Board of Director in February 2021. The roadmap has not yet estimated the investment for breakthrough technologies (e.g. carbon capture) for which the related business cases are still under development by the Group.

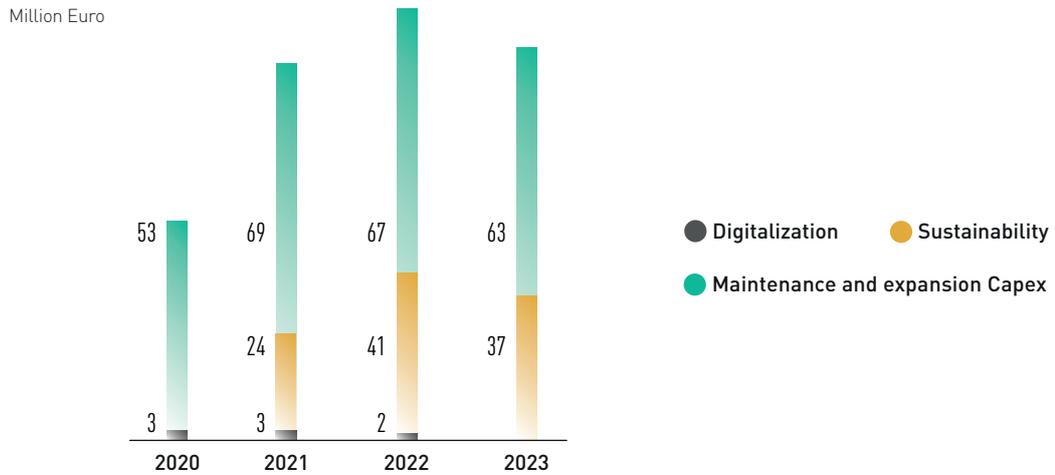
In the 2021-2023 period, the major investments will be related to:

- Upgrade of the kiln in the Belgian plant to increase alternative fuel use from the current 40% to 80%. Once completed, this investment will guarantee a CO<sub>2</sub> reduction of about 88,000 tons annually.
- Construction of a new calcination plant aimed at the production of FUTURECEM™. As already mentioned, through FUTURECEM™ technology, the clinker in cement will be partially replaced by limestone and calcined clay. The creation of a plant for the calcination of clay will support the shifting of our product portfolio from tradition Portland cement to low carbon cement (FUTURECEM™).
- Installation of two wind turbine generators (2 WTGs producing 4,200 kW) in the Aalborg plant. The energy produced will be used by the plant. According to the estimates, 2 WTGs will help reduce CO<sub>2</sub> emission by 25,000 tons CO<sub>2</sub>/year.
- Expansion of district heating supply in Aalborg from the current 36,000 to over 50,000 households. The Aalborg plant recovers excess heat from cement production to provide district heating to local residents. In 2020, the Aalborg plant delivered about 1.8 million GJ of energy to the municipality of Aalborg, with annual CO<sub>2</sub> savings of 150,000 tons for the municipality.



Cimbeton concrete mixer trucks in construction site, Turkey

## SUSTAINABILITY INVESTMENTS - CUMULATIVE CAPEX OVER 2021-2023



## OUR VISION FOR A NET ZERO WORLD

As a member of the European Cement Association (CEMBUREAU) and of the Global Cement and Concrete Association (GCCA) our ambition is to reduce CO<sub>2</sub> emission intensity to achieve carbon neutrality along the value chain by 2050.

CO<sub>2</sub> emissions can be reduced by acting at each stage of the value chain - clinker, cement, concrete, construction and (re)carbonation<sup>4</sup> - to achieve zero net emissions by 2050. This will require maximising existing technologies to replace fossil fuels with biomass and increase the efficiency of the kilns; the development of FUTURECEM™; the deployment of breakthrough carbon capture and storage/use technologies (CCUS) and optimised concrete mixes and building techniques.

### Value chain engagement

To understand the environmental impact of a company’s economic activity, it is not enough to look at only its direct emissions and risks. The entire value chain must be engaged to evaluate and improve its performance.



For this reason, in 2020, we started to investigate the CO<sub>2</sub> emissions of our suppliers in order to understand how they could be reduced and how to develop mutually beneficial projects (for both Cementir and the suppliers).

In total, 55 suppliers (30% of total purchases by value) were invited to participate in the CDP Supply Chain programme.

Each supplier was invited to disclose information about its risks and opportunities associated with climate change, its emissions, details on its emissions management strategy such as targets, and actions it has taken to reduce its emissions.

In this way Cementir will:

- Monitor Scope 3 emissions of its supply chain.
- Monitor the actions undertaken by the suppliers to manage climate change risk.
- Spread awareness among suppliers of climate change.

<sup>4</sup> Re-carbonation is the process whereby concrete re-absorbs some of the CO<sub>2</sub> that was released during clinker production. It is a process that occurs naturally in all concrete structures, permanently trapping the CO<sub>2</sub>. Thanks to recarbonation, cities effectively act as carbon sinks, allowing further reduction of emissions in the full cement and concrete value chain.

To support this engagement and boost supplier response rates, dedicated supplier training webinars have been held. This training aimed to communicate the importance and benefits of transparently reporting on emissions and climate impact.

### Our commitment on carbon-related public policy

Cutting our CO<sub>2</sub> emissions is a priority of Cementir Group, but clearly, we cannot achieve a carbon neutral future alone.



Cementir is also actively involved in global and national industry policy discussions on issues related to Climate Change, Sustainable Infrastructure, Innovation & Digital Transformation, Operational Efficiency, Health & Safety, the 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 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. In 2020, Cementir was awarded a 'B' rating from CDP, recognising our actions to mitigate climate change and our significant commitment to a low-carbon economy. This result represents a significant improvement from the previous 'F' rating and puts Cementir amongst the top players in the cement industry and much better than the average company, given that the average CDP European and Global rating is a 'C'.

Cementir is also member of the **European Cement Research Academy (ECRA)**. The ECRA's most important research projects are related to 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, as well as providing feedback to the EU Commissions concerning the EU Taxonomy.



## GOVERNANCE

### THE CORPORATE GOVERNANCE SYSTEM

Cementir Holding N.V. (hereinafter 'Cementir Holding' or 'Company') is a Dutch public limited company with its registered office in Amsterdam, The Netherlands, at 36 Zuidplein, 1077 XV and a secondary and operational office in Rome, Italy, at Corso di Francia, 200.

The tax residence of the Company is in Italy.

The Company has been listed in the STAR segment of the Milan Stock Exchange since 1955.

Cementir Holding has elected the Netherlands as home Member State for the purposes of Article 2(1)(i)(iii) of 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'), applied by the Company. 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 Shareholders' 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 Director is responsible for the 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. 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 report on this to the Board.

The Chief Executive Officer is primarily responsible for the day-to-day management of the Company and is vested with each and every power of ordinary and extraordinary administration of the Company, to the maximum extent permitted by the applicable law. Only one Executive Director has been appointed and he is also automatically Chief Executive Officer and Chairman pursuant to the Company's Board Regulations 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 Regulations. 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 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 Board may designate one (1) or more of its Non-Executive Directors as vice-chair for a period decided by the Board. If the Senior Non-Executive Director is absent or unwilling to take the chair, a vice-chair is entrusted with the duties of the Senior Non-Executive Director entrusted to him by the Board.

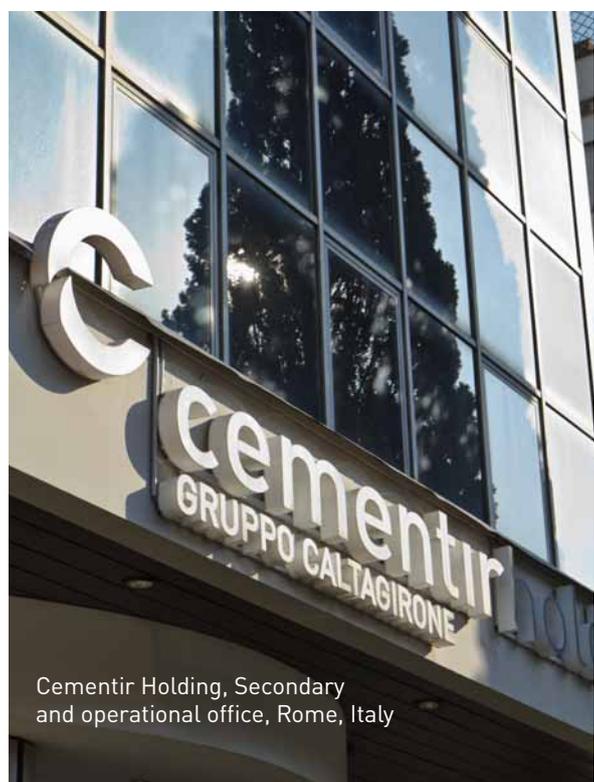
The Board has established two committees from within its ranks to provide advice and submit proposals: the Audit Committee and the Remuneration and Nomination Committee.

The annual Corporate Governance Report is also available for consultation within the Board report on the company website [www.cementirholding.com](http://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 Cementir Holding is shown below.

## Composition of Corporate Bodies

	2020			2019			2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Board of Directors</b>									
Under 30	0	0	0	0	0	0	0	0	0
30-50	2	2	4	3	4	7	4	4	8
Over 50	4	1	5	4	1	5	4	1	5
<b>TOTAL</b>	<b>6</b>	<b>3</b>	<b>9</b>	<b>7</b>	<b>5</b>	<b>12</b>	<b>8</b>	<b>5</b>	<b>13</b>
Of which independent	1	2	3	1	4	5	1	4	5
<b>Audit Committee</b>									
Under 30	0	0	0	0	0	0	0	0	0
30-50	0	1	1	0	3	3	0	3	3
Over 50	1	1	2	2	0	2	2	0	2
<b>TOTAL</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>5</b>
Of which independent	1	2	3	1	3	4	1	3	4
<b>Remuneration and Nomination Committee</b>									
Under 30	0	0	0	0	0	0	0	0	0
30-50	0	1	1	0	2	2	0	2	2
Over 50	1	1	2	2	0	2	2	0	2
<b>TOTAL</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>4</b>
Of which independent	1	2	3	1	2	3	1	2	3

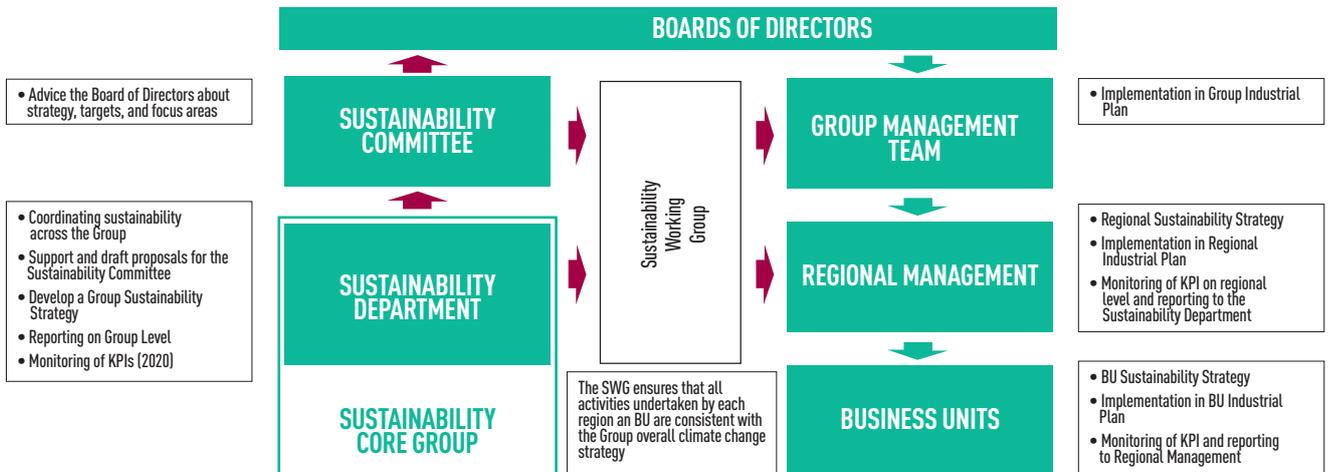


Cementir Holding, Secondary and operational office, Rome, Italy

The above data referred to the composition of board and committees at 31 December of each financial year.

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



### Composition of the main sustainability bodies

#### Sustainability Committee

Group Chairman and CEO  
 Chairman of Aalborg Portland Holding A/S,  
 Chairman of Compagnie des Ciments Belges SA  
 Group Chief Operating Officer  
 Group Chief Financial Officer  
 Group Investor Relations Officer  
 Group General Counsel  
 Group Chief Internal Audit Officer  
 Group Chief Technical Coordination Officer  
 Group Chief Procurement and Logistic Officer  
 Nordic & Baltic Head of Region  
 Belgium Managing Director

#### Sustainability Working Group (SWG)

Group Chief Operating Officer  
 Group Chief Internal Audit Officer  
 Group Chief Technical Coordination Officer  
 Group Chief Sales & Marketing Officer  
 Group Sustainability and R&D Director  
 Nordic & Baltic Head of Region  
 Belgium Managing Director

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 included in the diagram, help direct a disciplined approach to sustainability management.

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

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 the 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, Sustainability Working Group (SWG) and the

Group Management Team (GMT) to respectively collect any required information and provide requested insights and advice.

a) In 2020, the Sustainability Working Group (SWG) was established. The SWG is the operational arm of the Sustainability Committee. On a monthly basis, the SWG monitors the execution of the recommendations provided by the Sustainability Committee to the GMT. Moreover, it must ensure that all activities undertaken by each Region and BU are consistent with the Group's overall climate change strategy. Each region and BU must report and agree any activities undertaken at local level with business association, policy makers or local communities with the SWG.

b) 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 reports to the Board.

The Sustainability Committee meets at least quarterly undertaking any responsibilities or tasks relating to sustainability matters, with the main task being the development of 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 required 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 the 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).

It 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 variables of 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), operational risks (related to the effectiveness and efficiency of operating activities) and sustainability risks.

A panel of specific risks related to the sustainability aspects is applied to all the Group companies.

The Sustainability risks are related to 5 key areas:



- **Transition risks.** We assess the exposure of Cementir to the risks related to the transition to a low-carbon economy through an analysis of emissions and thermal energy intensity and exposure to downstream regulation. For example, tightening emission regulations could translate into increased compliance costs for the Group. In European countries, 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 a system comparable to the EU will be introduced in 2021 for the power generation sector.

To mitigate these risks, the Group constantly monitors its emissions and compliance with regulations, planning the availability of CO<sub>2</sub> emissions quotas. Concerning the EU ETS, according to the possible scenario developed by the

Group, Cementir will have free CO<sub>2</sub> allowances until the end of 2021. Starting 2022, allowances for around 600,000 tons of CO<sub>2</sub> of yearly emissions will be purchased.

Various actions covering different time horizons have been planned to manage this risk.

- *In the short term*, specific investments have been included in the 2021-2023 industrial plan. For example, concerning the Belgium plant, we have planned the upgrade of the kiln in order to increase alternative fuels usage to 80% of total fuel usage.
- *In the medium term*, we will reduce CO<sub>2</sub> emissions per ton of cement by about 30% by 2030. The target will be achieved through greater use of alternative fuels (77% of the total fuel usage to produce grey cement by 2030) and renewable resources, reduction of thermal consumption and the clinker ratio of cements.
- Cutting the CO<sub>2</sub> emissions in the medium-term is a priority of the Cementir Group, but we also believe that we cannot achieve the carbon neutrality acting alone. For this reason, looking at the long term, Cementir is involved in strengthening global partnerships for sustainable development. 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, the Circular Economy, Alternative Fuels, and Waste Management Frameworks, among others.



Meeting room, Rome, Italy

Climate-related issues and the related CO<sub>2</sub> emissions regulations are also affecting the landscape of suppliers, especially in Europe.

For example, fly ash is a by-product from burning pulverised coal in power plants. In Europe, pressure on reducing coal-fired plants is gradually reducing fly ash availability and increasing the related prices. Fly ash from coal-fired power plants can be used effectively as a component of raw kiln feed for the manufacture of cement clinker.

In the Aalborg plant, fly ash with a high alkali is used for the production of the clinker and the related fly ash cement.

The use of fly ash as an alternative raw material lowers the clinker/cement ratio. As clinker production is the most energy-intensive and CO<sub>2</sub>-emitting step of the cement-making process, reductions in the clinker/cement ratio (through the use of clinker substitutes) reduce energy use and process CO<sub>2</sub> emissions. In the short to medium term, in order to manage this issue, the Group is securing the current supply of materials through long term agreements, scouting for new suppliers and partially replacing fly ash with similar materials available in the market. In the long term, fly ash cement will be replaced by other new products, such as FUTURECEM™.



- **Physical risks.** We assess Cementir's exposure to acute physical risks, water stress risk and the usage and management of our water supply. In the short term, this risk is relevant for Group companies that have plants located in areas characterised by extreme weather conditions such as snow and very low temperatures in the winter (for example Norway and one plant in Turkey). If the winter is very cold, construction projects may be postponed or delayed. In such cases, customers postpone their purchases and as a consequence, Cementir's sales are also postponed. This issue is managed in a number of ways. For example, Cementir arranges training for customers on how to perform winter concrete casting (especially to foreign companies that are carrying out construction projects in Norway but that are not familiar with the weather). In addition, the ordinary maintenance of the plants is planned during the winter, when, as mentioned, due to climate condition, sales are slower.

In recent years, extreme weather phenomena are increasing. Hurricanes, cyclones, typhoons, drought, floods, rain and snow are all becoming increasingly violent due to global warming. This means that in the medium/long term, this risk could also become relevant for the other plants within the Group.

- **Transition opportunities.** We assess Cementir progress in shifting towards a low-carbon economy by looking at exposure to alternative materials and fuel, and low-carbon products and technologies. For example, opportunities for new revenue streams from low-carbon products. As explained in the section 'Our key actions and related investments for the 2021-2030 period', Cementir developed FUTURECEM™, an innovative, validated and patented technology which allows for more than 35% of the energy intensive clinker in cement to be replaced by limestone and calcined clay. This combination of materials in FUTURECEM™ has resulted in a much more sustainable, high grade cement with up to 30% lower carbon footprint compared to regular Portland cement. And the low carbon benefits of FUTURECEM™ have been achieved without compromising the strength and quality of the cement.

In the 2021-2023 period, the Group has planned the sales of about 1 million ton of FUTURECEM™. Starting from 2023, the annual production is expected to grow year by year. According to current estimates, by 2030 Futurecem™ volumes sold are expected to reach around 51% of total volumes sold in Europe and 60% of grey cement volumes.

- **Climate strategy.** We analyse Cementir governance frameworks including emissions reduction targets and the alignment of governance and remuneration structures with low-carbon objectives. Please see our 10-year roadmap for more details about the climate strategy.
- **Social risks.** Cementir is focused on labour management, Health and Safety issues and analysis of human rights across the whole Group. Cementir strives to reduce the number of injuries step by step. The implementation and maintenance of effective and efficient management systems for incident prevention is one of the key health and safety objectives at Group level. During 2020, all certified cement plants completed the migration process to the ISO 45001 standard (Health and Safety certification), finding full compliance with the standard's requirements. By the end of 2020, 73% of cement plants were ISO 45001 certified in total. The Group plans to certify all cement plants by 2022.

Concerning Human rights, Cementir is committed to maintaining and improving systems and processes designed to eliminate human rights related risks across the Group and implement remedial actions, in accordance with local constraints and requirements. 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 self-assessment checklist as part of the standard internal audit process. In 2020, the human rights self-assessment checklist was performed by the Group legal entities and reviewed by the Internal Audit department,

with a coverage of 79% of the Cementir workforce worldwide, involving the following countries: France, Belgium, Denmark, Norway, Turkey, the United States, China, Malaysia, Italy and Poland.

**The Ethics Committee has the responsibility to ensure that the activities are conducted according to the ethical principles provided by the Code of Ethics**

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 Group Sustainability Strategy is incorporated into the Internal Control and Risk Management System of the Cementir Group. 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, as well as by calling on 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 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 with the definition of adequate risk management systems and related controls according to their responsibilities (e.g. EHS, anti-corruption, anti-trust and privacy).



Lastly, the Internal Audit Department is responsible 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.

## 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 courses are held 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>5</sup> endorsing the business principles that all company officers and employees, and anyone working with the company in any capacity, are required to comply with when pursuing company business. The Code, which has been distributed to all staff and is available for consultation on the website [www.cementirholding.com](http://www.cementirholding.com), covers respect for ethical and behavioural principles, and the protection of health, safety and the environment.

The Code of Ethics also provides that the Group's operations must compete on the market in accordance with the laws 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 awareness 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.
- Also addresses 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 non-compliance with laws and regulations.

<sup>5</sup> For the Code of Ethics, please see <https://www.cementirholding.com/en/governance/ethics-and-compliance>.

Employees or third parties (suppliers, customers or other stakeholders) can send, with the maximum guarantee of confidentiality, reports of illegal or undesirable behaviour by sending a letter or email, by completing a dedicated form in the corporate website or by using a mobile app as WhatsApp and Signal. (Please visit the corporate website for details: <https://www.cementirholding.com/en/governance/ethics-and-compliance>).

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 2020, 6 alleged violations were received and investigated. Out of these, 2 claims were confirmed, 2 claims were not confirmed, and 2 claims were dismissed because the allegations were not corroborated by supporting information or data.

For the two confirmed violations, the disciplinary measures taken were proportionate to the seriousness of the case and comply with local legislation. In one case, due to misconduct in inventories processes, disciplinary action was taken against an employee while in the other case, the claim was related to services provided but not duly documented by our employees.

## COMMITMENT TO FIGHT CORRUPTION

The Cementir Group is active in the fight against corruption. In its Code of Ethics, it expressly prohibits '*bribes, illegal 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 plans. 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

At Cementir Group we are committed to promoting an inclusive and positive work environment, where respecting Human Rights, promoting equal opportunities and supporting health and well-being are our priorities. Our human rights approach is also driven by a proactive stakeholder management engagement. Cementir promotes Human Rights within its business relationships and adherence to the same Human Rights standards by its contractors, suppliers and business partners.

In 2020 we designed and launched an online training course mainly focused on the principles described in the Cementir Human Rights Policy and further detailed in local Procedures. The first wave of training provided in English involves about 1.100 Group employees. As soon as the transposition into local languages is available, the participation will be extended to the rest of the population.

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 self-assessment checklist as part of the standard internal audit process. In 2020, the human rights self-assessment checklist was performed by the Group legal entities and reviewed by the internal audit department, with a coverage of 79% of the Cementir workforce worldwide, involving the following countries: France, Belgium, Denmark, Norway, Turkey, United States, China, Malaysia, Italy and Poland. Any alleged human rights violations can be reported through the whistleblowing system, in line with all other types of potential violations.

**In 2020, the human rights self-assessment checklist was performed by the Group legal entities and reviewed by the internal audit department, with a coverage of 79% of the Cementir workforce worldwide**

## 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.

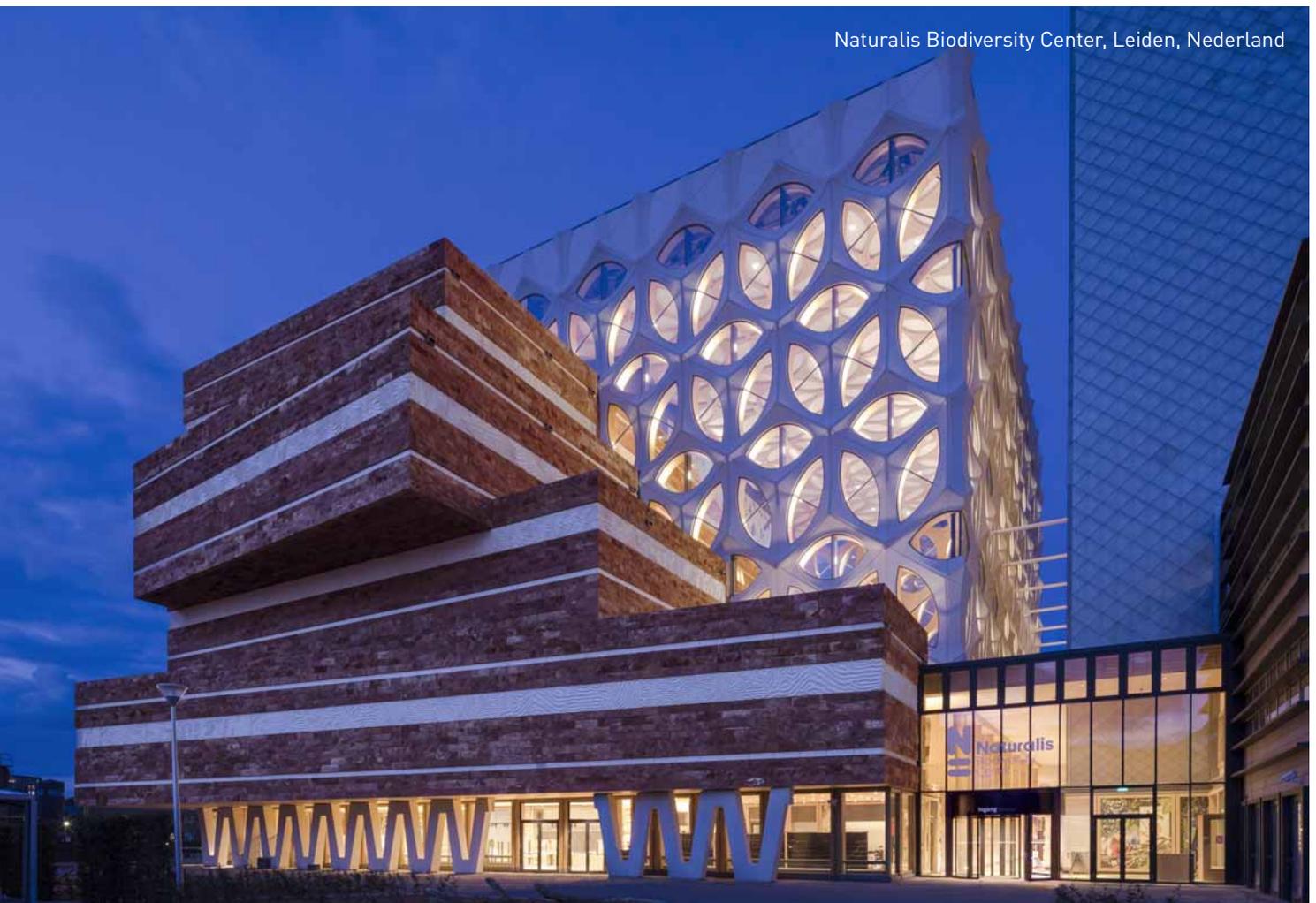
Distribution and sales contract templates are made available to the employees concerned and regular checks are made to ensure their constant alignment with competition rules and pricing policies.

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

## RELEVANT LITIGATION

An administrative dispute is pending before the Court of Appeal in Turkey, brought by the Turkish company Cimentas AS, indirect subsidiary of Cementir Holding. The dispute relates to the order issued by the Turkish stock exchange's regulatory and supervisory body (Capital Market Board - CMB), requiring Cimentas AS to demand that the concerned Cementir Group companies pay back around 100 million Turkish lira (now equal to around 13 million euros) from hidden profit distribution, allegedly generated by an intragroup company sale in 2009. On 29 January 2017, CMB served a summons to Cementir Holding to appear before the Court of Izmir, requesting that the company be ordered to pay to Cimentas AS an amount provisionally set at approximately 1 million Turkish lira. The Company duly appeared in court, arguing the total lack of foundation of the plaintiff's argument and requested that the civil proceedings be suspended until the administrative proceeding is finally settled. With a ruling of 1 July 2020, the Court of Appeal in Turkey declared lack of jurisdiction in relation to the case in question. The judgement has been challenged before the Supreme Court. There is not any other litigation pending.

Naturalis Biodiversity Center, Leiden, Nederland



# THE 4 PILLARS THAT GUIDE OUR ACTIONS

# 2



Cement plant Gaurain, Belgium

## 2 THE 4 PILLARS THAT GUIDE OUR ACTIONS

- 60 **In waste, we see resources: we promote a circular economy**
- 61 Use of alternative fuels
- 63 Alternative raw materials
- 67 Managing quarrying activities
- 69 Waste produced
- 70 **We respect the environment in all our operations**
- 70 CO<sub>2</sub> emissions
- 71 Energy consumption
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- 76 **We value our people**
- 76 Risk analysis and policies adopted
- 77 Group People Survey
- 77 Talent Review and Succession plans for Group key positions
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# 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.



The depletion of resources is not just a risk for the supply of fuel 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



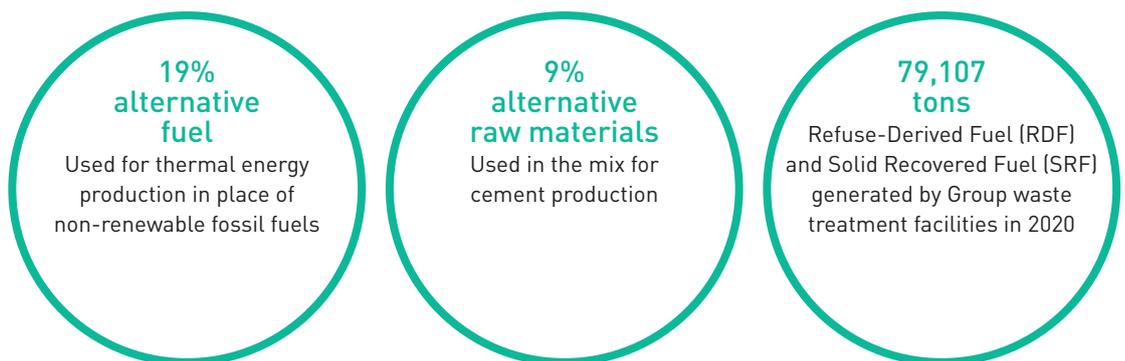
The thermal energy produced at Cementir Group plants is generated by the combustion of fossil fuels (fuel oil, petroleum coke, coal and natural gas) and, in part, by alternative fuels.

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% for producing grey cement and 6% for white cement. For white cement, the demand for consistency of colour is much higher than with grey as varying shades of white or coloured surfaces are not acceptable. 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 has been defined for 2022, 2025 and 2030.



Cement plant Elazig, Turkey



In 2020, due to the lockdowns imposed by countries where the plants are located, the Group faced a situation where alternative fuels and alternative raw materials were temporarily unavailable; the outbreak also led to difficulties in sourcing alternative fuels and the need to reorganise the timing of related investments, therefore last year the replacement rate of fossil fuels slightly decreased compared to 2019.

However, given the transient nature of the health emergency, it is not believed that the negative effects will have repercussions on future targets, which are therefore maintained.

Almost 19% 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>6</sup>.

Fossil fuel replacement index	Unit	2020	2019 <sup>7</sup>	2018
% of fossil fuel replacement (white and grey combined)	%	19%	20%	20%
% of fossil fuel replacement (only grey cement)	%	28%	31%	29%
% of fossil fuel replacement (only white cement)	%	3%	3%	2%

In 2020, clinker production increased of about 11% compared to 2019. Due to the Covid-19 lockdowns and the related difficulties in sourcing alternative fuels, the energy needed to produce this higher quantity of clinker came mainly from fossil fuels. For this reason, the absolute figures for fossil fuels increased by about 11% (31.1 million GJ in 2020 versus 27.8 million GJ in 2019), while the absolute figures for alternative fuels are in line with 2019. See the tables below for details.

### Fossil fuel consumption for cement production

Type	Unit	2020	2019 <sup>8</sup>	2018
Coal	GJ	5,682,239	7,371,459	6,879,121
Petroleum coke	GJ	20,152,510	17,955,038	19,192,152
Fuel oil	GJ	368,464	320,529	372,176
Lignite	GJ	3,074,765	352,409	441,457
Gas oil	GJ	0	108,179	100,617
LPG	GJ	194	814	1,020
Natural gas	GJ	1,789,485	1,757,651	1,626,930
District heating	GJ	26,386	8,110	15,408
<b>Total</b>	<b>GJ</b>	<b>31,094,042</b>	<b>27,874,189</b>	<b>28,628,882</b>
<b>Fossil Fuel per Clinker produced</b>	<b>GJ / ton clinker</b>	<b>3.6</b>	<b>3.6</b>	<b>Not reported</b>

### Fossil fuel consumption for White and Grey Cement production

Type	Unit	White	Grey	White <sup>9</sup>	Grey
		2020	2020	2019	2019
Coal	GJ	0	5,682,239	14,369	7,357,090
Petroleum coke	GJ	11,956,158	8,196,352	11,747,268	6,207,771
Fuel oil	GJ	160,914	207,550	124,472	196,057
Lignite	GJ	0	3,074,765	0	352,409
Gas oil	GJ	0	0	64,037	44,142
LPG	GJ	0	194	814	0
Natural gas	GJ	1,789,485	0	1,757,651	0
District heating	GJ		26,386	0	8,110
<b>Total</b>	<b>GJ</b>	<b>13,906,557</b>	<b>17,187,485</b>	<b>13,708,610</b>	<b>14,165,579</b>

<sup>6</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.

<sup>7</sup>The 2019 data has been subject to reclassification in the energy consumption for white cement for a like-by-like reading.

<sup>8</sup>The 2019 data has been subject to reclassification in the energy consumption for white cement for a like-by-like reading.

<sup>9</sup>The 2019 data has been subject to reclassification in the energy consumption for white cement for a like-by-like reading.

## Alternative fuel consumption for cement production

Type	Unit	2020	2019	2018
Used oil	GJ	161,074	248,053	200,492
Rubbers and plastics	GJ	58,364	58,677	40,031
Tyres	GJ	673,873	431,120	223,916
Paper/cardboard/wood	GJ	133,327	158,010	181,574
Meat and bone meal	GJ	1,187,248	1,109,985	998,137
Dry sewage sludge	GJ	41,672	52,319	123,057
RDF and SRF	GJ	4,787,849	4,608,513	5,132,148
Sunflower oil	GJ	41,856	89,395	76,977
Other alternative fuels	GJ	110,799	60,336	162,360
<b>Total</b>	<b>GJ</b>	<b>7,196,062</b>	<b>6,816,410</b>	<b>7,138,692</b>
<b>Alternative Fuel per Clinker produced</b>	<b>GJ / ton clinker</b>	<b>0.85</b>	<b>0.89</b>	<b>Not reported</b>

## Alternative fuel consumption for White and Grey Cement production

Type	Unit	White	Grey	White	Grey
		2020	2020	2019	2019
Used oil	GJ	0	161,074	0	248,053
Rubbers and plastics	GJ	0	58,364	0	58,677
Tyres	GJ	0	673,873	0	431,120
Paper/cardboard/wood	GJ	0	133,327	0	158,010
Meat and bone meal	GJ	388,854	798,394	325,911	784,074
Dry sewage sludge	GJ	0	41,672	0	52,319
RDF and SRF	GJ	0	4,787,849	0	4,608,513
Sunflower oil	GJ	0	41,856	0	89,395
Other alternative fuels	GJ	0	110,799	30,990	29,346
<b>Total</b>	<b>GJ</b>	<b>388,854</b>	<b>6,807,208</b>	<b>356,901</b>	<b>6,459,507</b>



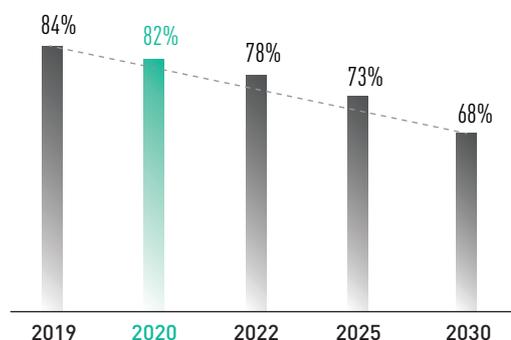
## ALTERNATIVE RAW MATERIALS



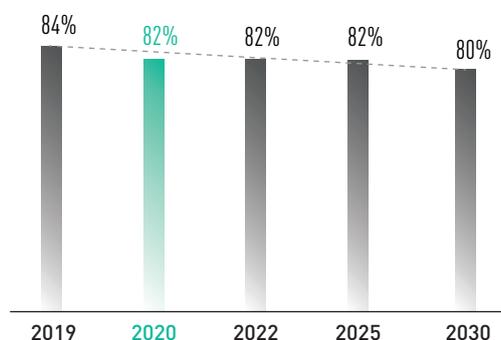
Cement production requires large quantities of natural raw materials, such as limestone, clay and gypsum, extracted from natural quarries using various methods. These are initially mixed to produce the meal from which the clinker is made, and subsequently added to the clinker and milled to obtain different 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 68% for grey cement and 80% for white cement. This objective is also attained by substituting clinker with alternative raw materials.**

## Clinker Ratio Reduction roadmap for Grey cement



## Clinker Ratio Reduction roadmap for White cement



In 2020, the cement production plants of the Cementir Group used a total of about 16 million tons of materials to produce cement. The same year, **about the 9% of raw materials used were recycled**, including fly ash, blast-furnace slag and other additives derived from the quarrying activities at the CCB plant in Belgium.

During 2020, the Covid-19 lockdowns in countries where the Group operates led to difficulties in sourcing alternative raw materials, for this reason the percentage of alternative raw materials decreased to 9% versus 11.8% in 2019.

### Raw materials used in cement production

	Unit	2020	2019	2018
Non-renewable raw materials	t	15,148,632	13,357,195	13,979,467
Renewable raw materials	t	1,563,285	1,576,012	1,654,361
<b>Total</b>	<b>t</b>	<b>16,711,917</b>	<b>14,933,207</b>	<b>15,633,828</b>
Renewable raw materials as a percentage of total raw materials used	%	9.35%	11.80%	11.80%

### Non-renewable raw materials used in cement production

	Unit	2020	2019	2018
Limestone	t	12,103,107	11,190,862	11,525,227
Clay	t	1,063,405	890,370	1,033,118
Gypsum	t	324,515	324,297	345,84
Marl	t	498,706	414,799	531,685
Sand	t	299,973	272,549	263,986
Pozzolana	t	191,107	132,696	153,774
Admixtures	t	44,977	16,106	15,900
Auxiliaries	t	3	895	847
Stone	t	0	30,477	0
Calcium fluoride	t	36,431	10,671	19,735
Bauxite	t	5,916	11,012	18,774
Iron ore	t	75,768	19,223	40,072
Other residual materials	t	504,725	43,228	30,509
<b>Total</b>	<b>t</b>	<b>15,148,632</b>	<b>13,357,195</b>	<b>13,979,467</b>

Renewable materials used in cement production	Unit	2020	2019	2018
Fly ash	t	320,633	365,428	507,406
FGD gypsum	t	89,823	106,642	86,967
Iron oxide	t	24,715	104,302	120,847
Blast-furnace slag	t	230,862	239,079	267,360
Recovered limestone	t	164,929	267,110	187,289
Excavated stone (clay replacement)	t	189,230	163,351	195,186
Other materials	t	543,093	330,100	289,307
<b>Total</b>	<b>t</b>	<b>1,563,285</b>	<b>1,576,012</b>	<b>1,654,362</b>

In 2020, Cementir Group plants producing ready-mixed concrete used a total of 9.6 million tons of raw materials, mainly rocks and sand. The variation is mainly linked to the increase in total production of concrete recorded in 2020, compared to 2019.

Raw materials used in the production of ready-mixed concrete	Unit	2020	2019	2018
Non-renewable raw materials	t	9,501,881	8,726,530	10,095,137
Renewable raw materials	t	105,969	113,418	152,347
<b>Total</b>	<b>t</b>	<b>9,607,850</b>	<b>8,839,948</b>	<b>10,247,484</b>
Renewable raw materials as a percentage of total raw materials used	%	1%	1%	2%

Non-renewable raw materials used in the production of ready-mixed concrete	Unit	2020	2019	2018
Limestone	t	0	3,452	0
Sand	t	3,020,365	3,090,992	3,177,730
Admixtures	t	15,832	25,873	18,330
Auxiliaries	t	7	0	1,625
Cement	t	1,326,955	1,240,087	1,440,518
Stones	t	5,135,275	4,363,130	5,456,935
Clay	t	0	0	0
Aggregates	t	0	0	0
Steel fibre	t	2,875	2,696	0
Basalt fibre	t	0	4	0
Plastic macro fibre	t	178	211	0
Colour pigment	t	142	85	0
Other materials	t	252	0	0
<b>Total</b>	<b>t</b>	<b>9,501,881</b>	<b>8,726,530</b>	<b>10,095,138</b>

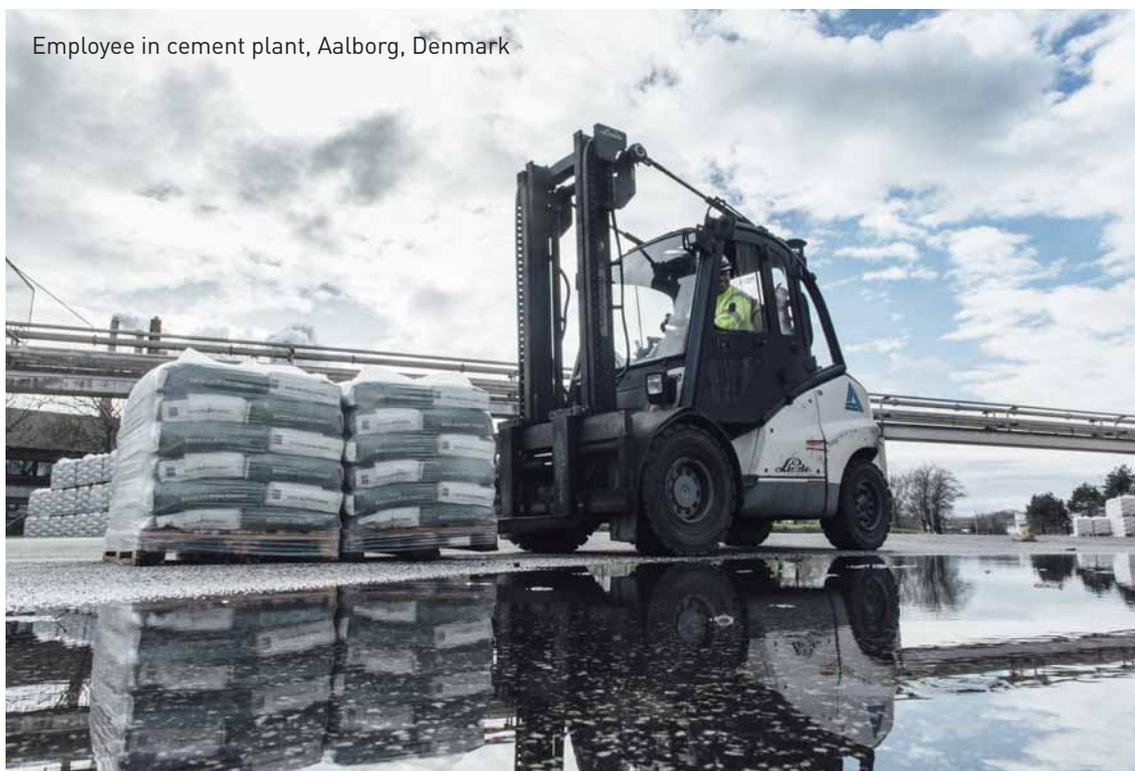
Renewable materials used in the production of ready-mixed concrete	Unit	2020	2019	2018
Fly ash	t	95,010	100,665	140,970
Microsilica	t	10,819	12,754	11,377
Blast-furnace slag	t	140	0	0
<b>Total</b>	<b>t</b>	<b>105,969</b>	<b>113,418</b>	<b>152,347</b>

Finally, there are the raw materials used for the Group's other production activities (mainly the manufacturing of prefabricated products and aggregates). Consumption of raw materials and materials is far lower than in the rest of the business (almost 80,000 tons) and there are no activities involving the use of recycled materials.

### Non-renewable raw materials used in other production activities<sup>10</sup>

	Unit	2020	2019	2018
Sand	t	39,700	56,576	83,973
Auxiliaries and admixtures	t	140	67	56
Cement	t	12,434	12,571	12,317
Rocks	t	25,902	25,375	23,778
Steel	t	2,204	1,965	1,708
<b>Total</b>	<b>t</b>	<b>80,380</b>	<b>96,554</b>	<b>121,832</b>

Employee in cement plant, Aalborg, Denmark



<sup>10</sup> 2019 and 2018 data has been subject to a restatement for a reclassification of limestone used by aggregates business as final product.

## MANAGING QUARRYING ACTIVITIES



The first step in cement production, the extraction of raw materials, inevitably impacts on the surrounding natural and social environment. In particular, the removal of soil and changes in topography of the area are likely to affect local ecosystems and watersheds. However, these impacts can be successfully addressed and mitigated through the development and implementation of an effective quarry rehabilitation plan. In some cases, the effective implementation of a well-designed rehabilitation plan can result in significant environmental and social benefits.

In Cementir, 95% of quarries have a rehabilitation plan in place.

According to long-term sourcing needs, we carefully plan and

design our quarries considering international best practices and complying with national and local mining/environmental legislations. Safety; inevitable but temporary impacts on the environment, flora, fauna and sometimes on water resources; social interaction and impacts; all risk and impact mitigation activities and land use plans after quarry operations are ended are carefully studied and planned before deciding to acquire and open any new quarry.

We therefore aim to minimise or eliminate any potential negative impacts that may occur as a result of quarrying activities and work to enhance potential positive impacts wherever possible.

We link and prioritize three of UN Sustainable Development Goals with our quarry activities as:

**In Cementir, 95%  
of quarries have a  
rehabilitation plan in place**



- The use of digital tools in mining activities to increase efficiency, optimise resources and minimise waste generation and extract only worthwhile materials of a suitable grade and volume in an economical way.



- The use of alternative raw materials that may have positive impact on CO<sub>2</sub> emissions (i.e. fly ash) and reduce quarry exploitation.
- The reuse of materials from other industries.

Below the examples from Aalborg and Izmir plants.

### *Mussel shells reused by Aalborg*

At the Aalborg plant, mussel shells from a local food processing plant are used as a recycled waste product in the chalk pit. After unloading, the mussel shells are spread over the working area of the quarry to provide a support surface for the large deep-excavator and belt conveyor. The shells ensure stable operation particularly in wet and frosty weather. The shells are removed along with the excavated chalk and recycled in cement production.

### *Clay from civil works in Izmir*

In 2018-2020, **only 7% of the clay used by the Izmir plant was extracted from the quarry, with the remaining 93% replaced by recycled clay coming from civil works performed in Izmir province.** Such recycling of excavation materials delivers significant benefits for the land and positive economical contributions to public institution as it helps eliminate or reduce the use of such materials that normally have to be transported for long distances and dumped to backfilling sites.



- The development of quarry rehabilitation, reclamation and biodiversity action plans by identifying the goals and timetable, with consideration for integrating quarries back into the surrounding landscape or according to future land usage purposes.

### **Chalk pit to family park in Aalborg**

Aalborg Portland covers an area of 1,200 hectares, 188 of which are used for cement production. The remaining 1,012 hectares consist of lakes, woods, meadows, salt marshes, fallow land and farmland.

The concept of the chalk pit rehabilitation plan is to develop the chalk pit as a family park, which will offer the local population a variety of leisure and sporting activities close to the city. The plan is for the lake to be used for sailing, water-skiing, diving and bathing, while the surrounding area provides amenities for hang-gliding, mountain-biking, jogging, walking and similar pursuits. The basic principle of the rehabilitation plan is to create a scenic space with steep, exposed slopes, soft green hills and opportunities for walking and leisure.

Creation of banks and terraces, in specific areas of the chalk pit, has already begun while mineral extraction activities are ongoing at a safe distance on the other side of the pit.

### **Green Quarry Project, China**

Aalborg Portland Anqing plant's limestone quarry has been included in the Anhui Province 2018-2025 Green Mine Plans.

The project aims to rehabilitate and reintegrate the finished production benches of the quarry into the surrounding landscape as well as creating dust and noise monitoring systems and the construction of new surface water drainage system in and around the quarry site.

The first phase of the Green Quarry Project began in April 2020 and following activities have already been completed successfully.

### **LIFE in Quarries project - Belgium**

Started in 2015 in Belgium, the *LIFE in Quarries* project was co-funded by the European Commission, the Walloon Region (Belgium) and the Belgian extractive sector.

The objective of the project, which will come to term in 2021, is to develop, optimise and protect the hosting potential for biodiversity in active extractives sites in Belgium.

To do so, the project is based on an innovative concept of dynamic biodiversity management. Our idea is to create and preserve a network of temporary habitats across the quarry during its exploitation phase and after, in order to ensure that suitable habitats are constantly available for the numerous rare and endangered species of high ecological value. Those pioneer species need very particular types of environments such as cliffs, rocky or sandy surfaces, rockslides, temporary bodies of water, chalk grasslands or sparse meadows that quarries generate. This is why two types of actions are carried out in the *LIFE in Quarries* project.

The first type of action is dedicated to 'temporary nature' such as the creation of pioneer ponds, pioneer grasslands for insects and pioneer plants or the installation of stony shelters for reptiles and amphibians.

In addition, the project includes numerous actions concerning 'permanent nature' such as eco-grazing by hardy species of sheep, the installation of floating platforms for marine birds on permanent bodies of water, the securing of bat galleries, the restoration and management of grasslands or, a point of pride for the project, our annual translocation campaign for the natter jack toad and the crested newt, two endangered species of amphibians.

Indeed, the geographic isolation of quarries can be a limiting factor for the recolonization of small wildlife, typical of pioneer environments. In order to benefit from the welcoming environment, for the second year, a large number of northern crested newt eggs have been released in our Clypot quarry.

But the keystone of the *LIFE in Quarries* project remains in the fruitful collaboration between different sectors (private, government, European, scientific, an NGO and a natural park) which provide many species such as the natter jack toad, the sand martins, the crested newts, the wall lizards, the Eurasian eagle-owl, the smooth snake and many others. Thanks to such a collaboration, we guarantee a peaceful and brighter future in our active quarries.

## 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.

In 2020, the waste produced by cement and ready-mix production decreased compared to 2019. In the other activities (aggregates and concrete prefabricate) the increase is mainly due to non-hazardous materials, stored by the plants and then delivered to recycling.

<b>Waste generated by cement production by destination</b>	<b>Unit</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
<b>Non-hazardous waste</b>				
Recycling	t	250,465	112,017	128,312
Incineration	t	170	406	703
Landfill	t	12,314	24,611	73,895
<b>Total non-hazardous waste</b>	<b>t</b>	<b>262,948</b>	<b>137,034</b>	<b>202,910</b>
<b>Hazardous waste</b>				
Recycling	t	358	253	277
Incineration	t	46	51	59
Landfill	t	0	211,375	57
Oils and chemical waste	t	86	97	86
<b>Total hazardous waste</b>	<b>t</b>	<b>490</b>	<b>211,777</b>	<b>479</b>
<b>Total waste</b>	<b>t</b>	<b>263,438</b>	<b>348,811</b>	<b>203,388</b>

<b>Waste generated by ready-mixed concrete production by destination</b>	<b>Unit</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
<b>Non-hazardous waste</b>				
Recycling	t	165,445	317,755	199,471
Incineration	t	243	328	297
Landfill	t	65,611	47,466	67,681
<b>Total non-hazardous waste</b>	<b>t</b>	<b>231,299</b>	<b>365,549</b>	<b>267,448</b>
<b>Hazardous waste</b>				
Recycling	t	6	4	15
Incineration	t	4	1	2
Landfill	t	0	2	1
Oils and chemical waste	t	103	120	100
<b>Total hazardous waste</b>	<b>t</b>	<b>113</b>	<b>126</b>	<b>118</b>
<b>Total waste</b>	<b>t</b>	<b>231,413</b>	<b>365,675</b>	<b>267,566</b>

<b>Waste generated by other activities by destination</b>	<b>Unit</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
<b>Non-hazardous waste</b>				
Recycling	t	2,061	38.1	7
Incineration	t	31	34.7	21
Landfill	t	0	60.0	0
<b>Total non-hazardous waste</b>	<b>t</b>	<b>2,092</b>	<b>132.8</b>	<b>28</b>
<b>Hazardous waste</b>				
Recycling	t	10	3.8	4
Incineration	t	5	9.3	5
Landfill	t	0	0	0
Oils and chemical waste	t	107	128.4	159
<b>Total hazardous waste</b>	<b>t</b>	<b>121</b>	<b>141.5</b>	<b>168</b>
<b>Total waste</b>	<b>t</b>	<b>2,213</b>	<b>274.4</b>	<b>196</b>

# We respect the environment in all our operations

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

The cement production process is associated with environmental impacts in terms of atmospheric emissions, mainly carbon dioxide, dust, nitrogen and sulphur oxides. Most climate experts agree that the world must take urgent action to cut CO<sub>2</sub> emissions and we cannot deny that cement manufacturing is a process that makes intensive use of thermal energy, releasing both direct and indirect CO<sub>2</sub> emissions into the atmosphere. The direct emissions (or Scope 1) are related to the calcination of limestone which, when heated in the kiln at high temperatures, converts to quick lime and releases CO<sub>2</sub>. The indirect emissions (or Scope 2) are related to the electricity used in the cement grindings mills. Cementir wants to address environmental and climate change issues by reducing CO<sub>2</sub> emissions, energy consumption, water withdrawal and preserve natural habitats and their biodiversity in areas surrounding our sites. The Group analyses the environmental risks of its operations, involving management to ensure compliance with current regulations, best environmental standards and Best Available Techniques (BAT).

Cementir has committed to all companies active in the cement and concrete production operating with a certified environmental management system (i.e. ISO 14001).

As of 2020, 8 cement plants (accounting for the 93% of total cement production), 2 RMC companies (accounting for 25% of total RMC production) and 3 waste management companies (accounting for 100% of waste managed by the group) have adopted a ISO 14001 certified management system.

**In 2020, Cementir has been awarded a 'B' rating from Carbon Disclosure Project (CDP), recognising its actions in favour of climate change mitigation and its significant commitment to a low-carbon economy. This result places Cementir among the top players in the cement industry and much better than the average company, given that the average CDP European and Global rating is a 'C'.**



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

In 2020, total CO<sub>2</sub> equivalent emissions (direct and indirect) from the production of cement amounted to about 8.4 million tons and about 93% of these were direct emissions (Scope 1).

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-to-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.

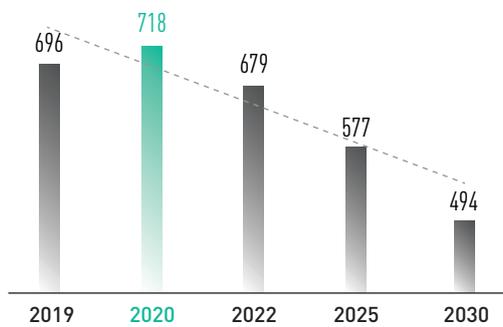
CO <sub>2</sub> emissions - Cement Production	Unit	2020	2019	2018
CO <sub>2</sub> eq emissions (Scope 1)	t	7,941,401	7,099,110	7,435,268
CO <sub>2</sub> eq emissions (Scope 2)	t	556,014	607,028	644,250
<b>Total CO<sub>2</sub> eq emissions</b>	t	<b>8,497,416</b>	<b>7,706,138</b>	<b>8,079,518</b>
CO <sub>2</sub> emissions Scope 1 - Grey cement	kg CO <sub>2</sub> /TCE	<b>718</b>	<b>696</b>	Not reported
CO <sub>2</sub> emissions Scope 1 - White cement	kg CO <sub>2</sub> /TCE	<b>915</b>	<b>926</b>	Not reported

In 2020, due to the lockdowns imposed by countries where the plants are located, the Group faced a situation where alternative fuels and alternative raw materials were temporarily unavailable and was forced to reschedule the timing of investments with a negative effect on CO<sub>2</sub> emissions per ton of cement.

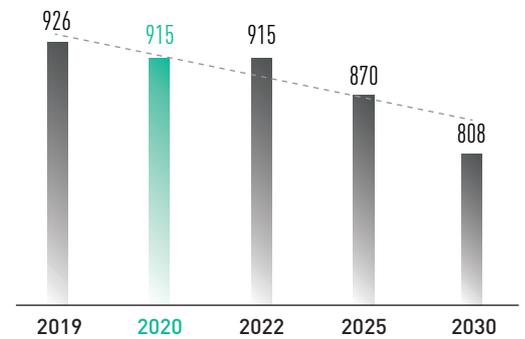
By 2030, Cementir's plan is to reduce its Scope 1 carbon intensity to **less than 500 kg CO<sub>2</sub> per ton of grey cement** produced (30% reduction of CO<sub>2</sub> emissions per ton of cement by 2030, compared to 1990).

For white cement, which is a specialty product with niche applications and markets (0.5% of total worldwide cement production), the plan is to reduce its Scope 1 carbon intensity to **800 kg CO<sub>2</sub> per ton of white cement** (35% reduction of CO<sub>2</sub> emissions per ton of cement by 2030, compared to 1990). This target is lower than the ETS benchmark for white cement (928 kg CO<sub>2</sub> per ton of cement, equal to the EU ETS benchmark for the clinker, 957 kg CO<sub>2</sub>/t clinker, multiplied by the clinker to cement ratio of 0.97).

**CO<sub>2</sub> Emissions (kg CO<sub>2</sub>/TCE)  
Reduction targets for Grey cement**



**CO<sub>2</sub> Emissions (kg CO<sub>2</sub>/TCE)  
Reduction targets for White cement**



For the other activities performed by the Group, ready-mix concrete, production of aggregates, production of concrete prefabricated products and waste collection and treatment, the CO<sub>2</sub> equivalent emissions are significantly lower. The data is presented in the table below.

**CO<sub>2</sub> emissions - Other activities**

	Unit	2019	2018	2017
CO <sub>2</sub> eq emissions (Scope 1)	t	35,831	62,740	57,771
CO <sub>2</sub> eq emissions (Scope 2)	t	16,213	23,086	24,669
<b>Total CO<sub>2</sub> eq emissions</b>	t	<b>52,044</b>	<b>85,826</b>	<b>82,440</b>

**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.

In 2020, the cement production plants used 38 million GJ of thermal energy and 4.5 million GJ of electricity. The energy index, equal to 3.97 GJ/TCE decreased slightly compared to 2019. Last year the index was 4.02.

## Energy consumed to produce cement

Type	Unit	2020	2019 <sup>11</sup>	2018
Thermal energy	GJ	38,290,104	34,690,599	35,767,574
of which: from alternative fuel	GJ	7,196,062	6,816,410	7,138,691
Thermal energy sold	GJ	-1,787,593	-1,521,827	-1,185,306
Electricity	GJ	4,560,025	4,278,324	4,323,044
<b>Total energy</b>	<b>GJ</b>	<b>41,062,536</b>	<b>37,447,096</b>	<b>38,905,312</b>
Thermal energy per t of Total Cement Equivalent	GJ/TCE	3.71	3.72	3.52
Thermal energy produced by alternative sources per t of Total Cement Equivalent	GJ/TCE	0.70	0.73	0.73
Electricity per t of Total Cement Equivalent	GJ/TCE	0.44	0.46	0.44
<b>Total energy per t of Total Cement Equivalent</b>	<b>GJ/TCE</b>	<b>3.97</b>	<b>4.02</b>	<b>3.96</b>

## Energy consumed for white and grey cement production<sup>12</sup>

Type	Unit	White	Grey	White	Grey
		2020	2020	2019	2019
Thermal energy	GJ	14,295,411	23,994,693	14,065,511	20,625,088
of which: from alternative fuel	GJ	388,854	6,807,208	356,901	6,459,509
Thermal energy sold	GJ	-1,787,593	0	-1,521,827	0
Electricity	GJ	1,293,361	3,266,664	1,280,579	2,997,744
<b>Total energy</b>	<b>GJ</b>	<b>13,801,179</b>	<b>27,261,357</b>	<b>13,824,264</b>	<b>23,622,832</b>
Thermal energy per t of Total Cement Equivalent	GJ/TCE	5.36	3.13	5.29	3.09
Thermal energy produced by alternative sources per t of Total Cement Equivalent	GJ/TCE	0.15	0.89	0.13	0.97
Electricity per t of Total Cement Equivalent	GJ/TCE	0.49	0.43	0.48	0.45
<b>Total energy per t of Total Cement Equivalent</b>	<b>GJ/TCE</b>	<b>5.18</b>	<b>3.56</b>	<b>5.20</b>	<b>3.54</b>

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 rise to 50,000 in the near future, covering about half of its urban population.

In 2020, seven cement plants, accounting for the 76% of the total cement production, adopted the ISO 50001 certification for energy management systems, in line with our goal of increasing the level of energy efficiency. Cementir has committed to all companies active in the cement production, concrete production and waste management sectors operating with a certified energy management system (i.e. ISO 50001).

<sup>11</sup> The 2019 data has been subject to reclassification in the energy consumption for white cement for a like-by-like reading.

<sup>12</sup> The 2019 data has been subject to reclassification in the energy consumption for white cement for a like-by-like reading.

The other production activities of the Group have far lower energy requirement than cement plants. In 2020, the ready-mixed concrete production plants used about 97,000 GJ of electricity and 272,000 GJ of thermal energy. The energy intensity index for these plants was calculated using tons of concrete produced during the year as the denominator.

### Energy consumed to produce ready-mixed concrete

Type	Unit	2020	2019	2018
Thermal energy	GJ	272,752	284,705	292,341
Electricity	GJ	97,292	69,983	77,729
<b>Total energy</b>	<b>GJ</b>	<b>370,044</b>	<b>354,688</b>	<b>370,070</b>
Thermal energy per t of ready-mixed concrete	GJ/t	0.03	0.03	0.03
Electricity per t of ready-mixed concrete	GJ/t	0.01	0.01	0.009
<b>Total energy per t of ready-mixed concrete</b>	<b>GJ/t</b>	<b>0.04</b>	<b>0.03</b>	<b>0.04</b>

For other activities such as the production of aggregates and cement manufacture, the Group used about 128,000 GJ of electricity and 217,000 GJ of thermal energy.

### Energy usage of other activities

Type	Unit	2020	2019	2018
Thermal energy	GJ	217,755	207,513	205,620
Electricity	GJ	128,430	60,629	65,538
<b>Total energy</b>	<b>GJ</b>	<b>346,185</b>	<b>268,142</b>	<b>271,158</b>
Thermal energy per t of product made	GJ/t	0.01	0.01	0.02
Electricity per t of product made	GJ/t	0.01	0.01	0.01
<b>Total energy per t of product made</b>	<b>GJ/t</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>

Energy consumption in the waste management sector has decreased compared to 2019 due to the sale of fixed equipment owned by Hereko.

### Energy used in the waste management sector

Type	Unit	2020	2019	2018
Thermal energy	GJ	14,096	20,991	19,533
Electricity	GJ	19,797	29,438	30,492
<b>Total energy</b>	<b>GJ</b>	<b>33,893</b>	<b>50,429</b>	<b>50,025</b>
Thermal energy per t of waste collected	GJ/t	0.05	0.05	0.05
Electricity per t of waste collected	GJ/t	0.08	0.07	0.08
<b>Total energy per t of waste collected</b>	<b>GJ/t</b>	<b>0.13</b>	<b>0.12</b>	<b>0.13</b>

## OTHER AIR EMISSIONS

The environmental impact of cement production also involves other air emissions, mainly sulphur oxides (SO<sub>x</sub>) and nitrogen oxides (NO<sub>x</sub>). These are associated with combustion in the firing of raw meal that is obtained from processing raw materials and from dust that is generated when grinding the clinker with gypsum and other ingredients to produce cement. Emissions are monitored through continuous monitoring systems or through spot measurements, in accordance with local regulations and according to the characteristics of the plants. The monitored data is periodically communicated to the competent authorities, which verify compliance of the plants with the limits.

NO<sub>x</sub>, SO<sub>x</sub> and dust are continuously monitored in all cement plants while other air emissions such as CO, VOC and HCl are periodical measured.

In 2020, NO<sub>x</sub> emissions from Cementir Group plants amounted to 11,859 tons, with an emissions index per ton of cement (kg/TCE) of 1.15, while SO<sub>2</sub> emissions originating from sulphur in the fuels and raw materials used in Group plants amounted to 2,032 tons, with an emissions index per ton of cement (g/TCE) of 197.

The dust emissions reached 680 tons with a dust emissions index per ton of cement (g/TCE) of 66.

Below the recap.

Air emissions for cement production	Unit	2020	2019	2018
NO <sub>x</sub>	t	11,859	9,598	9,119
SO <sub>x</sub>	t	2,032	1,431	1,427
Dust	t	680	348	439

Coefficients of emissions cement production	Unit	2020	2019	2018
NO <sub>x</sub>	kg/TCE	1.15	0.98	0.93
SO <sub>2</sub>	gr/TCE	197	146	145
Dust	gr/TCE	66	35	45

Coverage of emissions <sup>13</sup>	2020	2019
NO <sub>x</sub> : Percentage of production with NO <sub>x</sub> continuous measurement	100%	96%
SO <sub>x</sub> : Percentage of production with SO <sub>2</sub> continuous measurement	100%	96%
Dust: Percentage of production with dust measurement	100%	96%

## 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 however, 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. We monitor water withdrawal on a monthly basis at plant level, with data being consolidated at Group level by the Sustainability department.

In 2020, total water withdrawal decreased by 5%. The data is presented in the table below.

Water withdrawals - Cement production	Unit	2020	2019	2018
Surface water	m <sup>3</sup>	716,207	541,169	605,628
Ground water	m <sup>3</sup>	4,521,234	4,900,899	4,366,530
Rain water	m <sup>3</sup>	583,479	717,163	693,603
Public aqueduct	m <sup>3</sup>	92,889	309,772	288,155
Other sources	m <sup>3</sup>	2,714,976	2,602,775	2,602,211
<b>Total</b>	<b>m<sup>3</sup></b>	<b>8,628,786</b>	<b>9,071,778</b>	<b>8,556,127</b>

<sup>13</sup> Percentage of clinker produced by kilns with continuous measurement of NO<sub>x</sub>, SO<sub>x</sub> and dust.

Over the years, Cementir Group plants have adopted some technical solutions in order to reuse or use water resources more efficiently. In 2020, the percentage of reused water reached 40% of the total.

<b>Water withdrawals - Cement production</b>	<b>Unit</b>	<b>2020</b>	<b>2019<sup>14</sup></b>	<b>2018</b>
Volume of reused water	m <sup>3</sup>	3,428,782	3,100,141	2,576,684
% of reused water	%	40%	34%	30%

In 2020, a comprehensive water risk assessment was again carried out for all cement plant using the WRI Aqueduct Global Water Tool. The addresses of each plant are entered into the tool and potential water risks were assessed based on the impacts of several indicators such as water stress, drought severity or seasonal changes. A high water stressed area is defined as having a baseline water stress greater than 40%. The baseline water stress measures the current level of water demanded in a local area against the average available blue water. In 2020, 31 % of our total water withdrawal was sourced from plants located in water stressed areas.

<b>Cement in water - Stressed Area</b>	<b>Unit</b>	<b>2020</b>
Total Water	%	31%

In the production of ready-mixed concrete, water is one of the most significant resources in the production process as it represents an input resource. In 2020, the water withdrawal were in line with the 2019 data. The data is presented in the tables below.

<b>Water withdrawals Ready-mixed concrete production</b>	<b>Unit</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
Surface water	m <sup>3</sup>	47,800	67,272	37,683
Ground water	m <sup>3</sup>	293,852	238,633	563,235
Rain water	m <sup>3</sup>	99,620	110,210	84,458
Public aqueduct	m <sup>3</sup>	245,419	340,350	361,758
Other sources	m <sup>3</sup>	93,213	0	0
<b>Total</b>	<b>m<sup>3</sup></b>	<b>779,904</b>	<b>756,465</b>	<b>1,047,134</b>

<b>Water reuse Ready-mixed concrete production</b>	<b>Unit</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
Volume of reused water	m <sup>3</sup>	127,617	60,915	85,246
% of reused water	%	16%	8%	8%

In 2020, a comprehensive water risk assessment was also carried out for the concrete business using the WRI Aqueduct Global Water Tool. The analysis was conducted using the Aqueduct Country Rankings for each country where the concrete plants are located. In 2020, 45% of our total water withdrawal was by plants located in countries with a high water stressed areas.

<b>Cement in water - Stressed Area</b>	<b>Unit</b>	<b>2020</b>
Total Water	%	45%

In the Group's other activities, water consumption is less relevant, as it is not linked to production processes.

<sup>14</sup>The 2019 data relating to the Asian plants has been subject to reclassification for a like-by-like reading.

# 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 facilities that operate in 18 countries and on 5 continents, with the aim of increasing human resources 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 organisational, 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 2020, the Group continued the growth plan of its organisational strategy, launched in recent years, in order to make its structure more robust, achieve targets set in the 2020-2022 Business Plan and to respond more effectively to market trends and corporate changes. In particular, we have secured several key processes by adopting or reviewing policies and procedures (e.g. Group Human Rights, Group Recruitment and Selection Policy, Group Occupational Health and Safety Policy, Group Treasury Policy) and we developed some corporate and local organisational structures (Technical, Sales and Supply Chain).

Furthermore, we continued our commitment to the European Works Council to strengthen our relationship by organising a dedicated summit aimed at also sharing preventive and corrective measures against Covid-19 that have been adopted by individual legal entities in compliance with local regulations.

We continued to work on the Cementir 4.0 programme in order to improve our operational efficiency in Technical and Supply Chain organisations in two pilot plants, Gaurain and Aalborg. Moreover, we started planning and designing the expansion of the Cementir 4.0 programme in another country: the four cement plants in Turkey.

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 2020, we continued the 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.

Unicon employees, Denmark





## 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, Organisational Effectiveness and Agility, and People Development and Engagement.



In line with its Group HR Strategy, the Cementir Group launched its first Global People Survey, 'Your Voice', in 2019. This survey was aimed at all Cementir Employees working in offices and in production environments. 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 were communicated back to the whole organisation, analysed and discussed within the Action Teams, with the voluntary participation of our employees across the organisation.

Global, Regional and BU level actions plans have been defined and approved by the Global Senior Management Team, to be executed in 2020-2021. However, in 2020 on average 50% of the defined actions have been implemented as Covid-19 slowed down and sometimes prevented the execution of the engagement survey actions. Management's priority during the Covid-19 pandemic has always been the health, safety and well-being of our employees at all company sites.

## TALENT REVIEW AND SUCCESSION PLANS FOR GROUP KEY POSITIONS

In 2020, 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 earmarked as mid- and long-term successors.



Employees, Rome, Italy

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 have delivered a Group Approval Policy in order to clarify roles and responsibilities and to ensure effective stakeholders' management.

The adoption of online assessment tools and structured interview processes, as well as the consolidation of a strong partnership between corporate and local HRs, enabled the company to reach expected targets in terms of hire quality and employee engagement.

## PEOPLE EVALUATION AND DEVELOPMENT

The OSTA (Organisation and Skills Team Assessment) was extended gradually to the main 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 areas for improvement, 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 incorporating this process into the new Group Performance Management System.

In 2020, we finalised the design of a Group Performance Management System for all office workers to be launched within the Group by the end of 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 intention 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 2020, the performance feedback activity has been delayed by the COVID-19. Staff and managers have been regularly away work from home and close contact with colleagues were discouraged. For this reason, the percentage of employees that received regular performance is slightly decrease for manager, white collar and blue collar.

### Employees who receive regular performance reviews

	2020			2019			2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Executives	92%	100%	<b>93%</b>	92%	75%	<b>91%</b>	91%	67%	<b>89%</b>
Manager	61%	61%	<b>61%</b>	79%	71%	<b>78%</b>	98%	92%	<b>97%</b>
White collars	79%	73%	<b>77%</b>	82%	77%	<b>80%</b>	60%	63%	<b>61%</b>
Blue collars	43%	93%	<b>44%</b>	47%	90%	<b>48%</b>	45%	88%	<b>46%</b>

## CEMENTIR ACADEMY



As the Covid-19 pandemic spread across the globe, the company implemented a contingency plan aimed at mitigating the implications, such as postponing or suspending relevant training programs and initiatives. Despite this, the Cementir Academy continued its extended mission to support Cementir strategy and business results, to develop current and future global leaders, to accelerate Group transformation and to foster diversity and inclusion across the Group.

We designed and delivered key training and development initiatives which include:

- The launch of some new online courses in our Academy catalogue (GDPR, Human Rights and Cultural Training on Performance Management).
- The translation and deployment of the existing online courses in the most relevant local languages.
- Two pilot projects applied to an international sample representative of all Group professional families aimed at assessing the impact of e-learning solutions on reskilling and upskilling, by using popular online learning platforms that offer anyone, anywhere, access to online courses and degrees from world-class universities and companies.
- 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 35,000 hours of training were provided in 2020, almost 11.7 hours per member of staff. The measures put in place involved the entire Group workforce in a cross-functional and balanced way covering various roles, as can be seen from the summary table of training hours by professional category.

Due to the security measures introduced by the Group to combat Covid-19, the training activities initially planned for 2020, were either, where possible, held online, or where preferable, postponed to 2021. For this reason, the hours of training decreased compared to 2019.

**The Cementir Academy continued its extended mission to support Cementir strategy and business results, to develop current and future global leaders, to accelerate Group transformation and to foster diversity and inclusion across the Group**



Hours of training	Unit	2020			2019			2018		
		Men	Women	Total	Men	Women	Total	Men	Women	Total
Executives	Hours	374	56	430	976	100	1,076	1,100	8	1,108
Manager	Hours	4,902	558	5,460	5,188	913	6,101	5,266	688	5,954
White collars	Hours	7,551	3,320	10,871	13,863	4,174	18,037	12,738	3,194	15,932
Blue collars	Hours	18,014	512	18,525	24,684	659	25,343	37,415	796	38,211
<b>Total</b>	<b>Hours</b>	<b>30,841</b>	<b>4,445</b>	<b>35,286</b>	<b>44,710</b>	<b>5,846</b>	<b>50,556</b>	<b>56,519</b>	<b>4,686</b>	<b>61,205</b>
Executives	h/per	7.5	13.9	8.0	19.5	25	19.9	23.4	2.5	22.1
Manager	h/per	18.6	11.4	17.4	18.9	18.3	18.8	20.9	16.4	20.3
White collars	h/per	13.1	11.9	12.7	25	14.7	21.5	22.4	11.6	18.8
Blue collars	h/per	10.3	12.5	10.4	14.1	16.1	14.1	21.4	20.4	21.3
<b>Total</b>	<b>h/per</b>	<b>11.7</b>	<b>11.9</b>	<b>11.7</b>	<b>17</b>	<b>15.5</b>	<b>16.8</b>	<b>21.6</b>	<b>13</b>	<b>20.5</b>

## DIVERSITY AND INCLUSION



The production sector in which the Group operates is historically characterised by a predominantly male workforce. Analysing the data on personnel distribution shows that almost 88% of employees are male. This is widely linked to a net prevalence of men amongst blue collars (the main category of staff).

In recent years, the Group has developed measures to promote equal gender treatment and opportunities throughout 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 the leadership model. This involved all Group managers and all Corporate employees and will be progressively rolled out to the entire company workforce.

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

	31-12-20			31-12-19			31-12-18			
	Men	Women	Total	Men	Women	Total	Men	Women	Total	
<b>Executive Manager</b>										
<30	0	0	0	0	0	0	0	0	0	
30-50	16	3	19	16	4	20	16	3	19	
>50	34	1	35	35	0	35	34	0	34	
<b>Manager</b>										
<30	11	1	12	11	1	12	9	0	9	
30-50	144	36	180	153	41	194	142	37	179	
>50	109	12	121	113	9	122	117	7	124	
<b>White collars</b>										
<30	46	30	76	35	32	67	42	35	77	
30-50	347	177	524	352	202	554	361	195	556	
>50	184	72	256	184	60	244	180	58	238	
<b>Blue collars</b>										
<30	178	4	182	173	3	176	184	7	191	
30-50	983	34	1,017	1,048	34	1,082	1,079	30	1,109	
>50	584	3	587	561	4	565	580	2	582	

The Cementir Group operates internationally and 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>15</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: *'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.'*

## WORKFORCE NUMBER AND COMPOSITION

The Cementir Group workforce comprises 3,009 employees, spread across 18 countries and 5 continents, as well as 784 contractors, people not directly employed by the Group and employees of contractors who perform some of the production operations at the company's cement and concrete plants and quarries. The Group's workforce is mainly composed of personnel hired with permanent and full-time contracts.

The table below summarises<sup>16</sup> the main workforce figures by category as of 31 December 2020.

Cementir Group	31-12-20			31-12-19			31-12-18		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	2,636	373	3,009 <sup>17</sup>	2,681	390	3,071	2,747	374	3,121
Contractors	778	6	784	541	6	547	537	3	540
Executives	50	4	54	51	4	55	51	3	54
Manager	264	49	313	277	51	328	270	45	315
White collars	577	279	856	571	294	865	583	287	870
Blue collars	1,745	41	1,786	1,782	41	1,823	1,843	39	1,882

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

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

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

<sup>17</sup> The number of total employees included 100% of SCT as described into the methodology note.

## Turnover Rate

	2020			2019		
	Men	Women	Total	Men	Women	Total
Overall employee Turnover Rate <sup>18</sup>	12%	15%	12%	15%	12%	14%

## Group turnover

	2020 (absolute value)			2019 (absolute value)			2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Incoming</b>									
Under 30	92	13	105	80	11	91	103	20	123
30-50	135	19	154	181	39	220	184	35	219
Over 50	32	7	39	69	12	81	32	4	36
<b>Total</b>	<b>259</b>	<b>39</b>	<b>298</b>	<b>330</b>	<b>62</b>	<b>392</b>	<b>319</b>	<b>59</b>	<b>378</b>
<b>Outgoing</b>									
Under 30	48	8	56	65	6	71	74	3	77
30-50	167	34	201	210	33	243	209	45	254
Over 50	90	14	104	121	6	127	103	21	124
<b>Total</b>	<b>305</b>	<b>56</b>	<b>361</b>	<b>396</b>	<b>45</b>	<b>441</b>	<b>386</b>	<b>69</b>	<b>455</b>



Cement plant Aalborg, Denmark

<sup>18</sup>The 'employee turnover rate' refers to the percentage of employees who leave the Group during 2020.

## CONCRETELY SAFE



Occupational safety is a core value of Cementir’s culture of sustainability, as is protection of workers’ health. Safety begins with workers and then is focused back on them as the ultimate goal of actions put in place to improve overall risk mitigation and management, through their involvement and participation.

In this respect, Health and Safety risks are in the scope of the Cementir group’s risk management framework. The process of identifying, monitoring and controlling risks at work is in place through fully integration with health surveillance process provided by each site according to the Group’s Policy and the local regulation.

The governance of this process, right from its basic elements, was at the heart of the main initiatives implemented in 2020, starting with the strengthening of organisational controls on this subject, as well as within the Corporate technical area. The action plan included updating of the Group Policy and the definition, in a structured manner, of the event monitoring process, in line with internationally recognised reporting guidelines and standards (e.g. the Global Reporting Initiative).

In 2020, work began on the definition of the Group guidelines on occupational health and safety at the workplace, which provides minimum requirements, recommendations and guidelines, according to recognised best practices in the industry, Group policy and commitment in the area, without prejudice to the individual responsibilities of operating companies for their application and verification. The guidelines were issued in early 2021.

To standardise behaviour and share best practices on safety, the Group’s Golden Rules of Safety were defined, which summarise the common knowledge principles aimed at preventing accidents and therefore protecting individuals in the workplace. These rules are based on international best practices and the Group’s specific experience, which stems first and foremost from lessons learned from investigations of accidents and near-misses.

The Golden Rules, which may be supplemented by specific requirements at local level, are in fact a prerequisite for developing a proactive and responsible safety culture, where the principle that ‘everyone protects each other’ applies.

The implementation and maintenance of effective and efficient management systems for accident prevention is one of the key health and safety objectives at Group level. During 2020, all certified cement production plants completed the migration process to the ISO 45001 standard and were found to be in full compliance with the standard. At the end of 2020, certified cement plants accounted for 73% of the total. The Group plans to certify all cement production plants by 2022.



### CEMENTIR'S GOLDEN RULES OF SAFETY

**RISK ASSESSMENT AND JOB SAFETY ANALYSIS**  
All work must be risk assessed before starting. According to the results of the assessment all identified measures must be implemented.

**ENERGY SOURCES**  
All energy sources must be de-energized, isolated and locked-out before a work is started.

**SAFETY PROTECTIVE EQUIPMENT**  
All safety protective devices and equipment must not be removed/bypassed during the work. All necessary Personal Protective Equipment received for a given task must be properly used.

**SAFE AND UNSAFE BEHAVIORS AND CONDITIONS**  
All unsafe behaviors and conditions must be stopped. Observing safe and unsafe behaviors and conditions to be proactive: each one protects everyone.

**COMMUNICATION OF INCIDENTS**  
All incidents (accidents and near misses) must be communicated to those concerned, as identified in applicable procedures, to conduct necessary investigation and reporting activities.

### H&S Management Systems Certification

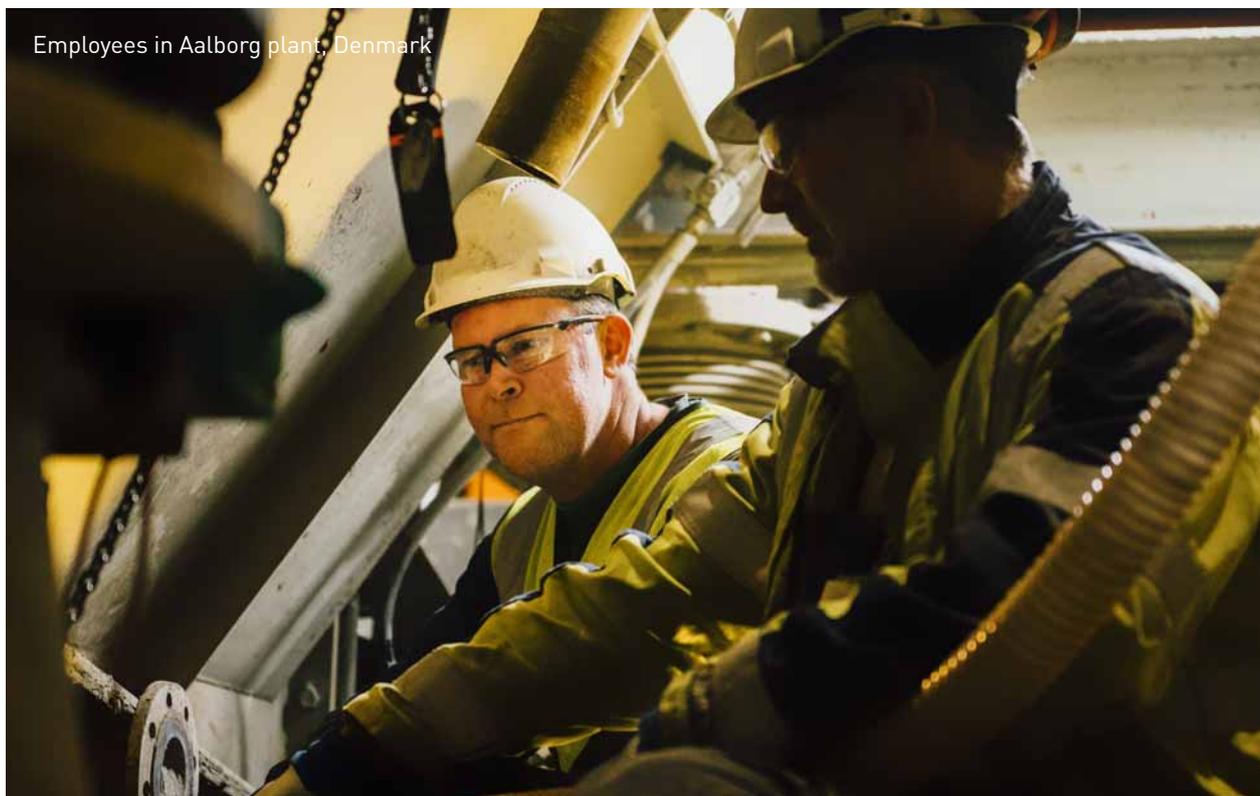
	Unit	2020	2022
Total ISO 45001 certified cement plants	%	73	100

The health and safety management system certification program is also supporting all Group's operations in involving workers through their participation in the identification of hazards and assessment of the risks, specific operational committees, incident investigations, actions take in response or additional training activities.

### Common definition applied in the Group

	TRIR (Total Recordable Injury Rate)	n	(total recordable injuries/hours worked) x 1,000,000 <i>total recordable injuries</i> : the sum of fatalities, lost-time injuries, RWIs (Restricted Workday Injury - work-related injury which causes the injured person to be assigned to other work on a temporary basis or to work their normal job less than full time or to work at their normal job without undertaking all the normal duties) and MTCs (Medical Treatment Case - work-related injury which requires treatment by a medical professional and does not result in time away from work or restriction in duties; it excludes all cases involving first aid treatment)
	Fatalities	n	number of fatalities as a result of work-related injury
	Fatality Rate	n	(fatal injuries/hours worked) x 1,000,000
Health and Safety	High-Consequence Work-related Injuries Rate (excluding fatalities)	n	(high consequence work-related injuries/hours worked) x 1,000,000  <i>high consequence work-related injuries</i> : work-related injury that results in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months (excluding fatalities)
	LTI FR (Lost Time Injury Frequency Rate)	n	(injuries with working days of absence/hours worked) x 1,000,000
	LTI SR (Lost Time Injury Severity Rate)	n	(working days of absence/hours worked) x 1,000
	Near Miss	n	an incident where no injury or ill health occurs but has the potential to do so
	OIFR (Occupational Illness Frequency Rate)	n	(occupational illness allegations received/hours worked) x 1,000,000

Employees in Aalborg plant, Denmark



## EMPLOYEES

	2020	2019	2018
<b>TRI (Total Recordable Injury)</b>	<b>110</b>	<b>98</b>	<b>120</b>
<b>TRIR (Total Recordable Injury Rate)</b>	<b>20.1</b>	<b>16.7</b>	<b>18.2</b>
Cement	18.0	12.5	16.2
RMC	16.9	23.8	19.1
Aggregates	37.6	9.9	10.1
Waste	64.6	45.3	81.9
Other	12.3	13.4	10.5
<b>Fatalities</b>	<b>0</b>	<b>0</b>	<b>0</b>
Cement	0	0	0
RMC	0	0	0
Aggregates	0	0	0
Waste	0	0	0
Other	0	0	0
<b>Fatality Rate</b>	<b>0</b>	<b>0</b>	<b>0</b>
Cement	0	0	0
RMC	0	0	0
Aggregates	0	0	0
Waste	0	0	0
Other	0	0	0
<b>High-Consequence Work-related Injuries Rate (excluding fatalities)</b>	<b>0.00</b>	<b>0.17</b>	<b>0.17</b>
Cement	0.00	0.00	0.00
RMC	0.00	0.00	0.66
Aggregates	0.00	0.00	0.00
Waste	0.00	3.77	0.00
Other	0.00	0.00	0.00
<b>LTI FR (Lost Time Injury Frequency Rate)</b>	<b>11.0</b>	<b>10.4</b>	<b>12.0</b>
Cement	9.1	9.1	10.7
RMC	14.0	16.1	18.4
Aggregates	17.1	6.6	6.7
Waste	24.8	11.3	0.0
Other	3.1	2.7	7.8
<b>LTI SR (Lost Time Injury Severity Rate)</b>	<b>0.16</b>	<b>0.27</b>	<b>0.2</b>
Cement	0.12	0.25	0.14
RMC	0.28	0.35	0.39
Aggregates	0.28	0.08	0.08
Waste	0.03	0.65	0.00
Other	0.01	0.01	0.15
<b>Near Miss</b>	<b>446</b>	<b>526</b>	<b>478</b>
Cement	182	368	245
RMC	230	129	210
Aggregates	27	17	22
Waste	4	8	0.00
Other	3	4	1
<b>OIFR (Occupational Illness Frequency Rate)</b>	<b>0.0</b>	<b>0.5</b>	<b>0.3</b>
<b>Man-hours worked (millions of hours)</b>	<b>5.5</b>	<b>5.9</b>	<b>5.8</b>
Cement	3.3	3.5	3.4
RMC	1.4	1.4	1.5
Aggregates	0.3	0.3	0.3
Waste	0.2	0.3	0.2
Other	0.3	0.4	0.4

<b>Contractors</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
<b>TRIR (Total Recordable Injury Rate), on site</b>	<b>8.5</b>	<b>10.7</b>	<b>10.5</b>
Cement	7.1	10.6	8.6
RMC	9.7	12	17.4
Aggregates	27.2	16.1	0.0
Waste	15.1	0.0	0.0
Other	0.0	0.0	0.0
<b>Fatalities</b>	<b>2</b>	<b>1</b>	<b>0</b>
Cement	1	0	0
RMC	1	0	0
Aggregates	0	1	0
Waste	0	0	0
Other	0	0	0
<b>Fatality Rate</b>	<b>0.55</b>	<b>0.28</b>	<b>0.00</b>
Cement	0.42	0.00	0.00
RMC	0.97	0.00	0.00
Aggregates	0.00	8.06	0.00
Waste	0.00	0.00	0.00
Other	0.00	0.00	0.00
<b>LTI FR (Lost Time Injury Frequency Rate) on site</b>	<b>6.0</b>	<b>6.7</b>	<b>4.5</b>
Cement	6.2	5.3	3.7
RMC	3.9	8.4	6.1
Aggregates	18.2	16.1	8.4
Waste	15.1	16.3	0.0
Other	0.0	0.0	0.0
<b>LTI SR (Lost Time Injury Severity Rate) on site</b>	<b>0.09</b>	<b>0.09</b>	<b>0.08</b>
Cement	0.10	0.08	0.09
RMC	0.08	0.09	0.06
Aggregates	0.09	0.24	0.00
Waste	0.05	0.06	0.00
Other	0.00	0.00	0.00
<b>Man-hours worked on site (millions of hours)</b>	<b>3.6</b>	<b>3.6</b>	<b>3.8</b>
Cement	2.4	2.5	2.7
RMC	1.0	0.8	1.0
Aggregates	0.1	0.1	0.1
Waste	0.1	0.1	0.0
Other	0.0	0.0	0.0

In 2020, no recordable fatal or high-consequence injuries occurred to directly employed individuals. Two fatal injuries occurred to contractors: one road accident in Turkey due to speeding and one during an unauthorised maintenance activity in Belgium.

Concerning the employees, the number of lost-time injuries (60) remained at the same level as the previous year. The lost-time injury frequency rate for employees increased by 6% because of fewer hours being worked overall, largely due to Covid-19 pandemic restrictions. On the contrary, the severity rate decreased by 41%.



Cement plant Aalborg, Denmark

During 2020, the systemic implementation of data gathering for contractors started. For this reason, the indicators between 2020/2019 and the previous year are not fully comparable. Despite this, an improvement in performance is observed in the total recordable injury rate and lost time injury frequency rate on site. In 2020, over 12,400 hours of specific health and safety training were provided. Due to the safety measures introduced by the Group to combat Covid-19 pandemic, the training activities initially planned for 2020, were either, where possible, held online, or where preferable, postponed to 2021. For this reason, the hours of training decreased compared to 2019.

<b>Health &amp; Safety</b>	<b>2020</b>	<b>2019</b>
Specific H&S training	12,424	18,796

Finally, the Group encourage the worker's access to non-occupational and healthcare services. In 2020 the activities were focused to facilitate the Covid-19 pandemic prevention, as, where possible, making agreement with private laboratory for the execution of swab tests.

## 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 number of weeks of notice that have to be given to workers for organisational changes varies according to country and professional category (some countries do not have any minimum notice periods, while in countries where they do have it, it can vary according to the type of organisation). The Cementir Group maintains an ongoing, structured dialogue with the representatives of its companies' European workers, in compliance with EU regulations and according to the framework adopted by the Group's European Company Committee (CAE). Throughout 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 continuously improving technical solutions that reduce environmental impact and that 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 unfavourable attitudes among 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 the 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.

To handle these topics, the Cementir Group has established a new function in Corporate, managing Health & Safety and Environmental matters, that will lead and coordinate all the related structures of the Group.

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 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 to analyse stakeholders' complaints, in order to provide the necessary information or to plan specifically focused actions.

Waste treatment plant Sureko, Turkey



## DIALOGUE AND SUPPORT OF LOCAL COMMUNITIES

Against this backdrop, the most debated topics with local stakeholders in 2020 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, on 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' surroundings and visual impact. To tackle these specific aspects, Çimentoaş 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.

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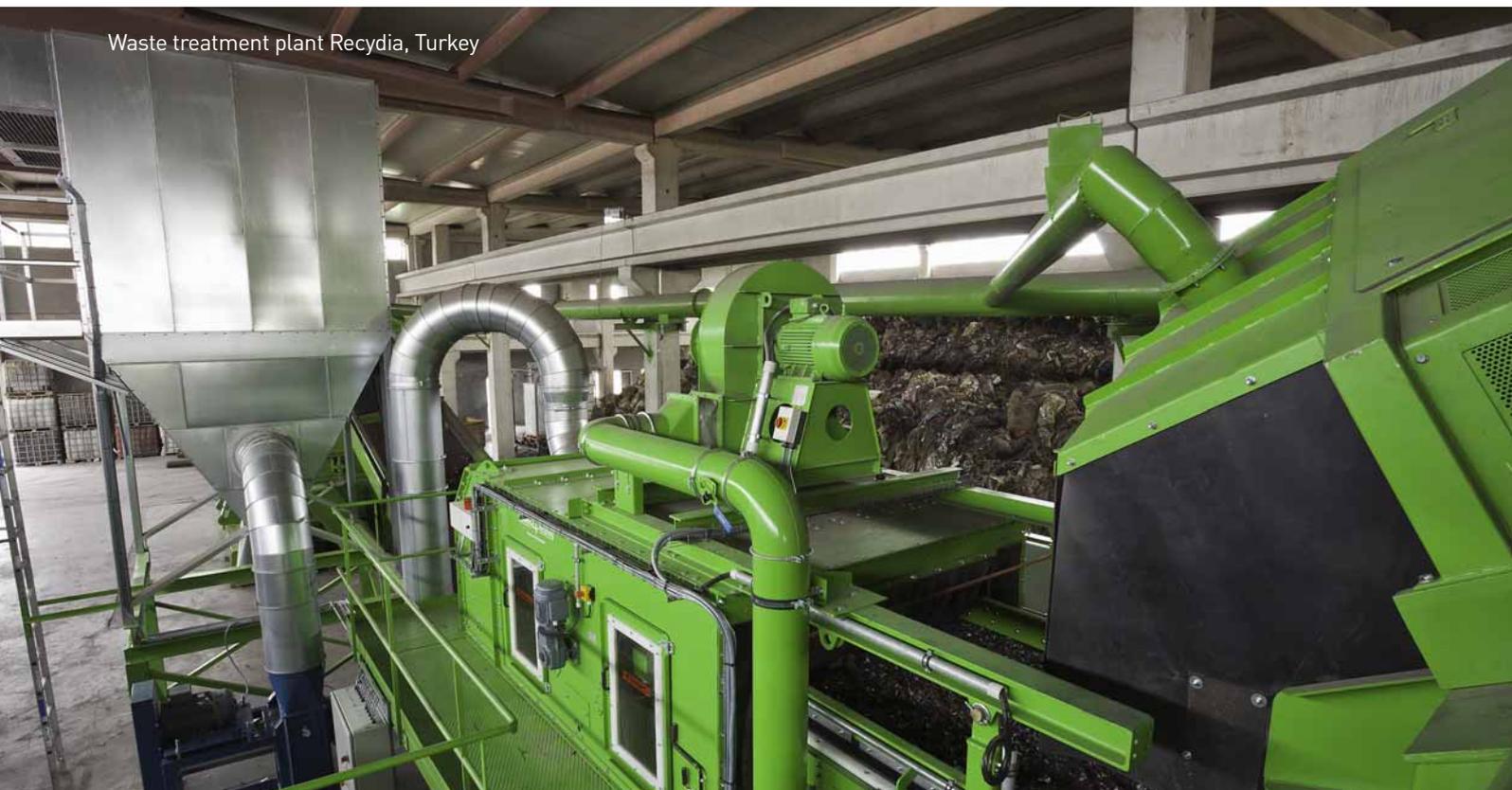
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## EARTHQUAKE IN ELAZIG

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 hours following the earthquake, Çimentoaş donated 1 million Turkish lira (approx. 150,000 euros) 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. In the following months, Çimentoaş management in Elazığ was in close coordination with local authorities to provide support to the local community.

Waste treatment plant Recydia, Turkey



## EARTHQUAKE IN İZMİR

On 30 October 2020, a magnitude 6.6 earthquake occurred in İzmir province, in Turkey. More than 90 people died and more than 900 injured. After the earthquake, Çimentoş donated 400 thousand Turkish lira (approx. 45,000 euros) to the local authorities and provided financial support to employees whose houses had been damaged.

## ÇİMENTAŞ EDUCATION AND HEALTH FOUNDATION

In Turkey, the Cementir Group maintains close ties with the most vulnerable groups through the Çimentoş Education and Health Foundation, established in 1986 and committed to providing financial assistance and educational materials to families and schools. Since it was founded, 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 Elazığ, Turkey.

In 1998, the Çimentoş Education and Health Foundation established the Işıkkent High School. This senior school is recognised for its innovative approach to education and research and can enrol up to 770 pupils a year. As part of this project, education is provided at all educational levels from nursery to senior school.

In 2020, the school had to define specific rules, procedures and systems to protect all students, teachers and employees from the risk of Covid-19 exposure; to pursue teaching and learning activities in a healthy, safe, structured and corporate environment; to ensure physical layouts and equipment are aligned with the new social realities and to ensure that all hygienic measures are taken.

Please visit the following link for further details: <https://www.isikkent.k12.tr/en-US>.

## RECOVERY OF HEAT FROM KILN FUEL



Since 1990, Aalborg Portland has provided district heating to the municipality of Aalborg.

In order to produce cement, raw materials such as limestone and sand must be burned at temperatures of

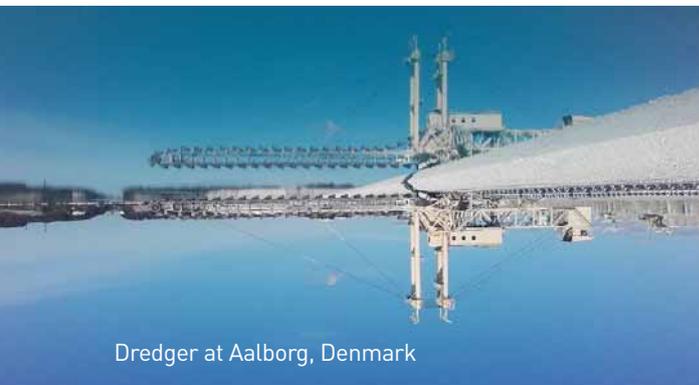
up to 1500°C. Due to this high temperature process, the Aalborg Portland cement factory has enormous supplies of excess heat.

One of the main sources of waste heat is the flue gas emitted by the white kilns. The solution to this energy loss was to implement a heat recovery system, in which the flue gasses from the five white kilns of the Aalborg plant are used in heat exchanger installations to transfer the thermal energy from the flue gas to Aalborg's district heating network.

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 2020, Aalborg Portland delivered about 1.8 million GJ of energy to the municipality of Aalborg.

The annual CO<sub>2</sub> savings from this heat recovery system have been estimated at 150,000 tons. The calculation is based on the amount of CO<sub>2</sub> that is not emitted from the local coal-fired power station because the total needs are partially covered by the heat coming from the Aalborg plant.

In this way, energy that has already been produced during the cement production is recycled and delivered to the district heating system, so that the energy does not have to be produced twice.



Dredger at Aalborg, Denmark

# LOOKING AT THE VALUE CREATED

3



Nanjing Medical University, Nanjing, China

## 3 LOOKING AT THE VALUE CREATED

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## EARNINGS AND FINANCIAL RESULTS

During 2020, cement and clinker sales volumes reached 10.7 million tons, up by 12.9% compared to 2019. The increase is mainly attributable to performance in Turkey, with cement volumes up 39%.

Sales volumes of ready-mixed concrete, equal to 4.4 million cubic metres, were up by 7.8% mainly due to the increase in Turkey and, to a lesser extent, in Sweden.

In the aggregates segment, sales volumes amounted to 9.5 million tons, down by 1.8% as a result of the increase in Denmark and Sweden being offset by the contraction in Belgium and France due to the pandemic. Group revenue reached the historical record of EUR 1,224.8 million, up 1.1% compared to EUR 1,211.8 million in 2019. Revenue increased in Turkey and Egypt, while remaining stable or falling in all other regions. At constant 2019 exchange rates, revenue would have reached EUR 1,269.3 million, up by 4.7% on the previous year.

EBITDA reached EUR 263.7 million, unchanged with respect to the EUR 263.8 million in 2019. At constant exchange rates with the previous year, EBITDA would have reached EUR 267.0 million.

In 2020, EBITDA includes non-recurring income of EUR 0.6 million, including EUR 6.1 million in charges related to some equipment disposal in Turkey, and EUR 6.7 million of non-recurring income related to the revaluation of land and buildings in Turkey (non-recurring income of EUR 6.4 million in 2019).

Excluding non-recurring items, EBITDA would have increased by 2.2% compared to 2019, with an increase in Turkey, Denmark, Egypt, China and Sweden but a decrease in Belgium, the United States and Malaysia.

The EBITDA margin was 21.5% compared to 21.8% in 2019.

EBIT, considering EUR 106.6 million of amortisation, depreciation, impairment losses and provisions (EUR 112.1 million in 2019), amounted to EUR 157.2 million, up 3.6% compared to EUR 151.7 million in the previous year. Amortisation, depreciation, write-downs and provisions include EUR 1.3 million for assets impairment and EUR 1.0 million for risk provisions. There are no inventory impairment losses or risks provisions because of the Covid-19 pandemic. At constant exchange rates with the previous year, EBIT would have reached EUR 157.3 million.

Net financial debt as at 31 December 2020 was EUR 122.2 million, a decrease of EUR 117.4 million from EUR 239.6 million as at 31 December 2019. The debt position due to accounting standard IFRS 16 was equal to EUR 85.3 million compared to EUR 83.9 million as at 31 December 2019. Net of this impact, net financial debt fell by EUR 118.8 million.

This change was due to net working capital dynamics, careful management of investments amounting to EUR 55.7 million and financial management. The result was also affected by a EUR 30.9 million dividend distribution, around EUR 4.5 million spent for the purchase of treasury shares, as well as the settlement of previous transactions, during the first quarter of the year.

<b>Financial highlights (in millions of euros)</b>	<b>2020</b>	<b>2019</b>	<b>Change %</b>
Revenue from sales and services	1,224.8	1,211.8	1.1%
EBITDA	263.7	263.8	-0.0%
EBITDA/Revenue from sales and services (%)	21.5%	21.8%	
EBIT	157.2	151.7	3.6%
<b>Sales volumes (,000)</b>	<b>2020</b>	<b>2019</b>	<b>Change %</b>
Grey and White Cement (metric tons)	10,712	9,489	12.9%
Ready-Mixed Concrete (m <sup>3</sup> )	4,435	4,116	7.8%
Aggregates (metric tons)	9,531	9,710	-1.8%
<b>Net Financial Debt (in millions of euros)</b>	<b>31/12/2020</b>	<b>31/12/2019</b>	
Net financial debt	122.2	239.6	

## CEMENTIR'S APPROACH TO TAXES

The Cementir group adopts a decentralized tax management model with reference to the local tax compliance where all the associated companies manage locally their own tax obligations in accordance with the respective regulations.

Global, complex or extraordinary tax matters are then coordinated centrally, such as transfer pricing policy and extraordinary operations, with the support of associated companies.

Local Chief Financial Officers and Finance Managers have been invited to engage first-class tax consultants to enhance the level of competences required by the local operations and to be consistently up to date with the evolution of local laws and regulations.

**Global, complex or extraordinary tax matters are then coordinated centrally, such as transfer pricing policy and extraordinary operations, with the support of associated companies**

The Cementir group does not include companies or branches located in so called tax heavens or in any case in countries with a reduced direct or indirect taxation and does not adopt aggressive tax planning strategies consisting of incorporation of artificial schemes and entities nor tax-driven transactions in order to obtain tax savings and advantages.

As far as commercial transactions are concerned, from a transfer pricing perspective, group's guidelines were introduced in order to comply with various countries requirements, for example concerning the trading activities and at level of Aalborg Portland Holding.

Given the internationalization of Cementir group, the global approach to tax is inspired by the guidelines provided by OECD and by the application of the Treaties for the avoidance of double taxation, where applicable.

The Cementir group manages its approach to tax with full transparency and collaborative approach, by complying with the local legislation of the various countries in which the Group operates.

Tax risks may lead to a negative effect on the business goals of the organization and/or to financial or reputational damages.

In this respect, tax risks are in the scope of the Cementir group's risk management framework. Tax risks are then monitored within the group risk management processes and a dedicated set of controls and testing instruments are dedicated to local tax compliance matters.

Main purpose is to control and limit those risks and to avoid possible situations conflicting with local authorities' interpretation of tax regulations.

In addition, as already mentioned in the paragraph "The code of Ethics" 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 to report non-compliance with laws and regulations.

As part of the "207-1 Approach to Tax", the specific and qualified tax knowledge at associated companies' level and the recourse to tier 1 tax consultants, contribute to the proper management of the tax risk within the group as well as to the alignment of the tax approach to the requirements of the countries in which the group operates.

The Cementir group maintains relationships with local tax authorities with respect to information on rules interpretation, contacts during tax audits / inspections as well as ruling procedure, where appropriate.

Local Chief Financial Officer / Finance Manager address these situations with a fully transparent and collaborative approach as well as with a strong focus on the group's business and on the business model adopted in order to avoid any sort of misinterpretation of group and associated companies behaviors.

As the Group recognizes the relevance of a transparent management of tax issues, also given its global presence, it is committed to developing a structured process that will allow, in 2021, to disclose the quantitative information foreseen by GRI 207-4 concerning the "country-by-country" reporting".

## ECONOMIC VALUE GENERATED AND DISTRIBUTED<sup>19</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)	2020	2019	2018
<b>Direct economic value generated<sup>20</sup></b>	<b>1,241,703</b>	<b>1,243,951</b>	<b>1,299,237</b>
Total operating revenue	1,232,799	1,243,392	1,239,670
Financial income	12,303	4,636	70,835
Foreign exchange rate gains (losses)	(3,970)	(4,387)	(12,318)
Share of net profits of equity-accounted investees	571	310	1,050
<b>Economic value distributed</b>	<b>1,061,382</b>	<b>1,064,870</b>	<b>1,092,585</b>
<b>Operating costs</b>	<b>768,650</b>	<b>783,419</b>	<b>813,759</b>
Raw materials costs	461,195	466,387	479,283
Other operating costs	307,455	317,032	334,476
<b>Value distributed to employees</b>	<b>188,430</b>	<b>184,897</b>	<b>176,326</b>
Personnel costs	188,430	184,897	176,326
<b>Value distributed to capital providers</b>	<b>54,425</b>	<b>52,906</b>	<b>49,115</b>
Financial expense	23,519	25,654	28,145
Dividends	30,906	27,252	20,970
<b>Value distributed to Government</b>	<b>49,877</b>	<b>43,648</b>	<b>53,385</b>
Current taxes (income taxes)	37,898	32,366	42,304
Other non-income-related taxes	11,979	11,282	11,081
<b>Economic value retained</b>	<b>177,412</b>	<b>173,972</b>	<b>153,023</b>
Profit (loss) for the year, of which:	<b>78,457</b>	114,690	60,010
Profit (loss) from discontinued operations	0	13,109	33,094
Amortisation and depreciation	104,223	78,093	72,590
Provisions	990	4,091	3,865
Impairment losses	1,354	3,107	5,677
Deferred tax liabilities (assets)	7,612	1,294	22,213

<sup>19</sup> Please note that the 2018 figure includes the contribution of Lehigh White Cement Company, consolidated in full as of 1 April 2018.

<sup>20</sup> The economic value withheld is not the exact difference between the economic value generated and distributed. The slightly different is a cash effect, linked mainly to taxes.



## APPENDIX

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

Issue of European Directive 95/2014/EU	Cementir material issue	Identified risks and managing methods	Policies adopted	Relevant GRI standards	Reported disclosure	Notes
<b>Environmental</b>	Use of alternative fuels and materials	Energy Risk of unavailability of raw materials Risks connected to climate change	Chap. "In waste we see resources"	GRI 103: Management approach GRI 302: Energy GRI 301: Materials	302-1 302-3 301-1	
	Climate Change	Please see: Chap. "In waste, we see resources" "We respect the environment in all our operations"	Chap. "We respect the environment in all our operations"	GRI 103: Management approach GRI 305: Emissions	305-1 305-2 305-4	
	Channelled emissions		Chap. "We respect the environment in all our operations"	GRI 103: Management approach GRI 305: Emissions	305-7	
	Water management		Chap. "We respect the environment in all our operations"	GRI 103: Management approach GRI 303 (2018): Water and effluents	303-1 303-2 303-3	
<b>Social</b>	Community engagement	Risks related to licences and operating permits Please see: Chap. "We support our communities"	Chap. "We support our communities"	GRI 103: Management approach GRI 413: Local Communities	413-2	
	Fair competition	Compliance risks Please see: Chap. "Integrity and competition"	Chap. "Integrity and competition"	GRI 103: Management approach GRI 206: Anti-competitive behavior	206-1	
	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	-	

follow

follow

Issue of European Directive 95/2014/EU	Cementir material issue	Identified risks and managing methods	Policies adopted	Relevant GRI standards	Reported disclosure	Notes
<b>Staff-related</b>	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 (2018): Occupational health and safety	403-1 403-2 403-3 403-4 403-5 403-6 403-7 403-9	
	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 the company's activities, its performance, its results and the impact produced.
	Diversity management		Chap. "We value our people"	GRI 103: Management approach GRI 405: Diversity and Equal opportunities	405-1	
	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	
	The fight against corruption	Ethics, anti-corruption and compliance Compliance risks Please see: Chap. "Commitment to fight corruption"	Chap. "Commitment to fighting corruption"	GRI 103: Management approach GRI 205: Anti-corruption	205-3	

## TABLES ON THE COMPOSITION OF PERSONNEL BY COUNTRY

Turkey	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	655	45	700	671	53	724	716	59	775
Contractors	478	5	483	222	5	227	216	2	218
<b>Professional category</b>									
Executives	9	2	11	9	2	11	8	1	9
Manager	30	4	34	34	4	38	35	6	41
White collars	132	38	170	135	45	180	138	48	186
Blue collars	484	1	485	493	2	495	535	4	539
<b>Age range</b>									
<30	57	7	64	47	6	53	71	9	80
30-50	547	36	583	565	44	609	599	48	647
>50	51	2	53	59	3	62	46	2	48
<b>Type of contract</b>									
Permanent	644	42	686	661	49	710	709	56	765
Temporary	11	3	14	10	4	14	7	3	10
Full-time	655	45	700	671	53	724	716	59	775
Part-time	0	0	0	0	0	0	0	0	0

Turkey	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	4	2	6	3	2	5	2	1	3
>50	5	0	5	6	0	6	6	0	6
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	25	4	29	26	4	30	30	6	36
>50	5	0	5	8	0	8	5	0	5
<b>White collars</b>									
<30	12	7	19	8	6	14	18	9	27
30-50	109	29	138	114	37	151	108	38	146
>50	11	2	13	13	2	15	12	1	13
<b>Blue collars</b>									
<30	45	0	45	39	0	39	53	0	53
30-50	409	1	410	422	1	423	459	3	462
>50	30	0	30	32	1	33	23	1	24

## Egypt

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	59	9	68	60	8	68	58	7	65
Contractors	263	0	263	282	0	282	282	0	282
<b>Professional category</b>									
Executives	1	0	1	2	0	2	1	0	1
Manager	20	0	20	21	0	21	21	0	21
White collars	24	9	33	23	8	31	21	7	28
Blue collars	14	0	14	14	0	14	15	0	15
<b>Age range</b>									
<30	4	3	7	1	0	1	0	0	0
30-50	51	6	57	54	8	62	52	7	59
>50	4	0	4	5	0	5	6	0	6
<b>Type of contract</b>									
Permanent	57	8	65	59	7	66	58	7	65
Temporary	2	1	3	1	1	2	0	0	0
Full-time	59	9	68	60	8	68	58	7	65
Part-time	0	0	0	0	0	0	0	0	0

## Egypt

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	1	0	1	1	0	1	0	0	0
>50	0	0	0	1	0	1	1	0	1
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	17	0	17	18	0	18	17	0	17
>50	3	0	3	3	0	3	4	0	4
<b>White collars</b>									
<30	4	3	7	1	0	1	0	0	0
30-50	20	6	26	22	8	30	21	7	28
>50	0	0	0	0	0	0	0	0	0
<b>Blue collars</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	13	0	13	13	0	13	14	0	14
>50	1	0	1	1	0	1	1	0	1

China	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	175	45	220	167	47	214	168	49	217
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	1	0	1	1	0	1	1	0	1
Manager	16	1	17	16	1	17	15	1	16
White collars	51	22	73	45	24	69	46	26	72
Blue collars	107	22	129	105	22	127	106	22	128
<b>Age range</b>									
<30	16	7	23	16	7	23	22	12	34
30-50	92	37	129	99	39	138	95	36	131
>50	67	1	68	52	1	53	51	1	52
<b>Type of contract</b>									
Permanent	144	30	174	145	27	172	147	33	180
Temporary	31	15	46	22	20	42	21	16	37
Full-time	175	45	220	167	47	214	168	49	217
Part-time	0	0	0	0	0	0	0	0	0

China	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	1	0	1	1	0	1	1	0	1
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	8	1	9	8	1	9	8	1	9
>50	8	0	8	8	0	8	7	0	7
<b>White collars</b>									
<30	4	5	9	3	5	8	5	7	12
30-50	30	17	47	30	18	48	30	18	48
>50	17	0	17	12	1	13	11	1	12
<b>Blue collars</b>									
<30	12	2	14	13	2	15	16	5	21
30-50	54	19	73	61	20	81	57	17	74
>50	41	1	42	31	0	31	33	0	33

## Malaysia

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	172	36	208	165	36	201	161	38	199
Contractors	37	0	37	37	0	37	37	0	37
<b>Professional category</b>									
Executives	2	0	2	2	0	2	2	0	2
Manager	12	3	15	12	3	15	12	3	15
White collars	46	33	79	43	33	76	44	35	79
Blue collars	112	0	112	108	0	108	103	0	103
<b>Age range</b>									
<30	48	3	51	36	4	40	30	5	35
30-50	97	27	124	94	26	120	94	26	120
>50	27	6	33	35	6	41	37	7	44
<b>Type of contract</b>									
Permanent	172	36	208	146	36	182	147	38	185
Temporary	0	0	0	19	0	19	14	0	14
Full-time	172	36	208	165	36	201	161	38	199
Part-time	0	0	0	0	0	0	0	0	0

## Malaysia

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	1	0	1	1	0	1	1	0	1
>50	1	0	1	1	0	1	1	0	1
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	11	3	14	10	3	13	9	3	12
>50	1	0	1	2	0	2	3	0	3
<b>White collars</b>									
<30	10	3	13	6	4	10	4	5	9
30-50	27	24	51	24	23	47	25	23	48
>50	9	6	15	13	6	19	15	7	22
<b>Blue collars</b>									
<30	38	0	38	30	0	30	26	0	26
30-50	58	0	58	59	0	59	59	0	59
>50	16	0	16	19	0	19	18	0	18

Denmark	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	598	86	684	628	86	714	645	75	720
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	4	0	4	3	0	3	3	0	3
Manager	41	9	50	47	10	57	44	8	52
White collars	134	68	202	143	69	212	138	63	201
Blue collars	419	9	428	435	7	442	460	4	464
<b>Age range</b>									
<30	25	6	31	31	7	38	29	5	34
30-50	227	47	274	252	52	304	266	48	314
>50	346	33	379	345	27	372	350	22	372
<b>Type of contract</b>									
Permanent	597	85	682	625	83	708	645	75	720
Temporary	1	1	2	3	3	6	0	0	0
Full-time	593	81	674	623	82	705	642	74	716
Part-time	5	5	10	5	4	9	3	1	4

Denmark	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	1	0	1	1	0	1	1	0	1
>50	3	0	3	2	0	2	2	0	2
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	17	6	23	24	7	31	23	6	29
>50	24	3	27	23	3	26	21	2	23
<b>White collars</b>									
<30	9	5	14	9	7	16	6	5	11
30-50	63	35	98	69	41	110	71	39	110
>50	62	28	90	66	22	88	61	19	80
<b>Blue collars</b>									
<30	16	1	17	22	1	23	23	0	23
30-50	146	6	152	161	6	167	171	3	174
>50	257	2	259	268	2	270	266	1	267

Norway	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	126	22	148	131	19	150	122	19	141
Contractors	0	1	1	0	0	0	0	0	0
<b>Professional category</b>									
Executives	0	0	0	0	0	0	0	0	0
Manager	11	4	15	21	5	26	15	4	19
White collars	34	13	47	25	11	36	32	13	45
Blue collars	81	5	86	85	3	88	75	2	77
<b>Age range</b>									
<30	10	0	10	9	0	9	7	1	8
30-50	70	16	86	64	14	78	64	13	77
>50	46	6	52	58	5	63	51	5	56
<b>Type of contract</b>									
Permanent	126	22	148	131	19	150	122	19	141
Temporary	0	0	0	0	0	0	0	0	0
Full-time	123	22	145	128	19	147	120	19	139
Part-time	3	0	3	3	0	3	2	0	2

Norway	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Managers</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	0	0	0	0	0	0	0	0	0
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	5	2	7	8	3	11	5	2	7
>50	6	2	8	7	1	8	10	1	11
<b>White collars</b>									
<30	1	0	1	1	0	1	1	1	2
30-50	18	9	27	16	8	24	17	9	26
>50	15	4	19	17	4	21	14	4	18
<b>Blue collars</b>									
<30	9	0	9	8	0	8	6	0	6
30-50	47	5	52	42	3	45	42	2	44
>50	25	0	25	34	0	34	27	0	27

## Great Britain

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	34	6	40	37	8	45	37	7	44
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	1	0	1	1	0	1	2	0	2
Manager	3	1	4	2	2	4	2	1	3
White collars	2	5	7	1	6	7	5	6	11
Blue collars	28	0	28	33	0	33	28	0	28
<b>Age range</b>									
<30	3	0	3	4	1	5	5	0	5
30-50	14	3	17	14	4	18	13	3	16
>50	17	3	20	19	3	22	19	4	23
<b>Type of contract</b>									
Permanent	34	6	40	37	7	44	36	6	42
Temporary	0	0	0	0	1	1	1	1	2
Full-time	34	6	40	37	7	44	37	5	42
Part-time	0	0	0	0	0	0	0	2	2

## Great Britain

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	1	0	1	1	0	1	1	0	1
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	2	0	2	2	1	3	2	0	2
>50	1	1	2	0	1	1	1	1	2
<b>White collars</b>									
<30	0	0	0	0	1	1	1	0	1
30-50	1	3	4	0	3	3	1	3	4
>50	1	2	3	1	2	3	3	3	6
<b>Blue collars</b>									
<30	3	0	3	4	0	4	4	0	4
30-50	11	0	11	12	0	12	10	0	10
>50	14	0	14	17	0	17	14	0	14

France	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	30	2	32	26	2	28	27	2	29
Contractors	0	0	0	0	1	1	0	0	0
<b>Professional category</b>									
Executives	0	0	0	0	0	0	0	0	0
Manager	13	1	14	13	1	14	12	1	13
White collars	15	1	16	13	1	14	15	1	16
Blue collars	2	0	2	0	0	0	0	0	0
<b>Age range</b>									
<30	3	0	3	3	0	3	1	0	1
30-50	20	1	21	16	2	18	18	2	20
>50	7	1	8	7	0	7	8	0	8
<b>Type of contract</b>									
Permanent	30	2	32	26	2	28	27	2	29
Temporary	0	0	0	0	0	0	0	0	0
Full-time	30	2	32	26	2	28	27	2	29
Part-time	0	0	0	0	0	0	0	0	0

France	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	0	0	0	0	0	0	0	0	0
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	7	1	8	7	1	8	5	1	6
>50	6	0	6	6	0	6	7	0	7
<b>White collars</b>									
<30	1	0	1	3	0	3	1	0	1
30-50	13	0	13	9	1	10	13	1	14
>50	1	1	2	1	0	1	1	0	1
<b>Blue collars</b>									
<30	2	0	2	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	0	0	0	0	0	0	0	0	0

Belgium	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	421	58	<b>479</b>	431	59	<b>490</b>	433	56	<b>489</b>
Contractors	0	0	<b>0</b>	2	1	<b>3</b>	2	1	<b>3</b>
<b>Professional category</b>									
Executives	1	0	<b>1</b>	1	0	<b>1</b>	1	0	<b>1</b>
Manager	56	13	<b>69</b>	55	12	<b>67</b>	54	10	<b>64</b>
White collars	79	44	<b>123</b>	78	46	<b>124</b>	84	45	<b>129</b>
Blue collars	285	1	<b>286</b>	297	1	<b>298</b>	294	1	<b>295</b>
<b>Age range</b>									
<30	34	3	<b>37</b>	37	3	<b>40</b>	34	2	<b>36</b>
30-50	217	37	<b>254</b>	249	47	<b>296</b>	235	43	<b>278</b>
>50	170	18	<b>188</b>	145	9	<b>154</b>	164	11	<b>175</b>
<b>Type of contract</b>									
Permanent	403	57	<b>460</b>	404	58	<b>462</b>	415	55	<b>470</b>
Temporary	18	1	<b>19</b>	27	1	<b>28</b>	18	1	<b>19</b>
Full-time	393	41	<b>434</b>	403	42	<b>445</b>	400	40	<b>440</b>
Part-time	28	17	<b>45</b>	28	17	<b>45</b>	33	16	<b>49</b>

Belgium	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>
30-50	0	0	<b>0</b>	0	0	<b>0</b>	0	0	<b>0</b>
>50	1	0	<b>1</b>	1	0	<b>1</b>	1	0	<b>1</b>
<b>Manager</b>									
<30	9	1	<b>10</b>	9	1	<b>10</b>	7	0	<b>7</b>
30-50	20	9	<b>29</b>	20	10	<b>30</b>	16	9	<b>25</b>
>50	27	3	<b>30</b>	26	1	<b>27</b>	31	1	<b>32</b>
<b>White collars</b>									
<30	1	2	<b>3</b>	1	2	<b>3</b>	3	2	<b>5</b>
30-50	39	27	<b>66</b>	43	36	<b>79</b>	45	33	<b>78</b>
>50	39	15	<b>54</b>	34	8	<b>42</b>	36	10	<b>46</b>
<b>Blue collars</b>									
<30	24	0	<b>24</b>	27	0	<b>27</b>	24	0	<b>24</b>
30-50	158	1	<b>159</b>	186	1	<b>187</b>	174	1	<b>175</b>
>50	103	0	<b>103</b>	84	0	<b>84</b>	96	0	<b>96</b>

**USA**

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	179	21	200	187	20	207	192	15	207
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	2	0	2	3	0	3	3	0	3
Manager	37	2	39	38	2	40	35	3	38
White collars	14	19	33	19	18	37	18	12	30
Blue collars	126	0	126	127	0	127	136	0	136
<b>Age range</b>									
<30	18	2	20	20	3	23	22	2	24
30-50	67	13	80	66	9	75	70	5	75
>50	94	6	100	101	8	109	100	8	108
<b>Type of contract</b>									
Permanent	179	21	200	187	20	207	192	15	207
Temporary	0	0	0	0	0	0	0	0	0
Full-time	179	21	200	186	20	206	189	15	204
Part-time	0	0	0	1	0	1	3	0	3

**USA**

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	2	0	2	3	0	3	3	0	3
<b>Manager</b>									
<30	1	0	1	2	0	2	1	0	1
30-50	17	2	19	13	1	14	10	2	12
>50	19	0	19	23	1	24	24	1	25
<b>White collars</b>									
<30	1	2	3	1	3	4	0	2	2
30-50	6	11	17	6	8	14	8	3	11
>50	7	6	13	12	7	19	10	7	17
<b>Blue collars</b>									
<30	16	0	16	17	0	17	21	0	21
30-50	44	0	44	47	0	47	56	0	56
>50	66	0	66	66	0	66	62	0	62

## Sweden

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	114	20	134	110	24	134	115	26	141
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	2	0	2	2	0	2	2	0	2
Manager	5	3	8	5	3	8	6	3	9
White collars	29	15	44	24	17	41	26	17	43
Blue collars	78	2	80	79	4	83	81	6	87
<b>Age range</b>									
<30	15	2	17	14	3	17	13	3	16
30-50	51	9	60	49	12	61	46	16	62
>50	48	9	57	47	9	56	56	7	63
<b>Type of contract</b>									
Permanent	112	20	132	107	24	131	112	25	137
Temporary	2	0	2	3	0	3	3	1	4
Full-time	114	19	133	110	23	133	115	25	140
Part-time	0	1	1	0	1	1	0	1	1

## Sweden

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	2	0	2	2	0	2	2	0	2
<b>Manager</b>									
<30	0	0	0	0	0	0	1	0	1
30-50	3	1	4	3	1	4	3	2	5
>50	2	2	4	2	2	4	2	1	3
<b>White collars</b>									
<30	2	2	4	1	2	3	1	1	2
30-50	12	6	18	10	8	18	12	10	22
>50	15	7	22	13	7	20	13	6	19
<b>Blue collars</b>									
<30	13	0	13	13	1	14	11	2	13
30-50	36	2	38	36	3	39	31	4	35
>50	29	0	29	30	0	30	39	0	39

Italy	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	53	19	72	51	22	73	54	18	72
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	27	2	29	27	2	29	28	2	30
Manager	13	8	21	14	9	23	13	5	18
White collars	13	9	22	10	11	21	13	11	24
Blue collars	0	0	0	0	0	0	0	0	0
<b>Age range</b>									
<30	1	1	2	1	4	5	2	3	5
30-50	26	16	42	27	18	45	30	15	45
>50	26	2	28	23	0	23	22	0	22
<b>Type of contract</b>									
Permanent	53	19	72	50	22	72	54	17	71
Temporary	0	0	0	1	0	1	0	1	1
Full-time	53	19	72	51	22	73	54	18	72
Part-time	0	0	0	0	0	0	0	0	0

Italy	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	9	1	10	10	2	12	12	2	14
>50	18	1	19	17	0	17	16	0	16
<b>Manager</b>									
<30	0	0	0	0	2	2	0	0	0
30-50	10	7	17	11	7	18	11	5	16
>50	3	1	4	3	0	3	2	0	2
<b>White collars</b>									
<30	1	1	2	1	2	3	2	3	5
30-50	7	8	15	6	9	15	7	8	15
>50	5	0	5	3	0	3	4	0	4
<b>Blue collars</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	0	0	0	0	0	0	0	0	0

**Iceland**

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	9	2	11	9	2	11	10	0	10
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	0	0	0	0	0	0	0	0	0
Manager	1	0	1	1	0	1	1	0	1
White collars	2	1	3	2	1	3	2	0	2
Blue collars	6	1	7	6	1	7	7	0	7
<b>Age range</b>									
<30	1	1	2	0	1	1	0	0	0
30-50	5	0	5	6	0	6	10	0	10
>50	3	1	4	3	1	4	0	0	0
<b>Type of contract</b>									
Permanent	9	2	11	0	0	0	10	0	10
Temporary	0	0	0	0	0	0	0	0	0
Full-time	9	2	11	9	2	11	10	0	10
Part-time	0	0	0	0	0	0	0	0	0

**Iceland**

	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	0	0	0	0	0	0	0	0	0
<b>Manager</b>									
<30	1	0	1	0	0	0	0	0	0
30-50	0	0	0	1	0	1	1	0	1
>50	0	0	0	0	0	0	0	0	0
<b>White collars</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	2	0	2
>50	2	1	3	2	1	3	0	0	0
<b>Blue collars</b>									
<30	0	1	1	0	1	1	0	0	0
30-50	5	0	5	5	0	5	7	0	7
>50	1	0	1	1	0	1	0	0	0

Poland	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	5	2	7	5	3	8	5	3	8
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	0	0	0	0	0	0	0	0	0
Manager	1	0	1	1	0	1	1	0	1
White collars	1	2	3	4	3	7	1	3	4
Blue collars	3	0	3	0	0	0	3	0	3
<b>Age range</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	3	2	5	5	3	8	5	3	8
>50	2	0	2	0	0	0	0	0	0
<b>Type of contract</b>									
Permanent	5	2	7	5	3	8	5	3	8
Temporary	0	0	0	0	0	0	0	0	0
Full-time	5	2	7	5	3	8	5	3	0
Part-time	0	0	0	0	0	0	0	0	0

Poland	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	0	0	0	0	0	0	0	0	0
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	1	0	1	1	0	1
>50	1	0	1	0	0	0	0	0	0
<b>White collars</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	1	2	3	1	3	4	1	3	4
>50	0	0	0	0	0	0	0	0	0
<b>Blue collars</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	2	0	2	3	0	3	3	0	3
>50	1	0	1	0	0	0	0	0	0

Russia	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	1	0	1	1	0	1	1	0	1
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	0	0	0	0	0	0	0	0	0
Manager	1	0	1	1	0	1	1	0	1
White collars	0	0	0	0	0	0	0	0	0
Blue collars	0	0	0	0	0	0	0	0	0
<b>Age range</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	1	0	1	1	0	1	0	0	0
>50	0	0	0	0	0	0	0	0	0
<b>Type of contract</b>									
Permanent	1	0	1	1	0	1	1	0	1
Temporary	0	0	0	0	0	0	0	0	0
Full-time	1	0	1	1	0	1	0	0	0
Part-time	0	0	0	0	0	0	0	0	0

Russia	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	0	0	0	0	0	0	0	0	0
<b>Manager</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	1	0	1	1	0	1	1	0	1
>50	0	0	0	0	0	0	0	0	0
<b>White collars</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	0	0	0	0	0	0	0	0	0
<b>Blue collars</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	0	0	0	0	0	0	0	0	0
>50	0	0	0	0	0	0	0	0	0

Australia	31/12/2020			31/12/2019			31/12/2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees	5	0	5	4	0	4	3	0	3
Contractors	0	0	0	0	0	0	0	0	0
<b>Professional category</b>									
Executives	0	0	0	0	0	0	0	0	0
Manager	4	0	4	3	0	3	3	0	3
White collars	1	0	1	1	0	1	0	0	0
Blue collars	0	0	0	0	0	0	0	0	0
<b>Age range</b>									
<30	0	0	0	0	0	0	0	0	0
30-50	2	0	2	2	0	2	3	0	3
>50	3	0	3	2	0	2	0	0	0
<b>Type of contract</b>									
Permanent	4	0	4	4	0	4	3	0	3
Temporary	1	0	1	0	0	0	0	0	0
Full-time	5	0	5	4	0	4	3	0	3
Part-time	0	0	0	0	0	0	0	0	0

Australia	31/12/2020			31/12/2019		
	Men	Women	Total	Men	Women	Total
<b>Executive Manager</b>						
<30	0	0	0	0	0	0
30-50	0	0	0	0	0	0
>50	0	0	0	0	0	0
<b>Manager</b>						
<30	0	0	0	0	0	0
30-50	1	0	1	1	0	1
>50	3	0	3	2	0	2
<b>White collars</b>						
<30	0	0	0	0	0	0
30-50	1	0	1	1	0	1
>50	0	0	0	0	0	0
<b>Blue collars</b>						
<30	0	0	0	0	0	0
30-50	0	0	0	0	0	0
>50	0	0	0	0	0	0

## CEMENTIR DATA TABLES

### CO<sub>2</sub> AND ENERGY

#### CO<sub>2</sub> emissions - Cement production

	Unit	2020	2019	2018	GRI Ref
CO <sub>2</sub> eq. emissions [Scope 1] <sup>21</sup>	t	7,941,401	7,099,110	7,435,268	305-1
CO <sub>2</sub> eq. emissions [Scope 2] <sup>22</sup>	t	556,014	607,028	644,250	305-2
<b>Total CO<sub>2</sub> eq. emissions</b>	<b>t</b>	<b>8,497,416</b>	<b>7,706,138</b>	<b>8,079,518</b>	
CO <sub>2</sub> emissions Scope 1 - Grey cement <sup>23</sup>	kg CO <sub>2</sub> /TCE	718	696		305-4
CO <sub>2</sub> emissions Scope 1 - White cement	kg CO <sub>2</sub> /TCE	915	926		305-4

#### CO<sub>2</sub> emissions - Other activities<sup>24</sup>

	Unit	2020	2019	2018	GRI Ref
CO <sub>2</sub> eq. emissions [Scope 1]	t	35,831	62,740	57,771	305-1
CO <sub>2</sub> eq. emissions [Scope 2]	t	16,213	23,086	24,669	305-2
<b>Total CO<sub>2</sub> eq. emissions</b>	<b>t</b>	<b>52,044</b>	<b>85,826</b>	<b>82,440</b>	

#### Fossil fuel replacement index

	Unit	2020	2019	2018	GRI Ref
% of fossil fuel replacement (white and grey combined)	%	19%	20%	20%	302-3
% of fossil fuel replacement (only grey cement)	%	28%	31%	29%	302-3
% of fossil fuel replacement (only white cement)	%	3%	3%	2%	302-3

#### Fossil fuel consumption for cement production

Type	Unit	2020	2019	2018	GRI Ref
Coal	GJ	5,682,239	7,371,459	6,879,121	302-1
Petroleum coke	GJ	20,152,510	17,955,038	19,192,152	302-1
Fuel oil	GJ	368,464	320,529	372,176	302-1
Lignite	GJ	3,074,765	352,409	441,457	302-1
Gas oil	GJ	0	108,948	100,617	302-1
LPG	GJ	194	814	1,020	302-1
Natural gas	GJ	1,789,485	1,756,882	1,626,930	302-1
District heating	GJ	26,386	8,110	15,408	302-1
<b>Total</b>	<b>GJ</b>	<b>31,094,042</b>	<b>27,874,189</b>	<b>28,628,882</b>	

<sup>21</sup> Direct emissions from our operations: decarbonation of raw materials and fuel consumption for cement production.

<sup>22</sup> Indirect emissions from the generation of purchased electricity consumed by the company's owned or controlled equipment.

<sup>23</sup> Reported as Kg CO<sub>2</sub> per Total Cement equivalent (TCE). TCE is 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.

<sup>24</sup> In the other activities are included: ready-mix concrete, production of aggregates, production of concrete prefabricated products and waste collection and treatment.

### Fossil fuel consumption for white and grey cement production

Type	Unit	White	Grey	White	Grey	GRI Ref
		2020	2020	2019	2019	
Coal	GJ	0	5,682,239	14,369	7,357,090	302-1
Petroleum coke	GJ	11,956,158	8,196,352	11,747,268	6,207,771	302-1
Fuel oil	GJ	160,914	207,550	124,472	196,057	302-1
Lignite	GJ	0	3,074,765	0	352,409	302-1
Gas oil	GJ	0	0	64,806	44,142	302-1
LPG	GJ	0	194	814	0	302-1
Natural gas	GJ	1,789,485	0	1,756,882	0	302-1
District heating	GJ	0	26,386	0	8,110	302-1
<b>Total</b>	<b>GJ</b>	<b>13,906,557</b>	<b>17,187,485</b>	<b>13,708,610</b>	<b>14,165,579</b>	

### Alternative fuel consumption for cement production

Type	Unit	2020	2019	2018	GRI Ref
Used oil	GJ	161,074	248,053	200,492	302-1
Rubbers and plastics	GJ	58,364	58,677	40,031	302-1
Tyres	GJ	673,873	431,120	223,916	302-1
Paper/cardboard/wood	GJ	133,327	158,010	181,574	302-1
Meat and bone meal	GJ	1,187,248	1,109,985	998,137	302-1
Dry sewage sludge	GJ	41,672	52,319	123,057	302-1
RDF and SRF	GJ	4,787,849	4,608,513	5,132,148	302-1
Sunflower oil	GJ	41,856	89,395	76,977	302-1
Other alternative fuels	GJ	110,799	60,336	162,360	302-1
<b>Total</b>	<b>GJ</b>	<b>7,196,062</b>	<b>6,816,410</b>	<b>7,138,692</b>	

### Alternative fuel consumption for white and grey cement production

Type	Unit	White	Grey	White	Grey	GRI Ref
		2020	2020	2019	2019	
Used oil	GJ	0	161,074	0	248,053	302-1
Rubbers and plastics	GJ	0	58,364	0	58,677	302-1
Tyres	GJ	0	673,873	0	431,12	302-1
Paper/cardboard/wood	GJ	0	133,327	0	158,010	302-1
Meat and bone meal	GJ	388,854	798,394	325,911	784,074	302-1
Dry sewage sludge	GJ	0	41,672	0	52,319	302-1
RDF and SRF	GJ	0	4,787,849	0	4,608,513	302-1
Sunflower oil	GJ	0	41,856	0	89,395	302-1
Other alternative fuels	GJ	0	110,799	30,990	29,346	302-1
<b>Total</b>	<b>GJ</b>	<b>388,854</b>	<b>6,807,208</b>	<b>356,901</b>	<b>6,459,509</b>	

## Cement production fuel mix

Type	Unit	2020	2019	2018	GRI Ref
Coal	%	15%	21%	19%	302-3
Petroleum coke	%	53%	52%	54%	302-3
Fuel oil	%	1%	1%	1%	302-3
Lignite	%	8%	1%	1%	302-3
Gas oil	%	0%	0%	0%	302-3
LPG	%	0%	0%	0%	302-3
Natural gas	%	5%	5%	5%	302-3
District heating	%	0%	0%	0%	302-3
Used oil	%	0%	1%	1%	302-3
Rubbers and plastics	%	0%	0%	0%	302-3
Tyres	%	2%	1%	1%	302-3
Paper/cardboard/wood	%	0%	0%	1%	302-3
Meat and bone meal	%	3%	3%	3%	302-3
Dry sewage sludge	%	0%	0%	0%	302-3
RDF and SRF	%	13%	13%	14%	302-3
Sunflower oil	%	0%	0%	0%	302-3
Other alternative fuels	%	0%	0%	0%	302-3
<b>Total</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	

## Cement fuel mix - Recap

Type	Unit	2020	2019	2018	GRI Ref
Coal	%	23%	22%	20%	302-3
Petroleum coke	%	53%	52%	54%	302-3
Oil	%	1%	1%	1%	302-3
Natural Gas	%	5%	5%	5%	302-3
Alternative fuels (without biomass)	%	11%	12%	12%	302-3
Biomass	%	8%	8%	8%	302-3
<b>Total</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	

## Energy consumed to produce cement

Type	Unit	2020	2019	2018	GRI Ref
Thermal energy	GJ	38,290,104	34,690,599	35,767,574	302-1
of which: from alternative fuel	GJ	7,196,062	6,816,410	7,138,691	302-1
Thermal energy sold	GJ	-1,787,593	-1,521,827	-1,185,306	302-1
Electricity	GJ	4,560,025	4,278,324	4,323,044	302-1
<b>Total energy</b>	<b>GJ</b>	<b>41,062,536</b>	<b>37,447,096</b>	<b>38,905,312</b>	
Thermal energy per t of Total Cement Equivalent	GJ/TCE	3.71	3.72	3.52	302-3
Thermal energy produced by alternative sources per t of Total Cement Equivalent	GJ/TCE	0.70	0.73	0.73	302-3
Electricity per t of Total Cement Equivalent	GJ/TCE	0.44	0.45	0.44	302-3
<b>Total energy per t of Total Cement Equivalent</b>	<b>GJ/TCE</b>	<b>3.97</b>	<b>4.02</b>	<b>3.96</b>	

## Energy consumed for white and grey cement production

Type	Unit	White	Grey	White	Grey	GRI Ref
		2020	2020	2019	2019	
Thermal energy	GJ	14,295,411	23,994,693	14,065,511	20,625,088	302-1
of which: from alternative fuel	GJ	388,854	6,807,208	356,901	6,459,509	302-1
Thermal energy sold <sup>25</sup>	GJ	-1,787,593	0	-1,521,827	0	302-1
Electricity	GJ	1,293,361	3,266,664	1,280,579	2,997,745	302-1
<b>Total energy</b>	<b>GJ</b>	<b>13,801,179</b>	<b>27,261,357</b>	<b>13,824,264</b>	<b>23,622,832</b>	
Thermal energy per t of Total Cement Equivalent	GJ/TCE	5.36	3.13	5.29	3.09	302-3
Thermal energy produced by alternative sources per t of Total Cement Equivalent	GJ/TCE	0.15	0.89	0.13	0.97	302-3
Electricity per t of Total Cement Equivalent	GJ/TCE	0.49	0.43	0.48	0.45	302-3
<b>Total energy per t of Total Cement Equivalent</b>	<b>GJ/TCE</b>	<b>5.18</b>	<b>3.56</b>	<b>5.20</b>	<b>3.54</b>	

## Energy consumed to produce ready-mixed concrete

Type	Unit	2020	2019	2018	GRI Ref
Thermal energy	GJ	272,752	284,705	292,341	302-1
Electricity	GJ	97,292	69,983	77,729	302-1
<b>Total energy</b>	<b>GJ</b>	<b>370,044</b>	<b>354,688</b>	<b>370,070</b>	
Thermal energy per t of ready-mixed concrete	GJ/t	0.03	0.03	0.03	302-3
Electricity per t of ready-mixed concrete	GJ/t	0.01	0.01	0.009	302-3
<b>Total energy per t of ready-mixed concrete</b>	<b>GJ/t</b>	<b>0.04</b>	<b>0.03</b>	<b>0.04</b>	

## Energy usage of other activities

Type	Unit	2020	2019	2018	GRI Ref
Thermal energy	GJ	217,755	207,512.90	205,619.67	302-1
Electricity	GJ	128,430	60,628.73	65,538.27	302-1
<b>Total energy</b>	<b>GJ</b>	<b>346,185</b>	<b>268,141.63</b>	<b>271,157.94</b>	
Thermal energy per t of product made	GJ/t	0.01	0.01	0.02	302-3
Electricity per t of product made	GJ/t	0.01	0.01	0.01	302-3
<b>Total energy per t of product made</b>	<b>GJ/t</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	

## Energy used in the waste management sector

Type	Unit	2020	2019	2018	GRI Ref
Thermal energy	GJ	14,096	20,990.69	19,532.92	302-1
Electricity	GJ	19,797	29,437.94	30,492.00	302-1
<b>Total energy</b>	<b>GJ</b>	<b>33,893</b>	<b>50,428.63</b>	<b>50,024.92</b>	
Thermal energy per t of waste collected	GJ/t	0.05	0.05	0.05	302-3
Electricity per t of waste collected	GJ/t	0.08	0.07	0.08	302-3
<b>Total energy per t of waste collected</b>	<b>GJ/t</b>	<b>0.13</b>	<b>0.12</b>	<b>0.13</b>	

<sup>25</sup>The Aalborg plant recovers excess heat from cement production to provide district heating to local inhabitants.

## MATERIALS USED

### Raw materials used in cement production

	Unit	2020	2019	2018	GRI Ref
Non-renewable raw materials	t	15,148,632	13,357,195	13,979,467	301-1
Renewable raw materials	t	1,563,285	1,576,012	1,654,361	301-1
<b>Total</b>	<b>t</b>	<b>16,711,917</b>	<b>14,933,207</b>	<b>15,633,828</b>	
Renewable raw materials as a percentage of total raw materials used	%	9.35%	11.80%	11.80%	301-2

### Non-renewable raw materials used in cement production

	Unit	2020	2019	2018	GRI Ref
Limestone	t	12,103,107	11,190,862	11,525,227	301-1
Clay	t	1,063,405	890,370	1,033,118	301-1
Gypsum	t	324,515	324,297	345,84	301-1
Marl	t	498,706	414,799	531,685	301-1
Sand	t	299,973	272,549	263,986	301-1
Pozzolana	t	191,107	132,696	153,774	301-1
Admixtures	t	44,977	16,106	15,900	301-1
Auxiliaries	t	3	895	847	301-1
Stone	t	0	30,477	0	301-1
Calcium fluoride	t	36,431	10,671	19,735	301-1
Bauxite	t	5,916	11,012	18,774	301-1
Iron ore	t	75,768	19,223	40,072	301-1
Other residual materials	t	504,725	43,228	30,509	301-1
<b>Total</b>	<b>t</b>	<b>15,148,632</b>	<b>13,357,195</b>	<b>13,979,467</b>	

### Renewable materials used in cement production

	Unit	2020	2019	2018	GRI Ref
Fly ash	t	320,633	365,428	507,406	301-1
FGD gypsum	t	89,823	106,642	86,967	301-1
Iron oxide	t	24,715	104,302	120,847	301-1
Blast-furnace slag	t	230,862	239,079	267,360	301-1
Recovered limestone	t	164,929	267,110	187,289	301-1
Excavated stone (clay replacement)	t	189,230	163,351	195,186	301-1
Other materials	t	543,093	330,100	289,307	301-1
<b>Total</b>	<b>t</b>	<b>1,563,285</b>	<b>1,576,012</b>	<b>1,654,362</b>	

### Raw materials used in the production of ready-mixed concrete

	Unit	2020	2019	2018	GRI Ref
Non-renewable raw materials	t	9,501,881	8,726,530	10,095,137	301-1
Renewable raw materials	t	105,969	113,418	152,347	301-1
<b>Total</b>	<b>t</b>	<b>9,607,850</b>	<b>8,839,948</b>	<b>10,247,484</b>	
Renewable raw materials as a percentage of total raw materials used	%	1%	1%	2%	301-2

### Non-renewable raw materials used in ready-mixed concrete production

	Unit	2020	2019	2018	GRI Ref
Limestone	t	0	3,452	0	301-1
Sand	t	3,020,365	3,090,992	3,177,730	301-1
Admixtures	t	15,832	25,873	18,330	301-1
Auxiliaries	t	7	0	1,625	301-1
Cement	t	1,326,955	1,240,087	1,440,518	301-1
Stones	t	5,135,275	4,363,130	5,456,935	301-1
Clay	t	0	0	0	301-1
Aggregates	t	0	0	0	301-1
Steel Fibre	t	2,875	2,696	0	301-1
Basalt Fibre	t	0	4	0	301-1
Plastic macro fibre	t	178	211	0	301-1
Colour pigment	t	142	85	0	301-1
Other materials	t	252	0	0	301-1
<b>Total</b>	<b>t</b>	<b>9,501,881</b>	<b>8,726,530</b>	<b>10,095,138</b>	

### Renewable materials used in ready-mixed concrete production

	Unit	2020	2019	2018	GRI Ref
Fly ash	t	95,010	100,665	140,970	301-1
Microsilica	t	10,819	12,754	11,377	301-1
Blast-furnace slag	t	140	0	0	301-1
<b>Total</b>	<b>t</b>	<b>105,969</b>	<b>113,418</b>	<b>152,347</b>	

### Non-renewable raw materials other production activities

	Unit	2020	2019	2018	GRI Ref
Sand	t	39,700	56,576	83,973	301-1
Auxiliaries and admixtures	t	140	67	56	301-1
Cement	t	12,434	12,571	12,317	301-1
Stones	t	25,902	25,375	23,778	301-1
Steel	t	2,204	1,965	1,708	301-1
<b>Total</b>	<b>t</b>	<b>80,380</b>	<b>96,554</b>	<b>121,832</b>	

## OTHER AIR EMISSIONS

### Other air emissions for Cement production

	Unit	2020	2019	2018	GRI Ref
NOx	t	11,859	9,598	9,119	305-7
SOx	t	2,032	1,431	1,427	305-7
Dust	t	680	348	439	305-7

### Coefficients of emissions Cement production

	Unit	2020	2019	2018	GRI Ref
NOx	kg/TCE	1.15	0.98	0.93	305-7
SO2	gr/TCE	197	146	145	305-7
Dust	gr/TCE	66	35	45	305-7

### Coverage of Emissions

	Unit	2020	2019	2018	GRI Ref
NOx: continuous measurement <sup>26</sup>	%	100%	96%	Not reported	305-7
SOx: continuous measurement <sup>27</sup>	%	100%	96%	Not reported	305-7
Dust: continuous measurement <sup>28</sup>	%	100%	95%	Not reported	305-7

<sup>26</sup> Percentage of clinker produced by kilns with continuous measurement of NOx.

<sup>27</sup> Percentage of clinker produced by kilns with continuous measurement of SOx.

<sup>28</sup> Percentage of clinker produced by kilns with continuous measurement of dust.

## RECYCLING AND WASTE

### Waste generated from cement production by destination

	Unit	2020	2019	2018	GRI Ref
<b>Non-hazardous waste</b>					
Recycling	t	250,465	112,017	128,312	306-2
Incineration	t	170	406	703	306-2
Landfill	t	12,314	24,611	73,895	306-2
<b>Total non-hazardous waste</b>	<b>t</b>	<b>262,948</b>	<b>137,034</b>	<b>202,910</b>	
<b>Hazardous waste</b>					
Recycling	t	358	253	277	306-2
Incineration	t	46	51	59	306-2
Landfill	t	0	211,375	57	306-2
Oils and chemical waste	t	86	97	86	306-2
<b>Total hazardous waste</b>	<b>t</b>	<b>490</b>	<b>211,777</b>	<b>479</b>	
<b>Total waste</b>	<b>t</b>	<b>263,438</b>	<b>348,811</b>	<b>203,388</b>	

### Waste generated from ready-mixed concrete production by destination

	Unit	2020	2019	2018	GRI Ref
<b>Non-hazardous waste</b>					
Recycling	t	165,445	317,755	199,471	306-2
Incineration	t	243	328	297	306-2
Landfill	t	65,611	47,466	67,681	306-2
<b>Total non-hazardous waste</b>	<b>t</b>	<b>231,299</b>	<b>365,549</b>	<b>267,448</b>	
<b>Hazardous waste</b>					
Recycling	t	6	4	15	306-2
Incineration	t	4	1	2	306-2
Landfill	t	0	2	1	306-2
Oils and chemical waste	t	103	120	100	306-2
<b>Total hazardous waste</b>	<b>t</b>	<b>113</b>	<b>126</b>	<b>118</b>	
<b>Total waste</b>	<b>t</b>	<b>231,413</b>	<b>365,675</b>	<b>267,566</b>	

## Waste generated from other processes by destination

	Unit	2020	2019	2018	GRI Ref
<b>Non-hazardous waste</b>					
Recycling	t	2,061	38,1	7	306-2
Incineration	t	31	34,7	21	306-2
Landfill	t	0	60,0	0	306-2
<b>Total non-hazardous waste</b>	<b>t</b>	<b>2,092</b>	<b>132,9</b>	<b>28</b>	
<b>Hazardous waste</b>					
Recycling	t	10	3,8	4	306-2
Incineration	t	5	9,3	5	306-2
Landfill	t	0	0	0	306-2
Oils and chemical waste	t	107	128,4	159	306-2
<b>Total hazardous waste</b>	<b>t</b>	<b>121</b>	<b>141,5</b>	<b>168</b>	
<b>Total waste</b>	<b>t</b>	<b>2,213</b>	<b>274,4</b>	<b>196</b>	

## Waste processed<sup>29</sup>

	Unit	2020	2019	2018	GRI Ref
Solid urban waste	t	110,659	230,943	260,671	
Industrial waste	t	148,879	189,411	134,213	
<b>Total</b>	<b>t</b>	<b>259,537</b>	<b>420,354</b>	<b>394,884</b>	

## Recycled material produced

	Unit	2020	2019	2018	GRI Ref
Ferrous material	t	1,843	2,316	2,930	
Plastic	t	527	1,807	4,908	
Aluminium	t	672	966	1,156	
Other materials	t	4,389	1,668	1,348	
<b>Total</b>	<b>t</b>	<b>7,430</b>	<b>6,757</b>	<b>10,342</b>	

## Alternative fuel produced

	Unit	2020	2019	2018	GRI Ref
Refuse-derived fuel	t	14,335	16,223	21,890	
Solid recovered fuel	t	64,772	84,297	83,589	
<b>Total</b>	<b>t</b>	<b>79,107</b>	<b>100,520</b>	<b>105,479</b>	

<sup>29</sup>Waste processed by the waste business unit. In June 2020, Cementir sold the fixed equipment of Hereko, the division operating in the processing of municipal solid waste in Istanbul.

### Water withdrawals for cement production

	Unit	2020	2019	2018	GRI Ref
Surface water	m <sup>3</sup>	716,207	541,169	605,628	303-3
Ground water	m <sup>3</sup>	4,521,234	4,900,899	4,366,530	303-3
Rainwater	m <sup>3</sup>	583,479	717,163	693,603	303-3
Public aqueduct	m <sup>3</sup>	92,889	309,772	288,155	303-3
Other sources	m <sup>3</sup>	2,714,976	2,602,775	2,602,211	303-3
<b>Total</b>	<b>m<sup>3</sup></b>	<b>8,628,786</b>	<b>9,071,778</b>	<b>8,556,127</b>	

### Water withdrawals for cement production

	Unit	2020	2019	2018	GRI Ref
Volume of reused water	m <sup>3</sup>	3,428,782	3,100,141	2,576,684	303-3
<b>% of reused water</b>	<b>%</b>	<b>40%</b>	<b>34%</b>	<b>30%</b>	<b>303-3</b>

### Water withdrawals in water stressed area<sup>30</sup>

	Unit	2020	2019	2018	GRI Ref
Total Water	%	31%	not reported	not reported	303-5

### Water withdrawals for ready-mixed concrete production

	Unit	2020	2019	2018	GRI Ref
Surface water	m <sup>3</sup>	47,800	67,272	37,683	303-3
Ground water	m <sup>3</sup>	293,852	238,633	563,235	303-3
Rainwater	m <sup>3</sup>	99,620	110,210	84,458	303-3
Public aqueduct	m <sup>3</sup>	245,419	340,350	361,758	303-3
Others	m <sup>3</sup>	93,213	0	0	303-3
<b>Total</b>	<b>m<sup>3</sup></b>	<b>779,904</b>	<b>756,465</b>	<b>1,047,134</b>	

### Water reuse in ready-mixed concrete production

	Unit	2020	2019	2018	GRI Ref
Volume of reused water	m <sup>3</sup>	127,617	60,915	85,246	303-3
<b>% of reused water</b>	<b>%</b>	<b>16%</b>	<b>8%</b>	<b>8%</b>	<b>303-3</b>

<sup>30</sup> Using the WRI Aqueduct Tool <https://www.wri.org/aqueduct> (A high water stressed area is defined as having a baseline water stress greater than 40%.)

## HEALTH AND SAFETY - EMPLOYEES

	Unit	2020	2019	2018	GRI Ref
<b>TRIR (Total Recordable Injury Rate)</b>	<b>n</b>	<b>20.1</b>	<b>16.7</b>	<b>18.2</b>	<b>403-9</b>
Cement	n	18.0	12.5	16.2	403-9
RMC	n	16.9	23.8	19.1	403-9
Aggregates	n	37.6	9.9	10.1	403-9
Waste	n	64.6	45.3	81.9	403-9
Other	n	12.3	13.4	10.5	403-9
<b>Fatalities</b>	<b>n</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>403-10</b>
Cement	n	0	0	0	403-10
RMC	n	0	0	0	403-10
Aggregates	n	0	0	0	403-10
Waste	n	0	0	0	403-10
Other	n	0	0	0	403-10
<b>Fatality Rate</b>	<b>n</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>403-10</b>
Cement	n	0	0	0	403-10
RMC	n	0	0	0	403-10
Aggregates	n	0	0	0	403-10
Waste	n	0	0	0	403-10
Other	n	0	0	0	403-10
<b>High-Consequence Work-Related Injuries Rate (excluding fatalities)</b>	<b>n</b>	<b>0.00</b>	<b>0.17</b>	<b>0.17</b>	<b>403-9</b>
Cement	n	0.00	0.00	0.00	403-9
RMC	n	0.00	0.00	0.66	403-9
Aggregates	n	0.00	0.00	0.00	403-9
Waste	n	0.00	3.77	0.00	403-9
Other	n	0.00	0.00	0.00	403-9
<b>LTI FR (Lost-Time Injury Frequency Rate)</b>	<b>n</b>	<b>11.0</b>	<b>10.4</b>	<b>12.0</b>	<b>403-9</b>
Cement	n	9.1	9.1	10.7	403-9
RMC	n	14.0	16.1	18.4	403-9
Aggregates	n	17.1	6.6	6.7	403-9
Waste	n	24.8	11.3	0.0	403-9
Other	n	3.1	2.7	7.8	403-9

## HEALTH AND SAFETY - EMPLOYEES

	Unit	2020	2019	2018	GRI Ref
<b>LTI SR (Lost-Time Injury Severity Rate)</b>	n	<b>0.16</b>	<b>0.27</b>	<b>0.20</b>	<b>403-9</b>
Cement	n	0.12	0.25	0.14	403-9
RMC	n	0.28	0.35	0.39	403-9
Aggregates	n	0.28	0.08	0.08	403-9
Waste	n	0.03	0.65	0.00	403-9
Other	n	0.01	0.01	0.15	403-9
<b>Near Miss</b>	n	<b>446</b>	<b>526</b>	<b>478</b>	<b>403-9</b>
Cement	n	182	368	245	403-9
RMC	n	230	129	210	403-9
Aggregates	n	27	17	22	403-9
Waste	n	4	8	0	403-9
Other	n	3	4	1	403-9
<b>OIFR (Occupational Illness Frequency Rate)</b>	n	<b>0.0</b>	<b>0.5</b>	<b>0.3</b>	<b>403-10</b>
<b>Man-hours worked (millions of hours)</b>	n	<b>5.5</b>	<b>5.9</b>	<b>5.8</b>	<b>403-9</b>
Cement	n	3.3	3.5	3.4	403-9
RMC	n	1.4	1.4	1.5	403-9
Aggregates	n	0.3	0.3	0.3	403-9
Waste	n	0.2	0.3	0.2	403-9
Other	n	0.3	0.4	0.4	403-9

## HEALTH AND SAFETY - CONTRACTORS

	Unit	2020	2019	2018	GRI Ref
<b>TRIR (Total Recordable Injury Rate), on site</b>	<b>n</b>	<b>8.5</b>	<b>10.7</b>	<b>10.5</b>	<b>403-9</b>
Cement	n	7.1	10.6	8.6	403-9
RMC	n	9.7	12.0	17.4	403-9
Aggregates	n	27.2	16.1	0.0	403-9
Waste	n	15.1	0.0	0.0	403-9
Other	n	0.0	0.0	0.0	403-9
<b>Fatalities</b>	<b>n</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>403-10</b>
Cement	n	1	0	0	403-10
RMC	n	1	0	0	403-10
Aggregates	n	0	1	0	403-10
Waste	n	0	0	0	403-10
Other	n	0	0	0	403-10
<b>Fatality Rate</b>	<b>n</b>	<b>0.55</b>	<b>0.28</b>	<b>0.00</b>	<b>403-10</b>
Cement	n	0.42	0.00	0.00	403-10
RMC	n	0.97	0.00	0.00	403-10
Aggregates	n	0.00	8.06	0.00	403-10
Waste	n	0.00	0.00	0.00	403-10
Other	n	0.00	0.00	0.00	403-10
<b>LTI FR (Lost-Time Injury Frequency Rate) on site</b>	<b>n</b>	<b>6.0</b>	<b>6.7</b>	<b>4.5</b>	<b>403-9</b>
Cement	n	6.2	5.3	3.7	403-9
RMC	n	3.9	8.4	6.1	403-9
Aggregates	n	18.2	16.1	8.4	403-9
Waste	n	15.1	16.3	0.0	403-9
Other	n	0.0	0.0	0.0	403-9
<b>LTI SR (Lost-Time Injury Severity Rate) on site</b>	<b>n</b>	<b>0.09</b>	<b>0.09</b>	<b>0.08</b>	<b>403-9</b>
Cement	n	0.10	0.08	0.09	403-9
RMC	n	0.08	0.09	0.06	403-9
Aggregates	n	0.09	0.24	0.00	403-9
Waste	n	0.05	0.06	0.00	403-9
Other	n	0.00	0.00	0.00	403-9
<b>Man-hours worked on site (millions of hours)</b>	<b>n</b>	<b>3.6</b>	<b>3.6</b>	<b>3.8</b>	<b>403-9</b>
Cement	n	2.4	2.5	2.7	403-9
RMC	n	1.0	0.8	1.0	403-9
Aggregates	n	0.1	0.1	0.1	403-9
Waste	n	0.1	0.1	0.0	403-9
Other	n	0.0	0.0	0.0	403-9

<b>Turnover rate</b>	<b>Unit</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>GRI Ref</b>
Overall employee turnover rate	%	12%	14%	Not Reported	401-1

<b>Hours of training</b>	<b>Unit</b>	<b>2020 Total</b>	<b>2019 Total</b>	<b>2018 Total</b>	<b>GRI Ref</b>
Executives	h/per	8.0	19.9	22.1	404-1
Manager	h/per	17.4	18.8	20.3	404-1
White-collar	h/per	12.7	21.5	18.8	404-1
Blue-collar	h/per	10.4	14.1	21.3	404-1
<b>Total</b>	<b>h/per</b>	<b>11.7</b>	<b>16.8</b>	<b>20.5</b>	<b>404-1</b>

<b>Biodiversity</b>	<b>Unit</b>	<b>2020</b>	<b>GRI Ref</b>
Quarry with rehabilitation plan in place	%	95	304-1

<b>Human rights</b>	<b>Unit</b>	<b>2020</b>	<b>GRI Ref</b>
Human rights assessment	%	79	412-1

<b>Communities</b>	<b>Unit</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>GRI Ref</b>
Thermal energy provided to the Aalborg municipality	GJ	1,787,593	1,521,827	1,185,306	412-1

## Plants with certified Environmental Management System ISO 14001

Cement		Ready-mixed concrete		Waste management	
Anqing	X	Çimbeton		Quercia	X
Ipoh	X	Unicon DK		Neales	X
CCB	X	Unicon NO	X	Sureko	X
Al Arish		AbSydsten	X		
Aalborg (White + grey)	X	CCB Brussels	X		
Waco		CCB France			
York					
Izmir	X				
Elazig	X				
Kars	X				
Edirne	X				

## Plants with certified Energy Management System ISO 50001

Cement		Ready-mixed concrete		Waste management	
Anqing	X	Çimbeton		Quercia	
Ipoh	X	Unicon DK		Neales	
CCB		Unicon NO		Sureko	
Al Arish		AbSydsten			
Aalborg (White + grey)	X	CCB Brussels			
Waco		CCB France			
York					
Izmir	X				
Elazig	X				
Kars	X				
Edirne	X				

## Plants with certified H&S System ISO 45001

Cement		Ready-mixed concrete		Waste management	
Anqing	X	Çimbeton	X	Quercia	
Ipoh	X	Unicon DK		Neales	
CCB		Unicon NO		Sureko	X
Al Arish	X	AbSydsten			
Aalborg (White + grey)	X	CCB Brussels			
Waco		CCB France			
York					
Izmir	X				
Elazig	X				
Kars	X				
Edirne	X				



Storebælt Bridge, Denmark

# GRI CONTENT INDEX

GRI Standard	Disclosure	Number of page or link	Omissions
<b>General Disclosure</b>			
GRI 102: General Disclosures	102-1 Name of the organization	Cementir Holding	-
	102-2 Activities, brands, products, and services	"Our presence around the world" "Our brands"	-
	102-3 Location of headquarters	Roma - Corso di Francia 200	-
	102-4 Location of operations	"Our presence around the world"	-
	102-5 Ownership and legal form	"The Corporate Governance system"	-
	102-6 Markets served	"Our presence around the world" "Our brands"	-
	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 chain	"The Cementir Group" "Methodology Note"	-
	102-11 Precautionary Principle or approach	"Internal control and risk management risk"	-
	102-12 External initiatives	"Our vision for a net zero world"	-
	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 developing	-
	102-14 Statement from senior decision-maker	"Letter to the Stakeholder"	-
	102-16 Values, principles, standards, and norms of behavior	"Governance"	-
	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"	-
	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	-

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GRI Standard	Disclosure	Number of page or link	Omissions
<b>Material Topics</b>			
<b>Economic Performance (Business performances, expansion and consolidation)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Earnings and financial results" "The economic value generated and distributed"	-
	103-2 The management approach and its components	"Earnings and financial results" "The economic value generated and distributed"	-
	103-3 Evaluation of the management approach	"Earnings and financial results" "The economic value generated and distributed"	-
GRI 201: Economic Performances	201-1 Direct economic value generated and distributed	"Economic value generated and distributed"	-
<b>Anti-corruption (Ethics, Anti-corruption and Compliance; Transparency and Accountability)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Governance" "The commitment to fighting corruption"	-
	103-2 The management approach and its components	"Governance" "The commitment to fighting corruption"	-
	103-3 Evaluation of the management approach	"Governance" "The commitment to fighting corruption"	-
GRI 205: Anti-corruption	205-3 Confirmed incidents of corruption and actions taken	"The commitment to fighting corruption"	-
<b>Anti-competitive behaviour (Fair Competition; Transparency and Accountability)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Governance" "Integrity and competition"	-
	103-2 The management approach and its components	"Governance" "Integrity and competition"	-
	103-3 Evaluation of the management approach	"Governance" "Integrity and competition"	-
GRI 206: Anti-competitive behaviour	206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	"Governance" "Integrity and competition"	-
GRI 207: Tax	Disclosure 207-1 Approach to tax	"Cementir's approach to taxes"	The Group is committed to developing a structured process that will allow, in 2021, to disclose the quantitative information foreseen by GRI 207-4 concerning the "country-by-country" reporting
	Disclosure 207-2 Tax governance, control, and risk management	"Cementir's approach to taxes"	
	Disclosure 207-3 Stakeholder engagement and management of concerns related to tax	"Cementir's approach to taxes"	
	Disclosure 207-4 Country-by-country reporting	"Cementir's approach to taxes"	
<b>Materials (Use of alternative fuels and materials)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "In waste we see resources"	-
	103-2 The management approach and its components	"In waste we see resources" "The use of alternative fuels" "Alternative raw materials"	-

follow

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GRI Standard	Disclosure	Number of page or link	Omissions
<b>Material Topics</b>			
<b>Materials (Use of alternative fuels and materials)</b>			
GRI 103: Management approach	103-3 Evaluation of the management approach	"In waste we see resources"	-
		"Use of alternative fuels"	
		"Alternative raw materials"	
GRI 301: Materials	301-1 Materials used by weight or volume	"Alternative raw materials"	-
<b>Energy (Use of alternative fuels and materials e Climate Change)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note"	-
		"In waste we see resources"	
		"We respect the environment in all our operations"	
	103-2 The management approach and its components	"In waste we see resources"	-
		"We respect the environment in all our operations"	
	103-3 Evaluation of the management approach	"In waste we see resources"	-
		"We respect the environment in all our operations"	
GRI 302: Energy	302-1 Energy consumption within the organization	"Energy consumption"	-
		"Use of alternative fuels"	
	302-3 Energy intensity	"Energy consumption"	-
<b>Water (Water management)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note"	-
		"We respect the environment in all our operations"	
		"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 and Effluents	303-1 Interactions with water as a shared resource	"Water consumption"	-
		"Water consumption"	
		"Water consumption"	
	303-2 Management of water discharge-related impacts	"Water consumption"	-
	303-3 Water withdrawal	"Water consumption"	-
<b>Emissions (Climate Change e Channeled emissions)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note"	-
		"We respect the environment in all our operations"	
		"10 Year Roadmap"	
	103-2 The management approach and its components	"We respect the environment in all our operations"	-
		"10 Year Roadmap"	
	103-3 Evaluation of the management approach	"We respect the environment in all our operations"	-
		"10 Year Roadmap"	
GRI 305: Emissions	305-1 Direct (Scope 1) GHG emissions	"CO <sub>2</sub> emissions"	-
	305-2 Energy indirect (Scope 2) GHG emissions	"CO <sub>2</sub> emissions"	-
	305-4 GHG emissions intensity	"CO <sub>2</sub> emissions"	-
	305-7 Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	"Other air emissions"	-

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GRI Standard	Disclosure	Number of page or link	Omissions
<b>Material Topics</b>			
<b>Employment (People management and development)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 401: Employment	401-1 New employee hires and employee turnover	"Workforcenumber and consistency"	-
<b>Labor/Management relations (Industrial Relations)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 402: Labor/Management relations	402-1 Minimum notice periods regarding operational changes	"Industrial relations"	-
<b>Occupational Health &amp; Safety (Health &amp; Safety)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 403: Occupational Health & Safety	403-1 Occupational health and safety management system	"Concretely Safe"	-
	403-2 Hazard identification, risk assessment, and incident investigation	"Concretely Safe"	-
	403-3 Occupational health services	"Concretely Safe"	-
	403-4 Worker participation, consultation, and communication on occupational health and safety	"Concretely Safe"	-
GRI 403 (2018): Occupational Health & Safety	403-5 Worker training on occupational health and safety	"Concretely Safe"	-
	403-6 Promotion of worker health	"COVID-19 emergency management system" "Concretely Safe"	-
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	"Concretely Safe"	-
	403-9 Work-related injuries	"Concretely Safe"	-

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GRI Standard	Disclosure	Number of page or link	Omissions
<b>Material Topics</b>			
<b>Training and education (People management and development)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 404: Training and education	404-1 Average hours of training per year per employee	"We value our people"	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
<b>Diversity and Equal Opportunity (Diversity Management)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people"	-
	103-2 The management approach and its components	"We value our people"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 405: Diversity and Equal Opportunity	405-1 Diversity of governance bodies and employees	"Diversity e inclusion" "Appendix"	-
<b>Non discrimination (Human Rights)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We value our people" "Diversity e inclusion"	-
	103-2 The management approach and its components	"We value our people" "Diversity e inclusion"	-
	103-3 Evaluation of the management approach	"We value our people"	-
GRI 406: Non discrimination	406-1 Incidents of discrimination and corrective actions taken	In 2020, no reports or complaints were received concerning possible discrimination in the workplace	-
<b>Local Communities (Community Engagement)</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "We support our communities"	-
	103-2 The management approach and its components	"We support our communities"	-
	103-3 Evaluation of the management approach	"We support our communities"	-
GRI 413: Local Communities	413-1 Operations with local community engagement, impact assessments, and development programs	"Dialogue and support for local communities"	Qualitative description of the involvement of local communities and of the programs developed
	413-2 Operations with significant actual and potential negative impacts on local communities	"Dialogue and support for local communities"	-

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GRI Standard	Disclosure	Number of page or link	Omissions
<b>Material Topics</b>			
<b>Customer Management</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Customer management"	-
	103-2 The management approach and its components	"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"	-
<b>White Cement applications and quality</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "Leader in white cement"	-
	103-2 The management approach and its components	"Leader in white cement"	-
	103-3 Evaluation of the management approach	"Leader in white cement"	-
n.a.	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"	-
<b>Innovation</b>			
GRI 103: Management approach	103-1 Explanation of the material topic and its Boundary	"Methodology note" "How cement is made"	-
	103-2 The management approach and its components	"How cement is made"	-
	103-3 Evaluation of the management approach	"How cement is made"	-
n.a.	No disclosure of the GRI applicable. The document presents a qualitative description of the subject and actions taken by the Group	"How cement is made"	-
<b>Logistic and Supply Chain</b>			
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" "How cement is made"	-
	103-3 Evaluation of the management approach	"Methodology note" "How cement is made" logistics"	-
n.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)	"Concretely Safe"	-

Rome, 9 March 2021

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

## GLOSSARY

**Cement equivalent (TCE - Ton(s) of 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>:** an acidic oxide (anhydride) formed by a carbon atom bound to two oxygen atoms. Colourless, odourless and tasteless gas, heavier than air, which is formed in all the processes of combustion, respiration and decomposition of organic material, due to the total oxidation of the carbon and, in the cement industry, the decarbonation of limestone. It is an essential substance in the biological processes of plants and animals, but it is also responsible for the increase in global warming. Carbon dioxide, which allows sunlight to pass through unimpeded, absorbs infrared radiation emitted by the earth's surface, causing the so-called 'greenhouse effect'. The cement process emits CO<sub>2</sub> from two sources: the calcination of raw materials (mainly limestone) and the combustion of fuels for heat production.

**Frequency rate:** occupational Health and Safety indicator. Number of work-related injuries per hours worked (e.g. per millions of hours worked).

**g/tTCE:** grams per Ton of Cement Equivalent.

**Joule:** unit of measurement 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  $1 \times 10^9$  joules, while a terajoule (TJ) is equal to  $1 \times 10^{12}$  joules.

**Injury:** Work-related event due to unexpected and violent cause that results in partial or total inability to work or in the most severe cases, death. Commuting injuries are excluded.

**ISO 14001:** a voluntary international standard, establishing the requirements of the environmental management system. ISO 14001 is a certifiable standard, meaning that certification of compliance with its requirements may be obtained from an accredited certification auditor. ISO 14001 certification is not mandatory but is the result of a voluntary choice by a company/organisation that decides to establish/implement/maintain/improve its environmental management system. The adoption of the ISO 14001 standard allows an organisation to identify and monitor the impact of its activities on the environment and improve its environmental performance by implementing a systematic approach that involves the definition and the achievement of specific environmental goals.

**ISO 45001:** voluntary international standard, which establishes the requirements the occupational health and safety management system must meet. ISO 45001 is a certifiable standard, which means that certification of compliance with its requirements can be obtained from an accredited certification agency auditor. ISO 45001 certification is not mandatory but is the result of a voluntary choice by a company/organisation that decides to establish/implement/maintain/improve its occupational health and safety management system. The adoption of the ISO 45001 standard allows an organisation to identify and monitor the impact of its activities on health and safety and improve its performance by implementing a systematic approach that provides for the definition and achievement of specific health and safety objectives.

**ISO 50001:** a voluntary international standard which establishes the requirements for creating, implementing, maintaining and improving an energy management system. The aim of this system is to make it possible for an organisation to use a systematic approach to continuously improve its energy performance, including energy efficiency as well as energy consumption and use.

**ISO 9001:** voluntary international standard which establishes the requirements of the quality management system.

**l/t:** Litres per ton.

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

**NO:** Nitrogen oxide.

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

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

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

**Severity rate:** occupational Health and Safety indicator. Working days of absence due to a work-related injuries per hours worked (e.g. per thousands of hours worked).

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

**'Scope 2' emissions:** the indirect emissions of the company, those linked to the purchase of energy from sources controlled by another subject (e.g. electricity).

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

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

## EMISSION FACTORS USED

To calculate the direct emissions of CO<sub>2</sub> equivalents (Scope 1), the default CO<sub>2</sub> emission factors of the Global Cement and Concrete Association were used. Please refer to the Global Cement and Concrete Association (GCCA) The Cement CO<sub>2</sub> and Energy Protocol, Version 3 CO<sub>2</sub> and Energy Accounting and Reporting Standard for the Cement Industry.

To calculate the indirect emissions of CO<sub>2</sub> equivalents (Scope 2), the emission factors provided by Ecoinvent 3.7.1 were used. The Ecoinvent Database is a database that has emission factors linked to the electricity production mix of several countries around the world.



## **Independent auditor's report on the Sustainability Report**

To the Board of Directors of Cementir Holding NV

We have been engaged to undertake a limited assurance engagement on the Sustainability Report (hereinafter also the "Report") of Cementir Holding NV and its subsidiaries (hereinafter the "Group") for the year ended 31 December 2020.

### **Responsibilities of the Directors for the Sustainability Report**

The Directors of Cementir Holding NV are responsible for the preparation of the Report in accordance with the "Global Reporting Initiative Sustainability Reporting Standards" issued by the GRI – Global Reporting Initiative (the "GRI Standards"), as illustrated in the "Methodology note" section of the Sustainability Report.

The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of a Sustainability Report that is free from material misstatement, whether due to fraud or error.

The Directors are responsible for defining the sustainability performance targets of the Group, as well as for identifying its stakeholders and material topics to be reported on.

### **Auditor's Independence and Quality Control**

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the *International Ethics Standards Board for Accountants*, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies *International Standard on Quality Control 1 (ISQC Italy 1)* and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

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#### **PricewaterhouseCoopers SpA**

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### **Auditor's Responsibilities**

Our responsibility is to express a conclusion, based on the procedures performed, on whether the Sustainability Report complies with the requirements of the GRI Standards. We conducted our work in accordance with "*International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements other than Audits or Reviews of Historical Financial Information*" (hereinafter also "*ISAE 3000 Revised*"), issued by the *International Auditing and Assurance Standards Board (IAASB)* for limited assurance engagements. The standard requires that we plan and perform procedures to obtain limited assurance about whether the Sustainability Report is free from material misstatement.

The work performed was less in scope than in a reasonable assurance engagement conducted in accordance with *ISAE 3000 Revised* and, consequently, we did not obtain assurance that we became aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.

The procedures performed on the Sustainability Report were based on our professional judgement and included inquiries, primarily of personnel of the Group responsible for the preparation of the information presented in the Sustainability Report, inspection of documents, recalculations and other procedures designed to obtain evidence considered useful.

In detail, we performed the following procedures:

- 1 We analysed the process of definition of the material topics reported on in the Sustainability Report, with reference to the method of their identification in terms of priority for the various categories of stakeholders and to the internal validation of the results of the process;
- 2 We obtained an understanding of the processes underlying the generation, collection and management of significant qualitative and quantitative information included in the Sustainability Report.  
In detail, we inquired of and discussed with management personnel of Cementir Holding NV and with personnel of Aalborg Portland Malaysia Sdn Bhd, Cimentas AS and Cimbeton AS and we carried out limited analyses of documentary evidence, in order to obtain information about the processes and procedures supporting the collection, aggregation, processing and submission of non-financial information to the corporate function in charge of the preparation of the Sustainability Report.

Furthermore, for significant information, taking into account the activities and characteristics of the Group:

- at holding level:
  - (a) with reference to qualitative information presented in the Sustainability Report, we carried out interviews and obtained supporting documents to verify its consistency with available evidence;
  - (b) with reference to quantitative information, we performed both analytical procedures and limited tests to verify, on a sample basis, the accuracy of data aggregation.



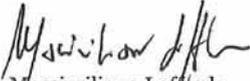
- for the following entities, Cementir Holding NV, Aalborg Portland Malaysia Sdn Bhd, Cimentas AS and Cimbeton AS, which we selected based on their activities, contribution to performance indicators at a consolidated level and location, we carried out remote visits during which we met the persons responsible and obtained documentary evidence, on a sample basis, about the correct application of the procedures and calculation methods applied for the indicators.

### **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 for the year ended 31 December 2020 is not prepared, in all material respects, in accordance with the requirements of the GRI Standards as illustrated in the “Methodology note” section of the Sustainability Report.

Rome, 9 March 2021

PricewaterhouseCoopers SpA

  
Massimiliano Lofredo  
(Partner)





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