

# Sustainability Report 2019

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**Dr. Dominik von Achten**, Chairman of the Managing Board

# Introduction

## Ladies and Gentlemen,

While we have been facing numerous new challenges in connection with the COVID-19 pandemic in recent weeks, one thing is certain: sustainability and the commitment to tackling climate change will remain central tasks both for HeidelbergCement and for the economy as a whole.

We are well positioned for this, as sustainable business in harmony with the environment and the careful use of natural resources have been priorities at HeidelbergCement for a long time. We already set our first specific CO<sub>2</sub> emission reduction target

in 2003, and we have updated and refined this target continuously over the years. Our Sustainability Commitments 2030, aligned with the Sustainable Development Goals (SDGs) of the United Nations, form the framework for our sustainability strategy for the next ten years, and we are also planning beyond that with our goal of a CO<sub>2</sub>-neutral concrete by 2050 at the latest.

## Successful commitment to tackling climate change

Our sustainability strategy focuses on climate protection. Our goal is clear: by 2030, we intend to reduce our specific net CO<sub>2</sub> emissions per tonne of cement by 30% compared with 1990. And we are making good progress – in 2019, we had already achieved a reduction of around 22%. We are pleased that this achievement has been recognised and acknowledged by independent institutes. In 2019, our reduction target was recognised as science-based by the Science Based Targets initiative (SBTi). This meant that HeidelbergCement was the first cement company worldwide to have SBTi-verified CO<sub>2</sub> reduction targets. The sustainability rating agency CDP also awarded HeidelbergCement a place on its Climate Change A List in 2019, as a globally leading company in terms of its commitment to tackling climate change.

## Thinking about climate protection in the long term: new technologies for CO<sub>2</sub> reduction

At our plants and research centers, we are working intensively to further reduce our CO<sub>2</sub> emissions. We are investing in improving the energy efficiency of our production facilities, using alternative raw materials and fuels, and replacing CO<sub>2</sub>-intensive clinker in our cement with raw and waste materials that have a significantly lower carbon footprint.

However, a considerable proportion of our emissions come from the process of cement manufacturing and this has so far been unavoidable. Besides the measures already mentioned, we must therefore develop new technologies that enable CO<sub>2</sub> savings on a large scale. In 2019, we thus invested in numerous projects, such as research into technologies for CO<sub>2</sub> capture, storage, and utilisation (CCU/CCS) in Brevik, Norway, and Alberta, Canada. In Europe, we have invested more than €1 billion in energy efficiency and emission reduction measures over the past ten years. By 2030, we aim to use 80% of our annual research budget for developing products that are even more sustainable.

### We act in a responsible manner

We are a partner of the United Nations Global Compact (UN GC) and have declared our express commitment to its ten principles in the areas of environmental protection, corruption prevention, labour standards, and human rights, and will take these into account and promote them within our corporate strategy as well as in all our business activities. We continued the human rights risk analysis that we launched in 2017, and by the end of 2019, we had carried out a human rights risk evaluation for more than two-thirds of our country organisations. In particular, this evaluation examined the risk of violating the rights of indigenous peoples.

HeidelbergCement pursues a zero-tolerance policy when it comes to occupational health and safety and compliance. More than 55,000 employees worldwide work towards the success of HeidelbergCement with competent and passionate dedication and strong loyalty to the company. Their health is our most important asset – in 2019, we therefore dedicated 48% of our corporate training to the topic of occupational safety.



To develop new technologies that enable CO<sub>2</sub> savings on a large scale, we invested in numerous projects in 2019.

### Well positioned globally for sustainable success

Our sustainability goals apply across the Group in more than 50 countries. Naturally, the achievement of these goals is also taken into account in the remuneration awarded to our international management. In the coming years, we want to continue being a good neighbour to those living in the vicinity of our more than 3,000 locations worldwide, and further decrease the ecological footprint of our business activity with ambitious research and development.

We want to shape the future of our company together with you – in dialogue with our shareholders, customers, employees, suppliers, and business partners as well as with the local communities near our operational sites and society as a whole. I look forward to your support on this journey.




Yours sincerely,

**Dr. Dominik von Achten**  
Chairman of the Managing Board

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## How to find your way through the report

To make it easier for you to navigate through the report, we have added links to this PDF file. In the grey bar at the top edge of the page, you can jump to the individual chapters from any page. The thin green bar shows you which chapter you are currently in. The icons operate similarly to those on a website:

-  Go forward/back
-  Table of contents
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You can also directly access the chapters from the table of contents. In each chapter, the column at the far left contains a linked overview of the sub-chapters. The following symbol in the text is also useful:

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**COMMUNICATION ON PROGRESS**

This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

Cover image: Lengfurt cement plant, Germany



## Company Portrait

- 6 → Organisational structure
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Image: Kiln at Geseke cement plant, Germany

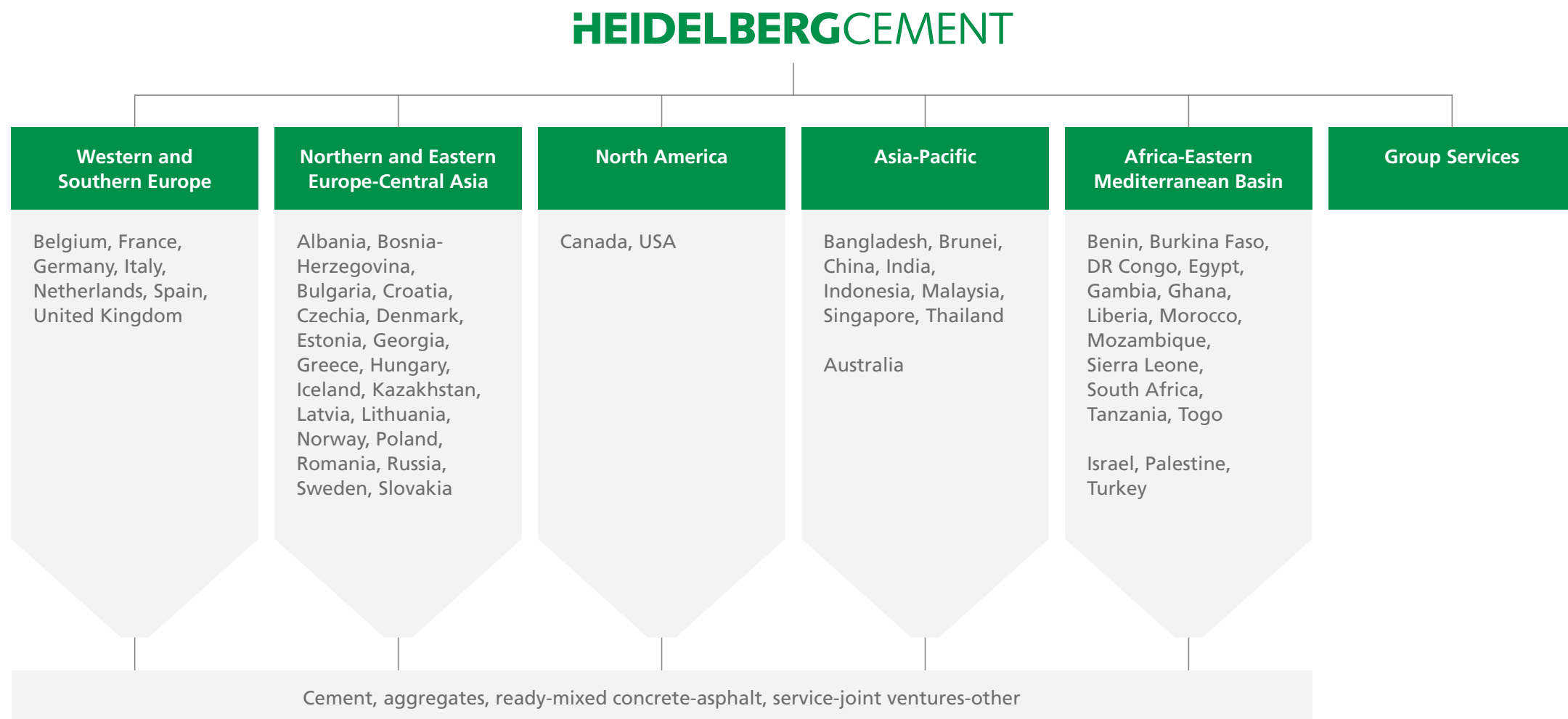




## Organisational structure

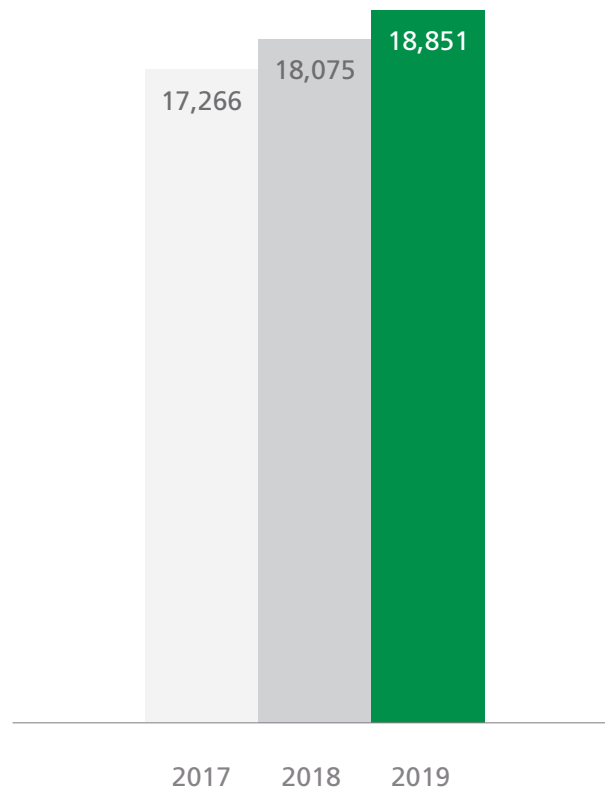
HeidelbergCement is divided into five geographical Group areas: Western and Southern Europe, Northern and Eastern Europe-Central Asia, North America, Asia-Pacific, and Africa-Eastern Mediterranean Basin (see organisation chart for breakdown of countries). Our global trading activities, especially the trading of cement, clinker, and solid fuels, are pooled together in the sixth Group area, Group Services.

Within the geographical Group areas, we have divided our activities into four business lines: cement, aggregates, ready-mixed concrete-asphalt, and service-joint ventures-other.

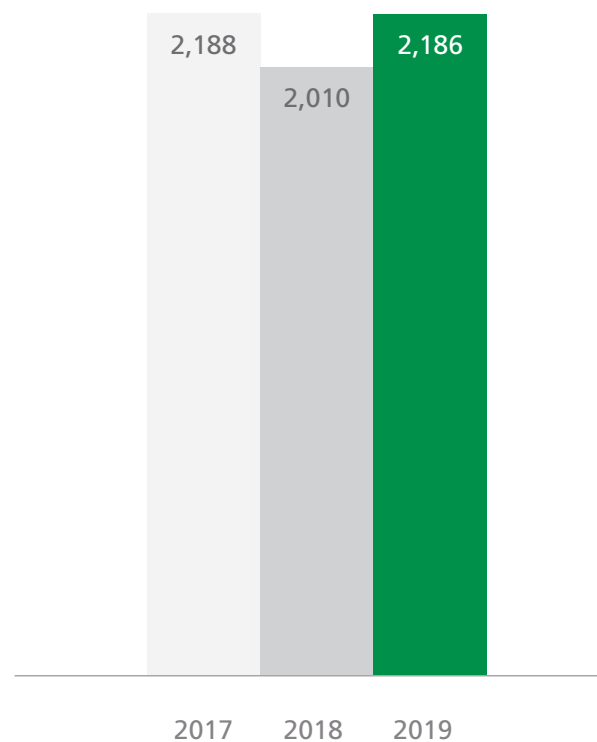




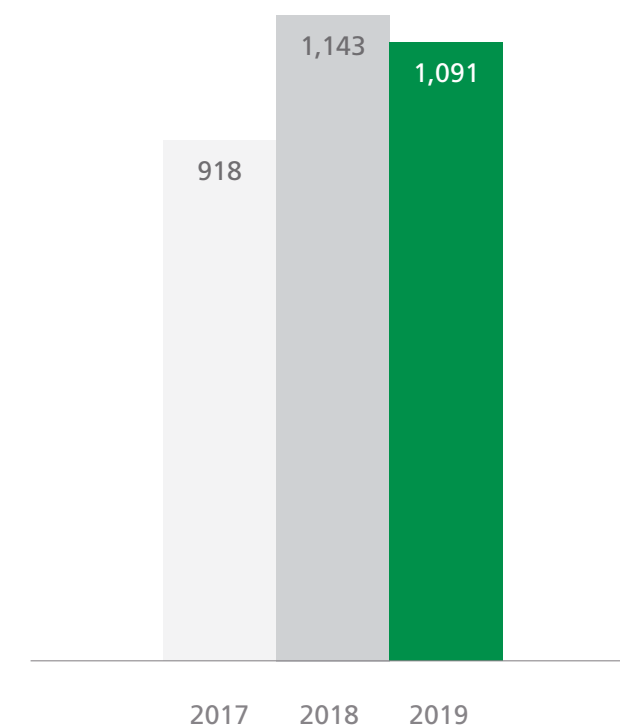
## Key business figures at a glance

**+4.3%****Total Group revenue**Increase from 2018 to 2019  
Figures in € millions

Besides consolidation and exchange rate effects, the increase of 4.3% in Group revenue was also due to price increases, which more than compensated for the slight fall in sales volumes.

**+8.8%****Result from current operations (RCO)**Increase from 2018 to 2019  
Figures in € millions

Price increases, exchange rate effects, and the initial application of the new accounting standard IFRS 16 all contributed to the rise of 8.8% in the result from current operations (RCO).

**-4.6%****Group share of profit**Decrease from 2018 to 2019  
Figures in € millions

The decrease of 4.6% in the Group share of profit was primarily due to non-recurring expenditure from the sale of the Ukraine activities.

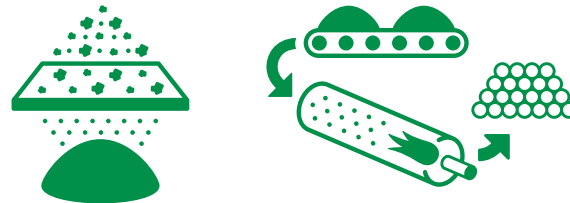
## Value chain



### Raw materials

- Extraction

The raw materials needed for producing our building materials – limestone for cement production as well as sand, gravel, and hard rock – are generally extracted from our own quarrying sites.



### Production

- Cement
- Aggregates
- Concrete
- Asphalt

Our business is based on the production of cement and aggregates, the two essential raw materials for manufacturing concrete.



### Customers

- Public-sector projects
- Commercial projects
- Private customers

We supply our products for public-sector and commercial projects as well as to private customers.

## Research and development

- CO<sub>2</sub> reduction
- Development of alternative clinkers
- Product innovation
- Recycling



The aim of our research activities is to provide customers with innovative products and to minimise energy consumption and CO<sub>2</sub> emissions by improving processes and creating new formulations.

## Procurement

- Raw materials
- Energy
- Logistics
- Maintenance

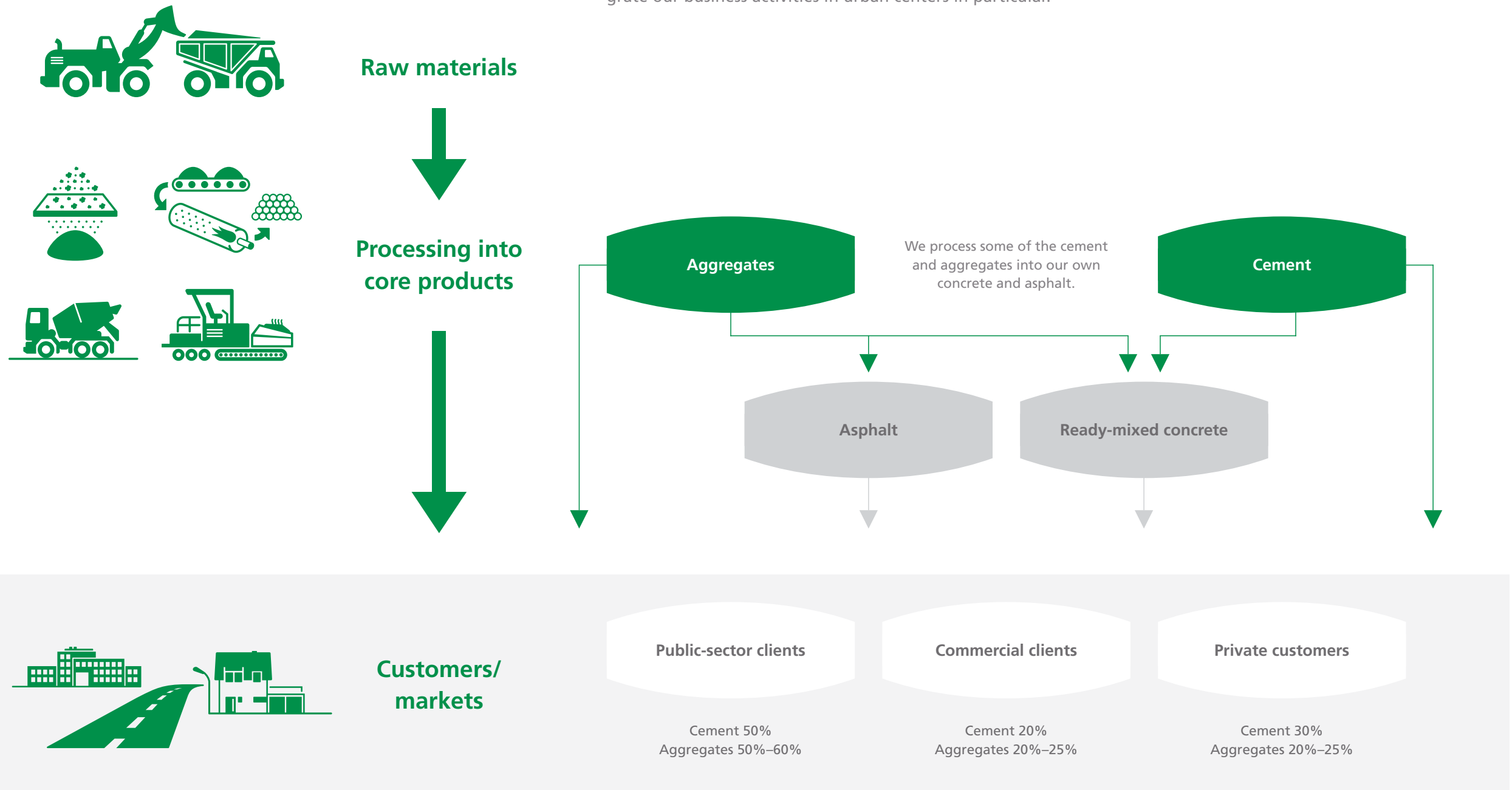


In 2019, HeidelbergCement procured goods and services with a total value of around €12.7 billion, with 39% being spent on energy and raw materials.



## Vertical integration

HeidelbergCement is one of the world's largest companies for building materials. The core activities of HeidelbergCement encompass the production and distribution of cement, aggregates, concrete, and asphalt. This vertical integration strategy is one of our growth drivers. In future, we plan to further integrate our business activities in urban centers in particular.





## Strategy & Management

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Image: Bridge over the Vltava River in the Prague district of Troja



## Top marks for climate protection

The international non-profit organisation CDP awarded HeidelbergCement a place on its **Climate Change A List 2019**, as a globally leading company in terms of its commitment to tackling climate change. Around 8,000 companies had supplied data to CDP, with only 179 receiving an “A”, the highest rating.



Responsibility & organisation → p. 14

## Six interdisciplinary working groups

are at the heart of HeidelbergCement's sustainability organisation. One member of the **Managing Board** is responsible for coordinating all sustainability activities, and the **Supervisory Board** also addresses different topics connected with sustainability on a regular basis.

Energy efficiency and climate protection → p. 17

# 30%

is our targeted reduction in CO<sub>2</sub> emissions by 2030 compared with 1990. In 2019, our reduction targets were officially confirmed by the **Science Based Targets initiative (SBTi)**, making HeidelbergCement the **first company in the cement sector** to have its reduction targets recognised as science-based.

Dialogue with political decision makers → p. 20

## Dialogue with political decision makers:

in early 2019, we created **two Public Affairs Manager positions**, based in Berlin and Brussels. In this way, we are supplementing HeidelbergCement's indirect representation through associations with **the company's direct contacts**.

📍 The focal points of our sustainability strategy until 2030

# SUSTAINABILITY COMMITMENTS 2030

## Driving economic strength and innovation

### Our Goals

- 🌐 We use all resources as efficiently as possible and target to earn a premium on our cost of capital.
- 🌐 We will spend 80% of our product R&D budget on the development of more sustainable products.
- 🌐 We are active in Green Building Councils and similar organisations in order to drive innovation of sustainable products together with our customers.



## Achieving excellence in occupational health and safety

### Our Goals

- 🌐 We will achieve zero fatalities.
- 🌐 We will achieve zero lost time injuries.



## Ensuring compliance and creating transparency

### Our Goals

- 🌐 We ensure compliance with international human rights, anti-corruption and labour standards through internal control and risk management systems, such as internal audits and a whistle-blower hotline.
- 🌐 We ensure that our suppliers comply with our Supplier Code of Conduct.
- 🌐 We ensure that each position is staffed with the most qualified person, independent from gender, origin, beliefs, and/or orientation.



## Enabling the circular economy

### Our Goal

- 🌐 We will continuously increase the substitution rate of natural raw materials by using by-products or recycled materials.



## Being a good neighbour

### Our Goals

- 🌐 We maintain open and transparent communication about our activities and performance.
- 🌐 We help improve the level of education and living conditions in neighbouring communities.
- 🌐 We offer one hour of voluntary community work per full-time employee per year.



## Reducing our environmental footprint

### Our Goals

#### Emissions

- 🌐 We will reduce our carbon footprint by 30% compared with 1990.
- 🌐 We will increase the alternative fuels rate to 30%.
- 🌐 We will reduce cement production-related SO<sub>x</sub> and NO<sub>x</sub> emissions by 40% and dust by 80% compared with 2008.
- 🌐 We will permanently reduce all other air emissions below cement industry average.

#### Water

- 🌐 We aim to reduce water consumption at all operational sites as far as economically and technologically feasible.
- 🌐 We aim to implement water management plans at all sites located in water scarce areas and aggregate them on a country level to form a water reduction master plan.
- 🌐 At Group level, all efforts will be combined in a global strategic water consumption reduction plan.

#### Land use

- 🌐 All our extraction sites are operated based on an after-use plan agreed with local authorities and in accordance with the needs of local communities.
- 🌐 We aim to include biodiversity enhancement recommendations in any new after-use plan.
- 🌐 We want to implement a biodiversity management plan at extraction sites within or in direct connection to nature conservation areas.
- 🌐 In case of nature-oriented after-use plans, we aim to achieve a positive impact on the biodiversity value at our extraction sites.





For us, doing business means a lot more than just achieving outstanding financial results. We also want to act in an environmentally and socially responsible manner. This understanding of our company shapes our sustainability strategy, our Sustainability Commitments 2030, and our Vision 2050.

## Vision & mission

We want to continue to grow. In the long term, however, we will only be able to achieve our business goals if we generate added value for society as a whole. Consequently, environmental and social goals are integrated alongside economic targets into our business strategy and the remuneration systems of our management. We conserve natural resources, as they form the basis of our business activities, and we take our social responsibility at the various company locations and towards our employees seriously. We want to continue providing our employees with good jobs and valuable qualifications in the future. In our production activities, we focus particularly on ensuring the health and safety of our employees. We want our customers to benefit from the high quality of our products and a close partnership. We maintain respectful relations with our suppliers and expect them to comply with our sustainability standards.

Our business activities are characterised by commercial prudence, the rule of law, and integrity. We promote value creation at our locations and help to increase prosperity and the quality of life in emerging economies in particular. Growth and good returns are also the basis for our investments in cutting-edge technologies to help protect the climate and the environment.



Local responsibility is central to our sustainability strategy at HeidelbergCement. Our Sustainability Commitments 2030 apply Group-wide to more than 3,000 locations in over 50 countries.

## Sustainability Commitments 2030

The HeidelbergCement Sustainability Commitments 2030 describe our most important activities for the coming decade in terms of promoting sustainability. This programme, which is valid throughout the Group, defines the principles, main components, and objectives of our sustainability strategy until the year 2030.

The focus is on climate protection: by 2030, we want to reduce our specific net CO<sub>2</sub> emissions by 30% compared to 1990 levels. This target has been approved by the Science Based Targets initiative (SBTi) and is in line with the Paris Agreement. We have already achieved a reduction of 22% by 2019.

The principles outlined in the Sustainability Commitments 2030 are as follows:

- Driving economic strength and innovation
- Achieving excellence in occupational health and safety
- Reducing our ecological footprint
- Promoting the circular economy
- Being a good neighbour
- Ensuring compliance and creating transparency

Through our Sustainability Commitments 2030, we are supporting the UN Sustainable Development Goals. In doing so, we aim to help address social, economic, and environmental challenges at a global level.

→ [www.heidelbergcement.com/en/sustainability-commitments-2030](http://www.heidelbergcement.com/en/sustainability-commitments-2030)

## Our Vision 2050

We are striving to significantly reduce the ecological footprint of cement production: our vision is to offer CO<sub>2</sub>-neutral concrete by 2050 at the latest. We plan to achieve this by increasing the proportion of alternative CO<sub>2</sub>-neutral raw materials and fuels, developing innovative cement types with a lower CO<sub>2</sub> footprint, and – in the long term – by capturing and utilising CO<sub>2</sub> emissions.

## Responsibility & organisation

Effective management systems operated by our various business lines help to ensure a continual process of improvement in accordance with our sustainability strategy. Within the framework of these systems, we have defined areas of responsibility and created structures that support the effective implementation and monitoring of the measures we employ to achieve our sustainability targets. These targets focus on occupational health and safety, compliance, and environmental sustainability.

**Occupational health and safety** is one of the cornerstones of our company, and it is an area for which all management levels at HeidelbergCement are accountable. Our occupational safety organisation falls within the remit of the Chairman of the Managing Board, to whom the Director Group Human Resources, who is responsible for Group Health & Safety, reports directly. H&S advisors support the Managing Board members responsible for the different Group areas in addition to the country managers, who coordinate the measures on a national basis, and the line managers at regional and local management level. Individual occupational health and safety measures are defined either by Group Health & Safety or the local units, depending on their nature and impact. Occupational safety measures are part of the personal goal agreement for the Managing Board and the top operations managers in the various countries. Last but not least, each individual employee, contractor, and visitor is responsible for following the occupational safety regulations.

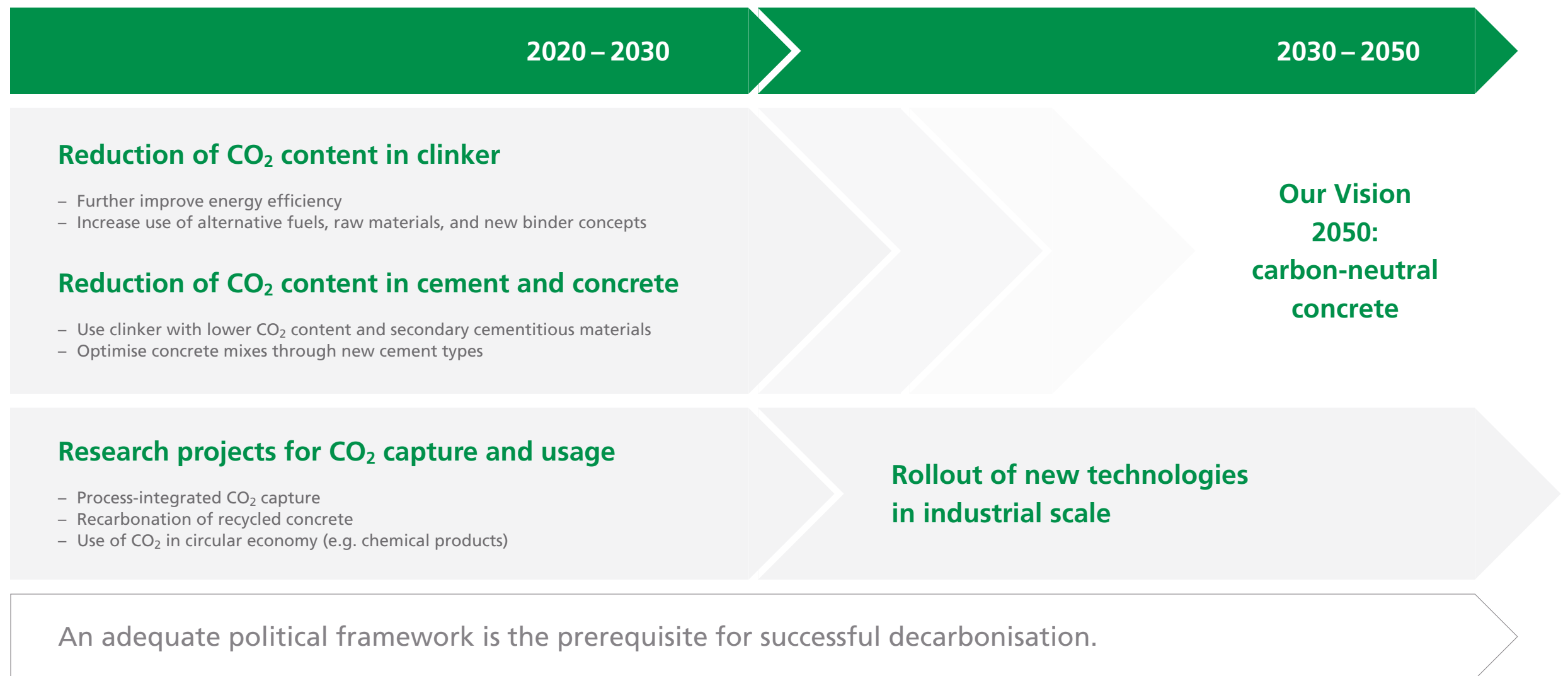
The **compliance** organisation is under the authority of the Chairman of the Managing Board, to whom the Director Group Compliance reports directly. Each country has its own compliance officer with a direct reporting line to the country manager. However, responsibility for ensuring that employees' conduct is compliant with the law and regulations lies with all managers and, of course, the employees themselves.

### Sustainability and environmental protection

**Environmental sustainability** is an integral element of HeidelbergCement's business strategy, which is defined by the Managing Board in consultation with the Supervisory Board. One member of the Managing Board is responsible for promoting and coordinating all sustainability activities. The Director of Global Environmental Sustainability (GES) reports to this member of the Managing Board and thus agrees all substantial measures directly with the Managing Board.

# Our Vision 2050

We want concrete to become the most sustainable building material.





## Sustainability management at HeidelbergCement



Until 2019, the member of the Managing Board responsible for the topic of sustainability also led the Group Environmental Sustainability Committee, whose task was to accelerate the progress of operating activities with regard to sustainability and position HeidelbergCement as a sustainable company. The Group Environmental Sustainability Committee was superseded by a new, more flexible working group model in 2019: six permanent interdisciplinary working groups comprising experts from different departments are now responsible for the topics of CO<sub>2</sub> Management, Sustainable Land Use, Sustainable Construction, Social Responsibility, Sustainability Strategy and Risk Management, and Sustainability Ratings and Reputation. Each of these topics has now been allocated a number of subgroups, which are then coordinated by steering committees, as in the case of CO<sub>2</sub> management, for example.

In addition, the GES department is responsible at Group level for preparing key decisions regarding the sustainability strategy and for implementing numerous measures in the area of environmental sustainability on the production side. These include defining guidelines and goals, identifying and disseminating tried-and-tested measures for achieving these goals, internal and external benchmarking, and representing the company in international organisations.

The Supervisory Board also addresses different topics connected with sustainability and environmental protection on a regular basis.

→ [Environmental management p. 41](#)

## Challenges & strategy

While we minimise the risks for our business and seize new opportunities, we simultaneously develop solutions for environmental and social challenges. This work focuses on the following topic areas:

- **Occupational safety:** HeidelbergCement is a manufacturing company. Occupational health and safety is therefore our highest priority. We use targeted measures to improve our technical and organisational safety standards and to raise awareness of safe working practices. This is aimed not only at our own employees but also at the employees of external companies and third parties.





- **Securing the supply of raw materials and conserving resources:** Our business operations are dependent on having long-term access to mineral-based raw materials in the vicinity of our plants. Such resources are finite, and their local exploitation often leads to conflicts of interest. We therefore view securing sustainable supplies of raw materials and conserving resources as key strategic tasks. Our strategy of conserving resources in cement production includes the use of alternative raw materials and fuels. In line with the European Commission's circular economy targets, HeidelbergCement is involved in research projects investigating the reuse of recycled building materials, for instance in fresh concrete.

→ **Energy and climate protection p. 42**  
**Building materials recycling p. 37, 44**

- **Nature conservation and species protection:** The quarrying of raw materials requires us to temporarily encroach upon the water supply, soil, and flora and fauna. At the same time, our extensive land use creates refuges for endangered animal and plant species. We operate our quarrying sites in accordance with international, national, and local environmental legislation. By 2030, we aim to operate all our extraction sites on the basis of an after-use plan agreed together with local authorities according to the needs of the local community. We strive to integrate recommendations for the promotion of biodiversity into every new after-use plan.

→ **Land use & biodiversity p. 48**

- **Energy efficiency and climate protection:** The production of cement requires a lot of energy. From both an economic and an environmental standpoint, it is therefore imperative that we further increase our energy efficiency. Cement production by its nature also leads to a high level of CO<sub>2</sub> emissions. We have made a commitment to accept our share of the global responsibility to

#### CO<sub>2</sub> reduction

# -30%

is our targeted reduction in CO<sub>2</sub> emissions by 2030 – and we already achieved 22% by 2019.

limit the rise in worldwide temperature to below 2°C. Our goal is to reduce our specific CO<sub>2</sub> emissions by 30% by 2030, compared with the 1990 level, and to realise our vision of CO<sub>2</sub>-neutral concrete by 2050 at the latest. We plan to achieve this by increasing the proportion of alternative CO<sub>2</sub>-neutral raw materials and fuels, developing innovative cement types with a lower CO<sub>2</sub> footprint, and – in the long term – by capturing and utilising CO<sub>2</sub> emissions. Our goal and the associated measures are consistent with the road map defined by the International Energy Agency (IEA) to help the industry implement the Paris Agreement. These steps were recognised by the Science Based Targets initiative (SBTi) in spring 2019, making HeidelbergCement the first cement company and one of currently around 370 businesses worldwide whose targets have been approved by the SBTi.

→ **Energy and climate protection p. 42**



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## Stakeholder engagement

In view of the strong local focus of our business operations, we can only be successful in the long term if we maintain good cooperative relationships with the various stakeholders in society. We seek to establish and maintain a dialogue based on trust with all such relevant groups – at a local, national, and international level. The resulting exchange of ideas and opinions helps us identify critical issues at an early stage and gain greater acceptance for our activities. Each country organisation is responsible for establishing and maintaining its own relationships with national and local stakeholders. The stakeholder dialogue at international level is managed by the Group departments for communication and sustainability.

### Relations with local stakeholders

Most of our plants and quarries are situated near cities and communities. It is therefore a matter of course for us to maintain regular contact with the respective community, government agencies, and local organisations, and to inform them about our activities and planned projects at the plant. Plant or facility management teams are generally responsible for such stakeholder relationships. Along with personal discussions, we use a variety of other means of communication to keep local stakeholder groups informed and enter into dialogue with them – ranging from traditional newsletters and guidelines to social media and a variety of public participation concepts.

We aim to reconcile the interests of the company with those of the local community. The concerns of our local stakeholders vary from location to location. In general, they range from simple visit enquiries and appeals for us to support projects and sports, cultural, and educational institutions all the way through to information requests. Stakeholders also raise reservations regarding imminent modernisation and expansion measures as well as complaints about noise and dust pollution from our plants and quarries. We respond



A site for art and part of the local community for a hundred years: the concrete plant of our subsidiary Ocean Concrete on Granville Island in Vancouver, Canada.

promptly to complaints and provide transparent information wherever possible and practical in order to address uncertainties and misgivings.

→ [Social responsibility p. 70](#)

### Stakeholder dialogue at a national and international level

HeidelbergCement is a member of various associations that represent their members' interests vis-à-vis governments, businesses, and the public. These memberships promote an exchange with other companies and organisations and a common determination to achieve greater sustainability. The topics addressed focus on challenges specific to individual countries and industrial policy, particularly with regard to the secure supply of raw materials, environmental protection, energy conservation, occupational health and safety, and social and labour issues.



Being part of the Green Building Councils, we foster sustainable construction by using new and recyclable building materials as well as by reducing the buildings' energy demand.

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As a Group headquartered in Germany, we are a member of econsense – Forum for Sustainable Development of German Business. This network of global German companies views itself as a partner and an expert forum for dialogue with governments, the scientific community, media, and society. The aim of econsense is to promote sustainable development in business and to assume social responsibility collectively.

→ <https://econsense.de/about-us/>

In order to further strengthen innovation and sustainability at a global level, HeidelbergCement and eight other international building materials companies came together to create the Global Cement and Concrete Association (GCCA) – the first worldwide association for cement and concrete. One of the association's most important tasks is to show how the challenges of construction – in relation to climate protection, for example – can be tackled in the future with the help of concrete.

→ <https://gccassociation.org/>

HeidelbergCement and its subsidiaries also work with national Green Building Councils in different countries. The goal here is to jointly develop certification systems for sustainable construction and to make the design, construction, and operation of buildings more sustainable. Since 2019, we have also been actively involved in the global umbrella organisation, the World Green Building Council. In June 2020, HeidelbergCement has joined the World Green Building Council's Europe Regional Network (ERN) as official Regional Partner.

→ <https://www.worldgbc.org/>

→ [Sustainable construction with concrete p. 37](#)

#### Dialogue with political decision makers

We participate in the European Cement Association (CEMBUREAU), which speaks for European cement manufacturers in discussions and negotiations with the European Union (EU) and other institutions. As a member of the European Aggregates Association (UEPG), we also present our positions on aggregates to political decision makers. Our interests concerning concrete are represented by the European Ready-Mixed Concrete Organisation (ERMCO) and the European Concrete Platform (ECP).



As an official partner of the Europe Regional Network of the World Green Building Council, we plan to expand our commitment to sustainable construction even further in the future.

**Christian Artelt**

Sustainable Construction Manager  
Global Environmental Sustainability



In early 2019, we created two Public Affairs Manager positions, based in Berlin and Brussels, to further strengthen our dialogue with policymakers. In this way, we are supplementing HeidelbergCement's indirect representation through associations with the company's direct contacts. At numerous events, panel discussions, presentations, background discussions, and other formats in 2019, we were also able to demonstrate in person how HeidelbergCement, as a leading building materials company in Europe, can help to solve societal problems. One of our areas of focus was climate protection, particularly our vision to offer CO<sub>2</sub>-neutral concrete by 2050.

Our lobbying activities represent the positions that HeidelbergCement takes in public.

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### Dialogue with analysts and investors who focus on sustainability issues

Sustainability considerations are becoming increasingly important in investment decisions as our shareholders and a growing number of financial analysts and rating agencies want to know how HeidelbergCement integrates the issue of sustainability into its Group strategy. They also want to know how successful the company has been in this regard. We provide data relating to these considerations to rating agencies including CDP, MSCI, Sustainalytics, ISS-oekom, and SAM CSA, and also attend bilateral meetings where required. In the past year, the central concerns discussed were measures and strategies to promote climate protection, the occupational safety of our employees and contractual partners, and respect for human rights.

#### Selection of our 2019 rating results



#### CLIMATE

#### CDP

In 2019, HeidelbergCement achieved the **top grade A** in the CDP sustainability rating in the area of climate protection and was therefore ranked on the "Climate Change A-List". For "Water Security", HeidelbergCement was awarded the grade A-.

→ [www.cdp.net](http://www.cdp.net)



#### ISS-oekom

In June 2019, HeidelbergCement received a **score of C+** in the ISS-oekom Corporate Rating and is thus authorised to use the ISS-oekom Prime Label.

→ [www.issgovernance.com](http://www.issgovernance.com)



#### MSCI ESG

In 2019, HeidelbergCement achieved an **AA rating** in the MSCI ESG Rating for the fourth time in a row.

→ [www.msci.com](http://www.msci.com) | [Disclaimer](#)



#### Sustainalytics

In Sustainalytics' ESG Risk-Rating, HeidelbergCement achieved a **28.4 score** in 2019 which places it 12<sup>th</sup> out of 104 in the construction materials industry. The management of material ESG issues was classified as strong.

→ [www.sustainalytics.com](http://www.sustainalytics.com)



### Dialogue with non-governmental organisations

As a matter of principle, we respond in a transparent manner to all requests from non-governmental organisations and interest groups. We also take critical questions as opportunities to inform people about our sustainability activities and enter into dialogue. We generally welcome the debate on climate change in society as a whole, which was particularly intense in 2019, since this topic has been driving us for a long time, as an energy-intensive quarrying company in the building materials industry.

GRI  
102-44,  
102-46

## Materiality analysis

We regularly use a materiality analysis to examine how relevant individual sustainability topics are for different stakeholder groups and for the company itself. The analysis thus helps us identify and evaluate issues and trends that are important for our business success today or could prove to be important in future.

→ [Stakeholder engagement p. 18](#)

The topics that are relevant for HeidelbergCement were already determined for the Sustainability Report 2017. In December 2019, they were discussed and validated at an internal workshop in view of current developments.

### Materiality analysis

# 17

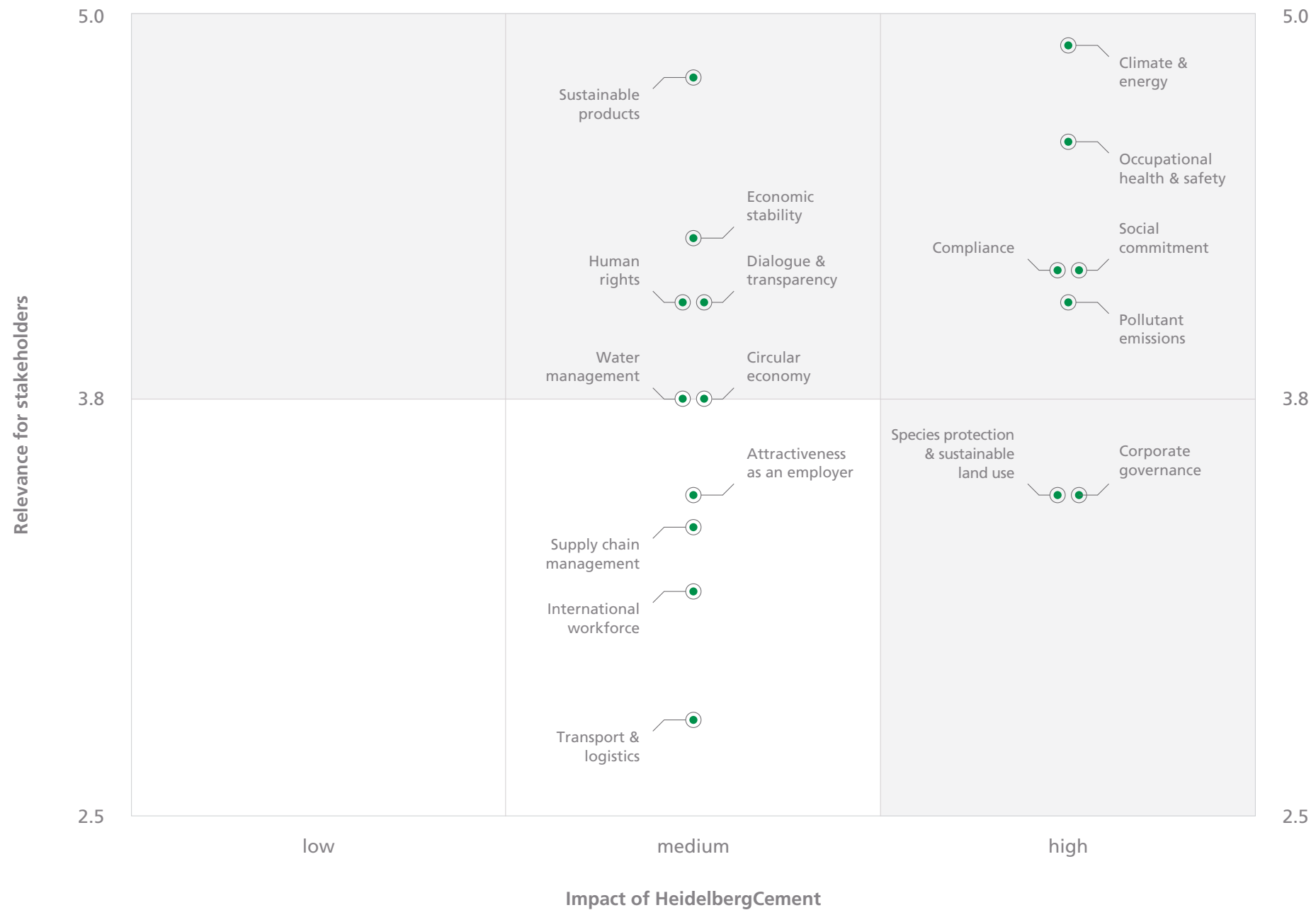
key action areas relating to sustainability were identified as part of our materiality analysis.

In order to determine the relevant topics, we compared the sustainability topics identified in the past with the lists of topics used by the Global Reporting Initiative (GRI) as well as those referred to in other frameworks and industry requirements, and examined their relevance to the business. This resulted in 17 action areas that we structured, consolidated, and allocated to the relevant GRI topic areas. The next step was to draw up an analysis from a stakeholder perspective and determine the social, economic, and environmental impact of our business activity. This process resulted in a materiality matrix, which is still valid and has been used, with minimal adjustments, for this report.

In 2020, we plan to carry out another materiality analysis.

Materiality matrix

GRI  
102-44,  
102-47





## Business & Compliance

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- 24 → Figures, data, facts
- 25 → Legal compliance
- 25 → Business performance
- 26 → Compliance management
- 28 → Risk & opportunity management



Image: Employee of our subsidiary Betotech, Germany



## Focus on human rights

By the end of 2019, more than two-thirds of our country organisations had carried out a **human rights risk evaluation**. By 2020, we aim to produce a risk assessment for **all countries** in which we are substantially active. Our suppliers must also subscribe to **fundamental human rights**.



Legal compliance → p. 25

## We have pledged

to incorporate the principles of the **UN Global Compact** in the areas of human rights, labour standards, environmental protection, and corruption prevention as integral elements of our strategy, corporate culture, and day-to-day business.

Business performance → p. 25

# Around 80%

of the **top management positions** in HeidelbergCement's plants were filled by **local managers** in 2019 – in this way, we make use of the expertise and experience of our local employees. In addition, each plant collaborates closely with local suppliers and service providers.

Compliance reporting system → p. 27

## Our compliance reporting system

offers employees and external parties the opportunity to report suspected **violations of laws or guidelines** – all such reports are handled anonymously if desired.





HeidelbergCement is committed to responsible corporate governance. We aim to achieve our business objectives in accordance with applicable laws and international standards and by means of socially and environmentally responsible methods. Only in this way will our success be sustainable.

## Legal compliance

In all the countries in which we operate, we comply with and respect the applicable laws and regulations. They form the legal basis for our business activity. As a globally active company, we are also bound by international values and standards. We are therefore committed to adhering to the core labour standards of the International Labour Organization (ILO), the Guidelines for Multinational Enterprises recommended by the Organisation for Economic Co-operation and Development (OECD), and the United Nations' Universal Declaration of Human Rights. We expect our employees and business partners worldwide also to observe these central guidelines and recommendations. Our Leadership Principles therefore include a commitment to these standards. Suppliers are obliged to commit to these standards by complying with our Supplier Code of Business Conduct.

When we joined the United Nations Global Compact in October 2018, we pledged to incorporate its principles in the areas of human rights, labour standards, environmental protection, and corruption prevention as integral elements of our strategy, corporate culture, and day-to-day business. In this context, we will increase our involvement in charitable projects in order to play our part in achieving the development goals of the United Nations, particularly the sustainability goals. We report to the public annually on our progress on the implementation of projects and the achievement of objectives, in accordance with the rules of the Global Compact.



At HeidelbergCement, lawful and ethical conduct is a core component of our business activities.

**Roland Sterr**

Director Group Legal and Group Compliance

Our management and monitoring structures comply with the company's Articles of Association, the Rules of Procedure of the Managing Board and Supervisory Board, the regulations under the German Stock Company Act, and the German Corporate Governance Code.

## Business performance

Group revenue for the whole of 2019 rose by 4.3% in comparison with the previous year to €18.9 billion. On a like-for-like basis, revenue increased by 2.1%. The result from current operations rose by 8.8% to €2,186 million. On a like-for-like basis, this is an increase of 4.7%. The profit for the financial year amounted to €1,242 million. In the 2019 financial year, cash inflow from operating activities of continuing operations increased significantly by €695 million to €2,664 million.

HeidelbergCement operates in over 50 countries and at more than 3,000 locations worldwide. We create jobs at our locations – both directly at our production sites and indirectly in upstream and downstream business sectors. We promote economic development with our wages, investment, purchasing, and taxes – particularly in economically weak regions. At our locations, local employees are given management responsibility wherever possible. The proportion of local managers in senior management positions in 2019 was



approximately 80%. Each of our plants collaborates closely with local suppliers and service providers, and we invest around 90% of our procurement volume in the areas immediately surrounding our plants or within the respective country.

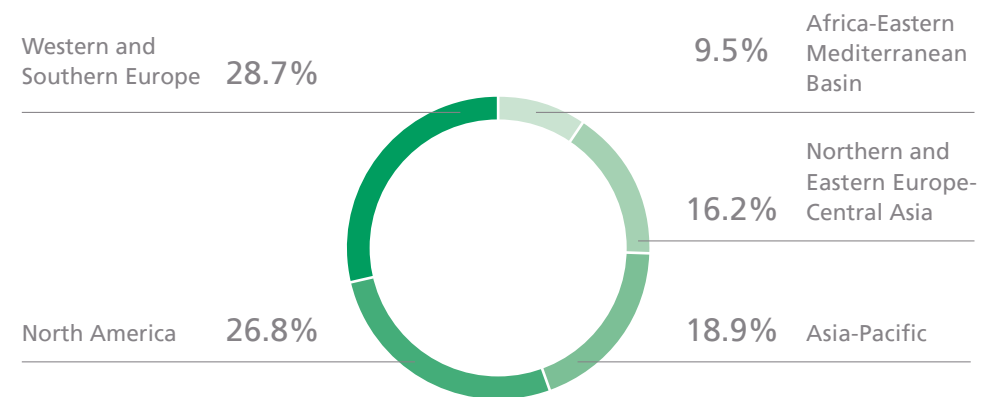
Our production and quarrying sites are generally designed for a service life of several decades. To maintain operating permits at our locations over these long periods and to renew our mining concessions at the required intervals, we need the constant support of the public. To achieve this, the key requirement is that we meet the conditions for regulatory approval, particularly in the area of environmental protection.

#### Procurement

# 90%

of our procurement value is invested in the areas immediately surrounding our plants or within the respective country.

#### Revenue by geographical Group areas



### Compliance management

We have implemented a compliance programme across the Group, based on our Code of Business Conduct, to ensure conduct that is compliant both with the law and with regulations. The Code of Business Conduct requires all employees to adhere to our basic principles of responsible corporate governance, regardless of whether such principles have been written into law or not. The compliance programme is reviewed on an ongoing basis for any necessary adjustments with respect to current legal and social developments, and it is improved and updated accordingly.

A central element of this programme is the self-commitment made by the Group management not to tolerate violations of applicable laws and to impose sanctions where appropriate. It also includes internal guidelines and measures that express the legal provisions in concrete terms. In addition to regular communication of these guidelines, our management issues compliance letters to raise awareness of compliance with laws and regulations. We also offer information brochures, an internet- and telephone-based

reporting system, and employee training that makes use of modern technologies and media, such as e-learning modules. The range of electronic courses available covers topics such as discrimination and harassment in the workplace, competition law, and the prevention of corruption.

Violations of applicable laws and internal guidelines will be consistently sanctioned. In addition, corrective and preventive measures ensure that similar incidents are prevented from occurring in the future.

Group-wide implementation of the compliance programme is monitored by regular and special audits by Group Internal Audit as well as via special half-yearly compliance reporting by the Director Group Compliance to the Managing Board and the Audit Committee of the Supervisory Board. He monitors the effectiveness of the compliance programme and verifies in particular whether it adequately satisfies the legal requirements and recognised compliance standards. An additional quarterly report regularly informs the Managing Board members with regional responsibility about the most important compliance incidents in their Group areas.

#### Compliance activities

In 2019, the country organisations of HeidelbergCement once again concentrated their efforts on implementing country-specific measures to tackle corruption and to ensure compliance with competition law, according to their risk profiles. This has been backed by appropriate training measures. In the reporting year, around 15,400 employees across the Group were registered for the compliance e-learning programmes.

In 2017, we launched a risk analysis for human rights. Among other issues, this explicitly examines the risk of violating the rights of indigenous peoples. By the end of 2019, more than two-thirds of our country organisations had carried out a human rights risk evaluation. This involved identifying potential risks and existing

measures as well as determining additional measures to be implemented. The aim is to produce a risk assessment for all countries in which we are substantially active and to repeat this analysis regularly at an interval of approximately three years. Our suppliers must subscribe to fundamental human rights relevant in the business context, such as the prohibition of child and forced labour, fair and safe work conditions, freedom of association, and a ban on discrimination.

In 2019, we continued to roll out the central supplier management system across the Group. Additional local and global measures to evaluate suppliers from a sustainability perspective were incorporated into an updated version of the global purchasing policy at the end of 2019. In 2020, we will gradually introduce these measures in the various countries.

→ **Additional information on the measures taken to establish legally compliant and responsible conduct within the HeidelbergCement Group can be found in our Annual Report 2019 on pages 55 ff. and 72 ff.**

#### Compliance reporting system

Our compliance reporting system, which also includes criteria for infringements of human rights and ILO core labour standards, offers employees and external parties the opportunity to report suspected violations of laws or guidelines. The system encompasses a variety of channels through which compliance violations can be addressed, ranging from reports sent directly to specifically authorised contact partners to information submitted via our whistle-blower hotline. All such reports are handled anonymously if desired. Our Compliance Incident Reporting & Case Management Guideline contains instructions and principles on how to report compliance-related incidents, investigate submitted complaints, and protect those reporting the incidents.

We examine every report we receive and take appropriate disciplinary action in cases of proven misconduct. These measures can range from reprimands to dismissal. We also initiate civil action and press criminal charges, if necessary. In addition to taking corrective action, we implement preventive measures to help stop similar incidents arising in the future.

In 2019, Group Compliance registered 99 confirmed or pending compliance cases across the Group, which corresponds to a rise of 11% compared with 2018. In our opinion, this rise is primarily the result of an increased willingness to report due to improved compliance awareness.

Of the allegations, 46% related to the working environment, 15% were property offences, and 8% concerned corrupt behaviour and conflicts of interest. The other 31% of allegations fall under various other categories. These include a small number of reports relating to human rights, such as safe working conditions and discrimination.

## Risk & opportunity management

HeidelbergCement's risk policy is based on the business strategy, which focuses on safeguarding the Group's existence and sustainably increasing its enterprise value. Entrepreneurial activity is always forward-looking and therefore subject to certain risks. Identifying risks, understanding them, as well as assessing and reducing them systematically are the responsibility of the Managing Board and a key task for all managers.

HeidelbergCement is subject to various risks that are not fundamentally avoided, but instead accepted, provided they are consistent with the legal and ethical principles of entrepreneurial activity and are well balanced by the opportunities they present. Opportunity management and risk management at HeidelbergCement are

closely linked by Group-wide planning and monitoring systems. Opportunities are recorded in the annual operational plan and followed up as part of monthly financial reporting. Operational management in each country and the central Group departments are directly responsible for identifying and observing opportunities at an early stage.

HeidelbergCement has installed transparent regulations to govern competences and responsibilities for risk management that are based on the Group's structure. A code of conduct, guidelines, and principles apply across the Group for the implementation of systematic and effective risk management. The standardised internal control and risk management system is based on financial resources, operational planning, and the risk management strategy established by the Managing Board.

Risks that may have a significant impact on our assets, financial, and earnings position are divided into four categories based on the risk catalogue established in the company: financial risks, strategic risks, operational risks, as well as legal and compliance risks.

In 2019, in order to respond to the growing importance of sustainability and non-financial risks, we also worked on a comprehensive risk assessment, involving the relevant internal stakeholders from the Group Communication & IR, Group Insurance & Corporate Risk, and Global Environmental Sustainability departments. In the next step, we will focus particularly on climate-related risks and investigate how HeidelbergCement can implement future reporting requirements.

→ **Comprehensive information on our risk and opportunity management can be found in our Annual Report 2019 on pages 63–73**



## Product & Innovation

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- 30 → Figures, data, facts
- 31 → Focus on customers
- 32 → Research & technology



Image: Additive manufacturing with 3D printable concrete supplied by Italcementi



## Innovative and sustainable products as a contribution to climate protection

Our R&D activities aim to generate added value for customers and the company through **innovative products**. We also minimise energy usage and our CO<sub>2</sub> emissions by means of **process improvements** and **new formulations**.



Expenditure and number of employees → p. 34

# €134 million

were spent on **research and technology** in 2019. This corresponds to 0.7% of Group revenue. **1,083 employees** were employed in research and technology in 2019.

Alternative raw materials for improving the carbon footprint → p. 34

## Alternative raw materials,

which are produced as **waste** in other industries, are one of the most important ways of **reducing CO<sub>2</sub> emissions** in cement manufacturing. By using these materials, we actively promote the **circular economy**.

Sustainable construction with concrete → p. 37

## Commitment to sustainable construction

HeidelbergCement and its subsidiaries work with national **Green Building Councils** in different countries. From 2020, we will also be actively involved as an **official partner in the Europe Regional Network (ERN)** of the World Green Building Council.

Our customers place the highest requirements on our products and services. The research and development (R&D) work we carry out at HeidelbergCement for our customers involves developing innovative products as well as improved processes and new cement and concrete formulations that help minimise energy consumption and CO<sub>2</sub> emissions. As a result, they also reduce the effects on the environment as well as costs.

## Focus on customers

Our close proximity to the market enables us to provide our customers with extensive advice and develop our products in close consultation with them. The responsible departments and employees are directly incorporated into the organisation of the respective national subsidiaries and develop cements, aggregates, and concretes that are optimally adapted to local needs. This development work is often carried out in close cooperation with our customers. However, our work does not end with the product, but also includes providing the customers with expert advice on product usage. Customers who wish to file complaints can get in touch with their personal contact partners, whereby all complaints – whether of a technical, logistical, or commercial nature – are forwarded directly to the appropriate department.

In order to continually deliver more value to our customers and offer them the high-quality solutions they expect, we need to look beyond mere product innovation. By truly understanding our customers and their needs, we are able to optimise not just our products but also our services. We believe that this creates greater customer value, which brings major benefits, such as differentiation, loyalty, advocacy, and sustainable growth.

Since 2015, HeidelbergCement has been using the Net Promoter System (NPS)<sup>®</sup> as a customer experience optimisation program. This



To deliver business and customer value, we are working in an agile development framework and are in constant touch with our end users. With our HConnect digital suite and products like the OnSite mobile app, we aim to make HeidelbergCement the easiest, most efficient and most personal company to do business with.

**Roman Lentz**

Chief Digital Transformation Officer

allows us to deliver superior value to our customers worldwide. In 2018, full customer journey mapping was introduced to deepen our customer insights. In the past five years, over 2,000 optimisations based on customer feedback have been made to improve the experience we offer our customers. We treat all the customer data we collect confidentially and in line with GDPR, and we do not pass on any information to third parties.

### Applying leading-edge technologies to our core business

One of the core values we have embraced at HeidelbergCement's Digital Transformation Office (DTO) is that building great digital tools requires us to understand the people who will be using those tools. This notion compels us to adopt a user-first instead of a technology-first mindset. DTO started its journey into user-centred design thinking by going out in the field and talking to customers about their day-to-day interactions, their needs and expectations, and their pain-points in doing business with HeidelbergCement. This has shaped our understanding and brought us one step closer to building and delivering products that address those specific needs.



Heidelberg Technology Center (HTC) in Leimen, Germany: one of its main research topics is the reduction of CO<sub>2</sub> emissions.

## Research & technology

The aim of research and development (R&D) at HeidelbergCement is to develop innovative products as well as process improvements and new formulations, in order to minimise the use of energy, CO<sub>2</sub> emissions, and hence costs.

### Our research and development activities

The innovation activities of HeidelbergCement focus on five main areas:

- **Products and applications:** The main priority is the development and improvement of binders and concretes with optimised properties and innovative functionalities.
- **Cement production:** Continuous improvement and the sharing of best practices are priorities in the cement business line. This is illustrated by the Continuous Improvement Program (CIP), Maintenance Improvement Program (MIP), and Operational Excellence (OPEX).

In 2019, we made further progress in the area of digitalisation and Industry 4.0 (CEM 4.0 project). Digital technologies allow us, for instance, to analyse plants and, if necessary, provide support remotely. We further advanced the introduction of Expert System, a software solution for optimising production.

- **Aggregates:** In the aggregates business line, our Continuous Improvement and Performance Management programme (CI Agg) exceeded the savings target of €49 million in 2019. It aims to make improvements along the entire value chain, from the extraction of raw materials through to production processes and sales. Through a similar programme, launched in the asphalt operating line in 2018, we achieved savings of around €10 million in 2019.
- **Ready-mixed concrete:** The Competence Center Readymix (CCR) aims to generate savings in the ready-mixed concrete operating line and improve the quality of the products and services. This will be achieved through an improvement programme examining all parts of the ready-mixed concrete business starting from the ground up delivering efficiencies in raw materials, logistics, production, product range, assets, and concrete pumps.
- **Development of cements and concretes with improved carbon footprint:** We are developing composite cements that contain less clinker. Reducing the proportion of clinker is the most important lever when it comes to minimising energy consumption and CO<sub>2</sub> emissions, and in conserving natural raw materials. We are also working on processes to incorporate CO<sub>2</sub> in our products by means of carbonation, which allows us to use building materials for CO<sub>2</sub> storage.



### Organisation and fields of activity

Our global competence centers Heidelberg Technology Center (HTC), Competence Center Materials (CCM), Competence Center Readymix (CCR), and teams from the two centers for R&D and product innovation – Global R&D (GRD) and Global Product Innovation (GPI) – pool the knowledge in our Group and make it available to all operating units. International experts work in all of our competence centers, offering wide-ranging expertise in the areas of cement, concrete, and aggregates.

**Central R&D and innovation:** We have concentrated our Group-wide R&D and innovation activities in the cement, ready-mixed concrete, and aggregates business lines in our two research centers in Leimen, Germany, (GRD) and Bergamo, Italy, (GPI). While the team in Leimen focuses on the reduction of CO<sub>2</sub> emissions, CO<sub>2</sub> use in building materials, resource efficiency, and a decrease in production costs, our activities in Bergamo concentrate on the development of sustainable concrete solutions for modern urban and infrastructure construction and new market opportunities. Individual projects are defined and implemented by the two teams in close coordination with the operating companies. This close collaboration from the very start of the project facilitates the efficient implementation of the development results and a quick market launch.

**Technology and innovation:** Technical centers support our national subsidiaries in each Group area. In the cement business line, this is the HTC with five area organisations. They assist our cement plants with all technical issues – from securing raw material supplies and operational optimisations to process control and quality assurance. With investment projects, HTC locations are involved in project management until a new installation or plant is commissioned or optimisation measures have been completed.



In the i.lab, our research center in Bergamo, Italy, the focus is on the development of innovative concrete solutions and new market opportunities.

Similarly, the CCM supports the aggregates and asphalt business areas Group-wide with programmes for continuous improvement and performance management. Its tasks also include the planning and implementation of projects as well as digitalisation and automation. In addition, the CCM offers training and further education.

The CCR is a comparable organisation in the ready-mixed concrete business line. It focuses on the continuous improvement of the entire ready-mixed concrete business but primarily on the optimisation of raw materials and logistics costs.

**Customer-related development and technical service:** Our close proximity to the market facilitates intensive customer-oriented development and technical service. Integrated directly into the organisation of the respective national subsidiaries, the relevant departments and employees develop and optimise the cements, aggregates, and concretes that are tailored to local needs, often in close cooperation with customers.

### Expenditure and number of employees

Total expenditure on research and technology amounted to €134.0 million in the reporting year (previous year: 145.7), corresponding to 0.7% of Group revenue. The following table shows a breakdown of expenses for the last three years, divided into each of the three fields of activities mentioned above.

Expenditure on research and technology			
€m	2017	2018	2019
Central R&D and innovation <sup>1) 2)</sup>	21.9	18.3	15.3
Technology and innovation	61.7	64.0	61.6
Customer-related development and technical service	57.4	63.4	57.1
Total	141.0	145.7	134.0

1) Including capitalised expenses.

2) Since 2017, the Global Environmental Sustainability (GES) department has been included in these figures.

In the 2019 financial year, a total of 1,083 people (previous year: 1,156) were employed in research and technology. The personnel breakdown and development over the last three years is shown in the following table. The high importance of customer-related development and technical service as well as technology and innovation is reflected not only in the costs but also in the number of employees.

Employees in research and technology			
	2017	2018	2019
Central R&D and innovation <sup>1)</sup>	127	109	97
Technology and innovation	348	357	342
Customer-related development and technical service	661	690	644
Total	1,136	1,156	1,083

1) Since 2017, the Global Environmental Sustainability (GES) department has been included in these figures.

### Alternative raw materials for improving the carbon footprint

One of the most important ways of reducing CO<sub>2</sub> emissions in cement manufacturing is the use of alternative raw materials that are produced as waste in other industries. A very large share of these alternative raw materials comes from the metalworking industry. Moreover, coal-fired power plants supply ash as well as synthetic gypsum. By using these materials, and thus avoiding waste, we actively promote the circular economy. The systematic assessment of the suitability of all materials used ensures the best and most consistent product characteristics.

HeidelbergCement generally uses alternative raw materials in two phases of the production process: in the combustion process for the production of clinker, which is the most important intermediate product in the manufacture of cement, and as additives that allow us to reduce the proportion of CO<sub>2</sub>-intensive clinker in cement.



## Clinker ratio

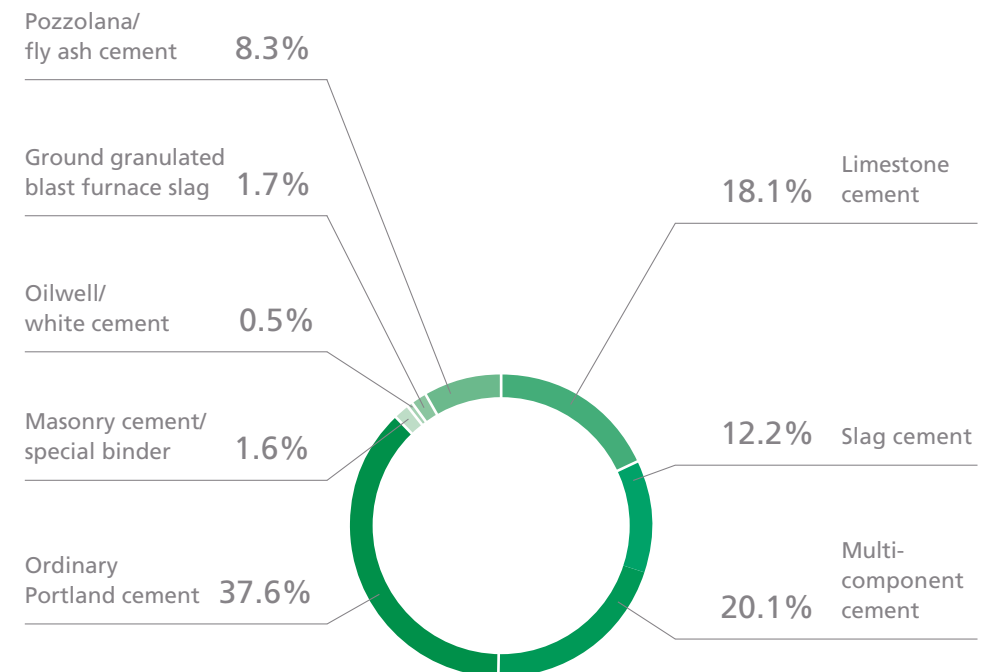
# 74.5%

was the clinker proportion in cement in 2019.

To produce clinker, we make use of used foundry sand, for example, or lime sludge from drinking water purification systems in order to reduce the consumption of finite natural resources. When we develop new types of cement with a reduced clinker proportion, we also use other major constituents such as blast furnace slag from steel production operations as well as fly ashes, a by-product from coal-fired power plants. Moreover, in Africa, for example, we use ground rock from local quarries as an additional component in cement production, thereby replacing imported clinker with local raw materials. In the Netherlands, Germany, and France, we are investigating whether the fines from concrete recycling can be used as a cement ingredient in order to fully close the loop in concrete recycling.

At Group level, the proportion of alternative raw materials in cement production was 11.3% during the reporting period; the clinker proportion in cement was 74.5%.

## Cement type portfolio

**Development of alternative clinker**

With TernoCem<sup>®</sup>, we have established the basis for an alternative clinker technology. Based on an altered chemical composition and low burning temperatures, CO<sub>2</sub> output is 30% lower in comparison with conventional clinker and energy consumption is reduced by around 15%. The underlying technology is protected by various patents.



## 📍 Research into sustainable construction

# Ultra-high-performance concrete

is stronger and more durable than conventional concrete, making it a particularly suitable material for sustainable construction.

## Slim design ensures resource efficiency

Ultra-high-performance concrete is one of the most significant developments worldwide in the field of concrete technology and applications. In the course of its research into solutions for sustainable construction, HeidelbergCement has developed a special product, Effix® PLUS.

Ultra-high-performance concrete has a denser structure than conventional concrete. This makes it significantly more resistant to mechanical or damaging stresses. Because the material is so strong and durable, it can be used for structures that are thinner and thus more lightweight. In addition, the building components last longer and require much less maintenance. The long service life and more streamlined construction make ultra-high-performance concrete a particularly resource-saving and sustainable building material.

## First application in bridge construction

In 2018, HeidelbergCement, in cooperation with the Technical University of Munich and the company Max Bögl, constructed the first railway bridge in Germany made of ultra-high-performance concrete. Thanks to the use of a precast element made of Effix® PLUS, the renovation and construction of the innovative bridge was completed within a few days.



### Sustainable construction with concrete

As a founding member of the Concrete Sustainability Council, we contributed significantly to the development of a new certification system for sustainably produced concrete, which was introduced at the beginning of 2017 and has been continuously developed since then. Additional concrete plants in Poland, Italy, and Turkey were certified in 2019. With the certification of concrete, taking into account social, economic, and environmental aspects along the value chain, we expect to see greater acceptance of the product and the entire industry. We have also strengthened our engagement in various national Green Building Councils, the European Construction Technology Platform, and other associations in order to support and accelerate developments in the area of sustainable construction and market transformation. From 2020, we will also be actively involved as an official partner in the Europe Regional Network (ERN) of the World Green Building Council.

Besides reducing our carbon footprint through the use of alternative raw materials and clinker technologies, our research laboratories are also working on products intended to improve the energy efficiency of buildings and to support the energy transition. One example of a product designed to support the energy transition is Powercrete®, a special concrete with outstandingly high thermal conductivity, which allows high-voltage cables to be laid underground.

Concrete is generally characterised by good thermal insulation properties and can, where used correctly, contribute towards significant energy savings in a building over the material's service life. Thanks to innovative formulations, concrete can also be used to store or conduct heat. Our research center in Leimen, which was built in 2016, uses concrete-core activation to provide energy-efficient air conditioning for offices and laboratories. The new headquarters in Heidelberg, which has been occupied from mid-2020, have been



By using recycled domestic waste in high-quality building materials, our Australian subsidiary Alex Fraser Group actively contributes to the circular economy.

constructed in accordance with the platinum standard of the German Sustainable Building Council (DGNB), and the energy demand of the building will be exceptionally low.

An important factor in measuring the sustainability performance of cement and concrete lies in considering the entire life cycle of these building materials, including how they are recycled. In Australia, Hanson Australia took over the Alex Fraser Group, one of the largest companies for building material recycling on the west coast of Australia, back in 2018. Alex Fraser recycles more than 3 million tonnes of demolition concrete and several hundred thousand tonnes of asphalt every year. The majority of this recycled material is currently still used in road construction. However, there are specific plans to increase the use of demolition concrete in the production of fresh concrete in the future.

HeidelbergCement is committed to the circular economy, as demonstrated, for example, by our participation in the Dutch concrete recycling company Rewinn B.V., Amsterdam, which we established together with local partner Theo Pouw BV, Utrecht, Netherlands. The company continued to develop positively in the reporting year, and we are able to produce up to 250,000 tonnes of aggregates from recycled concrete annually. These are already used in numerous applications, such as the production of fresh concrete.

In Italy, our subsidiary Calcestruzzi has launched a new series of concrete products named EcoBuild with a minimum proportion of 5% recycled material to fulfil the requirements for public tenders. At the customer's request, the proportion of recycled material can be increased in accordance with technical specifications and standards. EcoBuild concrete, which generally uses locally produced materials, also has an Environmental Product Declaration (EPD) that verifies its low environmental impact and can be used to fulfil the criteria of building rating systems.

One of the areas the GPI team in Bergamo is investigating is cement- and concrete-based construction technologies. The team has developed a cement with photocatalytic properties and is working on concrete solutions for energy saving and the thermal insulation of buildings. Digitalisation, automation, and sustainability in the construction industry will also support the development of new building technologies, such as 3D printing with concrete.

#### **Collecting data about sustainable products**

In order to meet the ever-increasing demand for transparent data relating to HeidelbergCement's sustainable product portfolio, we further developed the Product Evaluation Tool (PET) in 2018, which had been newly created in the previous year, and have introduced it in ten Group countries since 1 January 2018.

PET assesses the sustainability performance of our cement and concrete products over their entire life cycles. The tool is based on a questionnaire that uses calculations and qualified assessments to compare either a product that has been improved for a specific application or a new product with the reference product used as standard for this application. The period for determining the reference product is 2017/2018. The reference product thus serves as a benchmark for measuring and assessing the change made by the newer, more innovative product. In this way, the new product is recognised as being a more efficient substitute for the reference product within the same area of application.

During the PET evaluation process, data is collected on the product's various life-cycle phases, particularly information relating to the environment, social aspects, and cost-effectiveness. The assessment takes into account production as well as construction and usage phases and recycling/end-of-life considerations.

The sustainability assessments carried out using PET and information about the revenue generated through sustainable products are collated in the Sustainable Product Database. Above all, this resource helps us to respond to enquiries by investors, analysts, and rating agencies, who use these parameters as key criteria to describe company performance. The sustainability data recorded with PET is collected again every three years, while the relevant key figures for determining revenue are updated annually.



## Production & Supply Chain

- 40 → Figures, data, facts
- 41 → Environmental management
- 42 → Energy & climate protection
- 47 → Alternative fuels
- 48 → Land use & biodiversity
- 51 → Local environmental impact
- 53 → Management of supplier relations



Image: Employees of the Hanson aggregates plant in Bridgeport/Texas, USA





## We manufacture our products in a responsible manner

All of our facilities around the world have strict rules for ensuring sustainable, environmentally compatible production processes. Our suppliers also have to commit themselves to a **Code of Conduct**, and we monitor their compliance with this code.



Environmental management → p. 41

# Around 94%

of our integrated cement plants were operating with a **certified environmental management system** at the end of 2019. By 2030, we intend to increase this share to 100%.

Energy & climate protection → p. 42

## CO<sub>2</sub>-neutral concrete

by 2050 at the latest: this is what we intend to offer our customers worldwide. It is HeidelbergCement's view that concrete has the potential to become **the most sustainable building material**.

Water management → p. 51

# By 2030

we aim to have **water management plans** in place for all plants in regions affected by water scarcity. Alongside this process, we are developing a global strategic **water reduction plan**. Thanks to our work, we achieved an **"A-" classification in the water security category** of the CDP company ranking for 2019.





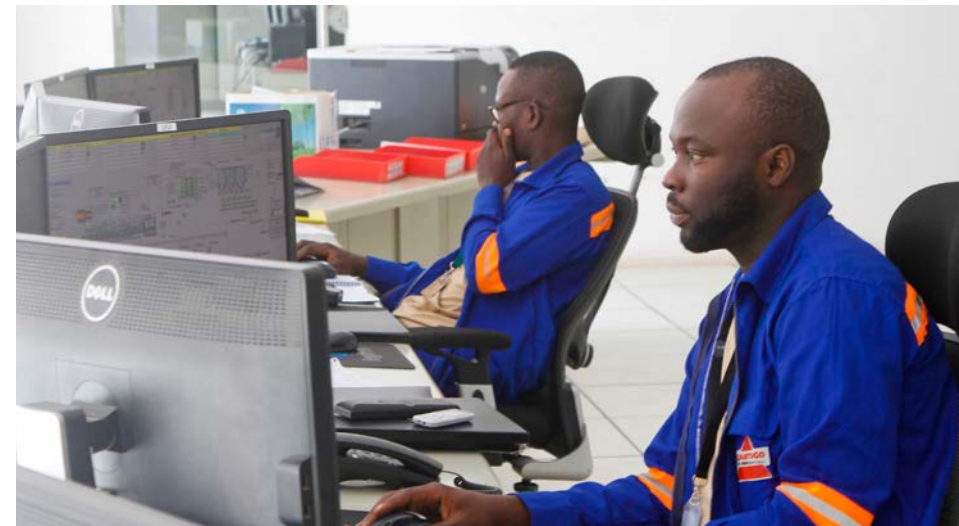
HeidelbergCement's sustainability strategy focuses on climate protection, environmental responsibility, and ensuring the permanent availability of resources. This has given rise to our objective of operating sustainable production processes at all of our operational sites worldwide. We also expect our suppliers to be aware of our standards: that is why a Code of Conduct forms the basis of all of our partnerships, and our contractors have to commit themselves to upholding this code.

## Environmental management

Environmental protection is an integral element of HeidelbergCement's business strategy, which is defined by the Managing Board in consultation with the Supervisory Board. One member of the Managing Board is responsible for the topic of environmental sustainability and coordinates all activities at Group level. The GES (Global Environmental Sustainability) department also reports to him. The task of this department is to manage and support the progress of operating activities with regard to environmental sustainability.

As HeidelbergCement has a decentralised structure, the country organisations take responsibility for all areas of our operating activities, including compliance with all legal provisions and regulatory conditions. This also covers the correct recording and transmission of all necessary production, operating, consumption, and emissions data that HeidelbergCement is obligated to provide in the various countries by law or by regulations, or because of voluntary commitments. Every plant manager is essentially responsible for the environmental management system and the environmental performance of their plant.

The internal monitoring of all relevant operating data is carried out by our competence centers: HTC for the cement business line, CCM for the aggregates business line, and CCR for concrete. Any



The country organisations of HeidelbergCement are responsible for all areas of our operating activities – this includes the correct recording of all consumption and emissions data.

Irregularities identified during the check are followed up immediately. Where necessary, this also includes supporting the relevant production plant in resolving any technical issues.

In the reporting year, there were a few isolated violations of environmental protection laws from continuing operations which have led to fines or non-financial penalties. At the time of reporting, there were seven known cases involving amounts of over USD 10,000. Since individual cases are still pending, this figure should be regarded as preliminary. We analyse each case to derive changes and improvements.

In an effort to place environmental protection on a firmer footing at our production locations and achieve continual improvements in this area, we plan to introduce certified environmental management systems at all of our cement plants worldwide by 2030. We will focus here on the ISO 14001 international standard, but also use locally recognised environmental management systems. At the end of 2019, around 94% of our integrated cement plants were operating with a certified environmental management system.

## Energy & climate protection

Due to the high temperatures needed to burn limestone, the production of cement consumes a lot of energy and thus causes combustion-related CO<sub>2</sub> emissions. In the calcination process, the raw material is heated to over 800°C, which leads to further, process-related CO<sub>2</sub> emissions from the limestone.

This is why climate protection is a fundamental part of our environmental policy, as is also reflected in our Sustainability Commitments 2030, published in October 2017. In this document, HeidelbergCement has set itself the objective of reducing its ecological footprint, among other aspects. As a company, we are committed to fulfilling our share of the global responsibility to keep the rise in worldwide temperature below 2°C, as set out in the Paris Agreement. In concrete terms, this means that HeidelbergCement's target is to reduce its specific CO<sub>2</sub> emissions per tonne of cement by 30% compared with the 1990 level by 2030. By 2019, a reduction of approximately 22% was achieved. To attain this target, we will, for instance, increase the proportion of alternative fuels in the fuel mix to 30%. In 2019, this figure reached 24%. At the same time, we plan to further intensify the use of alternative raw materials and further reduce the proportion of clinker in our cement – that is to say, the clinker ratio. This currently stands at below 75%.

Our reduction targets and the measures defined to achieve them are in accordance with the road map set out by the International Energy Agency (IEA) for our industry in order to successfully limit the global temperature rise to 2°C, as agreed at the COP21 Climate Change Conference in Paris. We have since had this conformity reviewed and confirmed by the Science Based Targets initiative (SBTi), which made HeidelbergCement the first company in the cement sector, and one of currently around 370 businesses worldwide, whose reduction targets have been approved by the SBTi.

Climate protection			
	2017	2018	2019
Specific net CO <sub>2</sub> emissions (kg CO <sub>2</sub> per tonne of cement)	607.6	598.9	589.8
Alternative fuel rate	21.0%	22.0%	24.0%
Clinker ratio	75.4%	74.8%	74.5%

We are also working intensively to reach our goal of being able to offer our customers throughout the world a CO<sub>2</sub>-neutral concrete by 2050 at the latest. To achieve this, we are investigating a number of measures, including the option of capturing and utilising CO<sub>2</sub> emissions in the product life cycle over the long term. It is HeidelbergCement's view that concrete has the potential to become the most sustainable building material.

### Participation in the European Union's emissions trading system

HeidelbergCement currently has 50 facilities in 16 countries that participate in the EU Emissions Trading Scheme (EU ETS). As in previous years, the compliance requirements for the past financial year were met without incident. The debate regarding the reform of the EU ETS for Phase IV (2021–2030) continued in 2019. The final allocation rules for the emissions certificates and, in particular, the product-specific benchmark for the cement industry had not yet been defined at the time of compiling this report. These are expected to be announced in the second half of 2020.

### Emissions trading systems outside Europe

Emissions trading systems are also being set up in regions outside the EU. A national emissions trading system in China – a follow-on to the pilot project run in some provinces – is expected to commence in 2020. Initially, the electricity sector is being integrated into the national ETS in China, but as at the end of 2019, no decision had yet been made regarding the precise timing of the cement industry's inclusion in the



scheme. In North America, the Western Climate Initiative combines the Canadian and Californian emissions trading programmes. In the United States, California has had an emissions trading system since 2013. In Canada, we are currently subject to a CO<sub>2</sub> tax and operate as part of an emissions trading system at provincial level. A carbon price floor has also been introduced at national level, which defines a lower price limit for Canada's individual emissions trading systems over the next few years.

### Innovations for climate protection

HeidelbergCement takes a leading role when it comes to climate protection research projects and invests in particular in studies into innovative techniques for the capture and utilisation of CO<sub>2</sub>. By doing so, we also fulfil our obligation under the Low Carbon Technology Partnerships initiative (LCTPi): during the United Nations Climate Change Conference 2015 (COP21) in Paris, HeidelbergCement and 17 other cement companies signed the LCTPi, which was launched by the World Business Council for Sustainable Development (WBCSD). The LCTPi for cement is an ambitious long-term project to scale up deployment of low-carbon-dioxide technologies in industry. To achieve this goal and ensure the economic viability of large-scale deployment, necessary policy actions have been defined, including technologies to capture, utilise, and store carbon dioxide.

### Current research projects investigating carbon capture

#### LEILAC (Low Emissions Intensity Lime And Cement)

The EU-funded LEILAC (Low Emissions Intensity Lime And Cement) project, in which HeidelbergCement is one of the strategic partners, started in January 2016. This project aims to demonstrate the technical and economic feasibility of a process technology designed to capture CO<sub>2</sub> in its purest form when it is released as the raw material is heated. After extensive preparations, work began at our cement plant in Lixhe, Belgium, in 2018 to construct the 60-metre-high demonstration calciner. The construction work was completed in the first half of



At our cement plant in Lixhe, Belgium, the LEILAC consortium is working on capturing CO<sub>2</sub> in its purest form and thereby reducing the carbon footprint of cement production.

2019, and actual process trials have begun. The first promising results were published at the start of December 2019, and further trials will take place in 2020. In 2019, numerous delegations from all over the world visited the LEILAC operational site in Lixhe, including industry and media representatives from Asia, the Middle East, and most European countries. In spring 2020, a decision was made to scale up the LEILAC technology to an industrial scale. In the LEILAC 2 project, a system around four times as large will be operated at a HeidelbergCement plant, still to be determined, in Western Europe.

→ [www.project-leilac.eu](http://www.project-leilac.eu)

### **AC<sup>2</sup>OCEM – ongoing development of oxyfuel technology for CO<sub>2</sub> capture**

In the oxyfuel process, the rotary kiln is supplied with pure oxygen instead of ambient air, which facilitates the capture of CO<sub>2</sub>. To further develop the oxyfuel technology, HeidelbergCement participates in the AC<sup>2</sup>OCEM project, which aims to drive forward the use of technologies for the capture of CO<sub>2</sub> in the cement industry and is co-financed by the ACT (Accelerating CCS Technologies) European development programme. As part of the AC<sup>2</sup>OCEM project, the first-generation oxyfuel technology, which aims to modify existing kiln lines, and the second-generation oxyfuel technology for use in new systems will be investigated.

→ <http://ac2ocem.eu-projects.de>

### **catch4climate – applicability of oxyfuel technology to cement plants**

Besides AC<sup>2</sup>OCEM, HeidelbergCement launched the catch4climate research project with three other European cement manufacturers. This project investigates the practical applicability of oxyfuel technology to the cement manufacturing process. Together with Schwenk, Buzzi, and Vicat, HeidelbergCement hopes that catch4climate will create the necessary conditions for large-scale use of low-energy and therefore more cost-effective technologies for CO<sub>2</sub> capture at cement plants, in order to allow the CO<sub>2</sub> to be used subsequently as a raw material for other industrial processes, for example.

### **Current research projects investigating carbon sequestration and utilisation**

#### **Recarbonation of cement dust in concrete recycling processes**

In 2017, HeidelbergCement launched the CO<sub>2</sub>MIN project in collaboration with RWTH Aachen University and the Institute for Advanced Sustainability Studies (IASS) in Potsdam, Germany. This project aims to investigate the potential of natural minerals for

absorbing CO<sub>2</sub> and the possibility of using them to produce marketable building materials. Besides natural minerals like olivine and basalt, industrial waste products such as slag or fines made from recycled concrete are also being tested. The three-year research and development programme received €3 million in funding from the German Federal Ministry of Education and Research (BMBF), and has now been extended by a further year to the end of 2020 in order to establish a solid calculation method for carbonation potential.

In parallel, another research project was awarded funding in 2019: the C2inCO<sub>2</sub> project – calcium carbonation for the industrial use of CO<sub>2</sub> – explores the potential of adding CO<sub>2</sub> to recycled waste concrete, so that it can be used as a building material. By developing optimised preparation processes and efficient carbonation methods, it addresses the two key elements that are needed to close the CO<sub>2</sub> and material cycle in the cement and concrete industry. The three year project is supported by the BMBF as part of the CO<sub>2</sub>-WIN funding initiative. With a funding volume totalling €3.2 million (overall budget: €6.0 million), C2inCO<sub>2</sub> is the biggest project funded in the tender. Besides HeidelbergCement as the project coordinator, thyssenkrupp IS, Loesche and Sika, the German universities of Aachen and Weimar, and the Fraunhofer Institute for Building Physics are also contributing to the implementation of this concept.

By recarbonating the cement dust generated in concrete recycling, we can return CO<sub>2</sub> to the cement and concrete materials cycle. This process requires access to sufficient quantities of demolition concrete and cost-effective management of the material streams of recycled material and CO<sub>2</sub>. The concept's technical feasibility has already been examined, and pilot projects are being planned.



Algae can absorb as much as twice their weight of CO<sub>2</sub>. At our plant in Safi, Morocco, they are bred and processed into animal feed additive.

#### Use of CO<sub>2</sub> in algae cultivation

In cooperation with our Dutch partner OmegaGreen, we launched a large-scale research and demonstration project in 2018 to use CO<sub>2</sub> from the cement kiln to produce microalgae at our Safi cement plant in Morocco. The algae produced in this way can be used as a high-quality animal feed additive. With our investment of over €1.4 million, we have constructed an algae farm of approximately 5,000 m<sup>2</sup>. Preliminary trials for the selection of suitable algae species were completed successfully at the start of 2019, which meant that we were able to begin the actual breeding trials from the middle of the year. During 2019, we produced several species of algae, which were examined by specialist laboratories and future customers and found to fulfil all specifications and quality criteria. The algae farm is operated by a local team, which means that new and sustainable jobs have been created in Safi in an innovative field.

#### Long-term storage of CO<sub>2</sub>

##### Brevik, Norway

Since 2011, a project for the capture and storage of CO<sub>2</sub> (CCS – Carbon Capture and Storage) in the cement industry has been running at the HeidelbergCement subsidiary Norcem in Brevik, Norway. Following the conclusion of a comprehensive feasibility study in 2015/2016, the project at the Brevik cement plant in Norway has now undergone pre-FEED and FEED studies. The Norwegian government is examining the FEED documents and is expected to make a decision in October 2020 regarding financial support for implementing this project, which will involve the capture of 400,000 tonnes of CO<sub>2</sub> a year. According to the planned schedule, the CO<sub>2</sub> emissions captured as part of the project will be transported to an underground storage site below the North Sea from 2024.

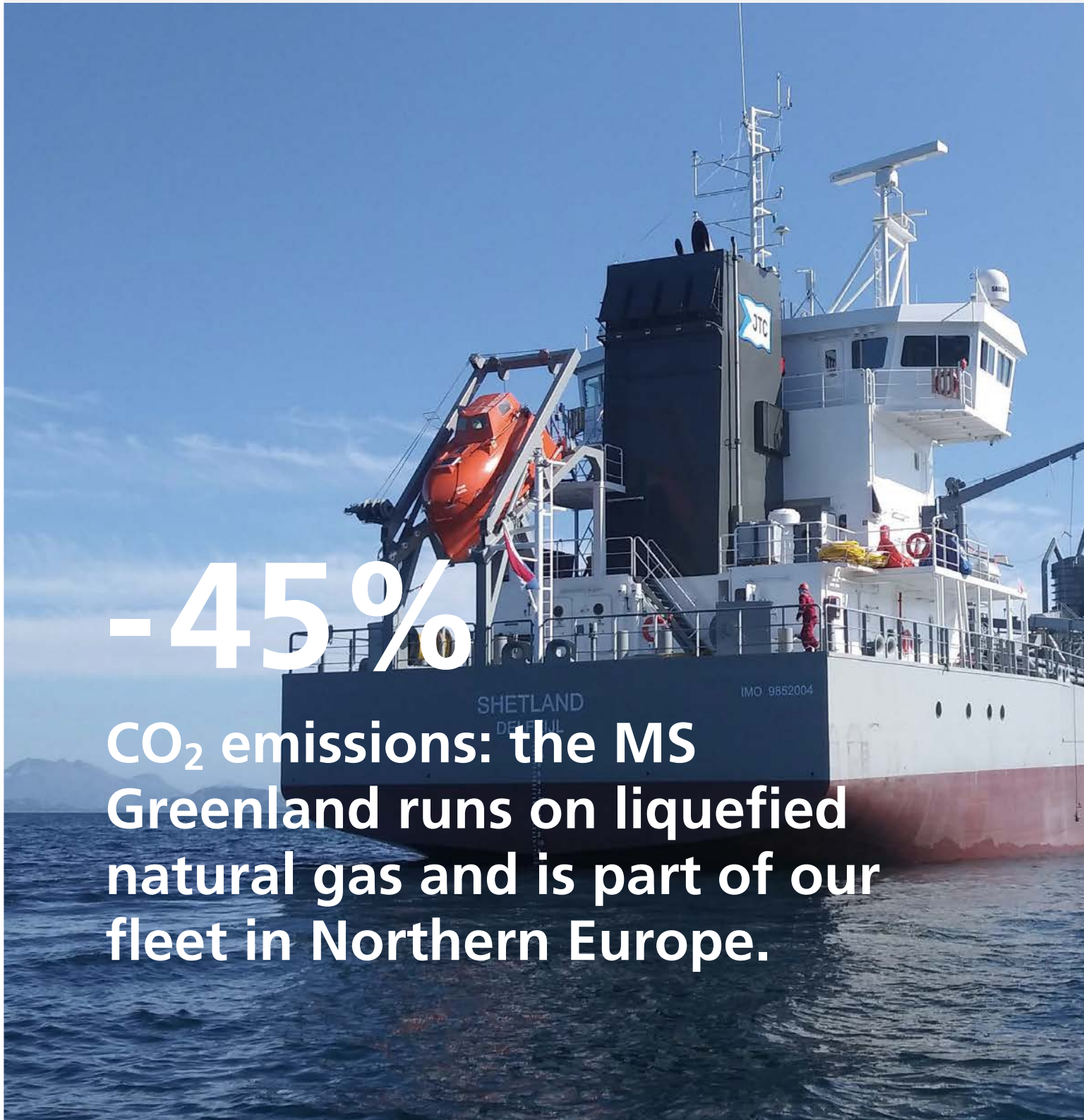
→ <https://www.norcem.no/en/CCS>

##### Edmonton/Alberta, Canada

At our cement plant in Edmonton/Alberta, Canada, the organisation Emissions Reduction Alberta (ERA) is providing 1.4 million Canadian dollars for a feasibility study for an industrial-scale project for the capture and storage of CO<sub>2</sub> (CCS – Carbon Capture and Storage). The study comprises technical designs, cost estimates, and a comprehensive profitability analysis. In the next step, detailed FEED studies will be carried out.

→ [More information on our research projects: p. 24 of the AR 2019](#)

📍 Transforming our fleet in Northern Europe



**-45%**

**CO<sub>2</sub> emissions: the MS Greenland runs on liquefied natural gas and is part of our fleet in Northern Europe.**

- HeidelbergCement is the only company worldwide to operate cement vessels running on liquefied natural gas.
- The climate benefits from significant emission reduction.
- The new vessel "MS Shetland" (see picture) was awarded 5 stars by the Clean Shipping Index.

**Liquid natural gas is taking over our cement fleet**

To make maritime transport more sustainable, we are gradually changing our fossil fuel-powered fleet into a fleet operating on natural gas. The MS Greenland, which runs on natural gas, has achieved a 45% reduction in CO<sub>2</sub> emissions compared with the previous generation of cement vessels on the route between the Slite cement plant and the Malmö terminal in Sweden. Moreover, by using liquefied natural gas, all hazardous substances are removed, and sulphur emissions are reduced to a minimum.



The biggest benefit of maritime transport is the large transport capacity of the ships and the smaller quantity of CO<sub>2</sub> emissions produced per tonne of material compared with other means of transport. Alongside electric motors, hydrogen and ammoniac are being investigated for their use as fuels.



## Alternative fuels

Many waste materials and by-products from other industries serve as valuable raw materials for HeidelbergCement. We use these resources as alternatives to finite natural raw materials and fossil fuels in the production of cement. In this way, we are helping to conserve resources and solve the problems associated with waste disposal faced by municipalities and industrial companies near our plants. At the same time, these efforts are also reducing our CO<sub>2</sub> emissions, because the biomass that accounts for around 38.1% of the alternative fuel mix is classified as climate neutral.

### Alternative fuels replace natural resources

The Alternative Fuel Master Plan project was launched in mid-2018. It aims to increase the proportion of alternative fuels across the Group, helping us to meet our commitment to reduce CO<sub>2</sub> emissions by 2030. The project is being led by a working group comprising experts from various Group areas and departments.

In 2019, we significantly increased the proportion of alternative fuels used in several countries. This is predominantly waste that cannot be recycled in full and would therefore be uneconomical to recycle. In this scenario, co-processing in clinker kilns is regarded as a worthwhile option, as it not only uses the waste's calorific value much more efficiently compared with waste incineration plants but also embeds its mineral components into the clinker. The waste is co-processed without any residue while complying with the same strict emission standards as waste incineration plants.

During the reporting year, we made various investments in the use of alternative fuels. For example, in our cement plant in Devnya, Bulgaria, we implemented a project to supply alternative fuels directly to the main burner. This has allowed the plant to significantly increase the proportion of alternative fuels used. Another point of focus regarding optimisation and environmental protection was on the projects of the Germany Cement Master Plan for

### Alternative fuels

# 24%

was the alternative fuel rate in 2019.

modernisation and efficiency improvements as well as environmental protection in our German cement plants. These include the two newly constructed clinker production lines in Burglengenfeld and Schelklingen, Germany, which are set to have alternative fuel rates of 90%.

In 2019, the proportion of alternative fuels in the fuel mix was 24%. By 2030, we intend to increase this figure to 30%.

### Use of hazardous materials

The careful handling of hazardous wastes is a key element of every country's waste disposal infrastructure. For most types of hazardous waste, reuse in cement plants has proved to be a safe means of disposal and utilisation. The high temperatures of over 1,450°C and long incineration period in the kilns ensure that all harmful components are completely destroyed. This has been confirmed by measurements taken by independent state-certified institutes. Certain specific types of waste, such as nuclear waste, are not used by HeidelbergCement.



## Land use & biodiversity

We only extract worthwhile deposits if they can be exploited in an environmentally compatible and economical manner. Before making any decision concerning the development of a new quarry or the expansion of an existing one, the company first conducts an extensive approval process in line with the corresponding laws and regulations. Our sites are operated in accordance with relevant international, national, and local environmental legislation, and environmental impact assessments are generally prepared as a pre-requisite for the permitting of quarrying activities. Through this process, we manage our impact on biodiversity in line with the sequential steps of the mitigation hierarchy: avoid, minimise and mitigate.

### Concepts for the limitation of land consumption

For environmental and economic reasons, we strive to limit land consumption when planning our quarrying and reclamation activities. As a matter of principle, the authorised raw material supply is always completely extracted in order to minimise land consumption. We therefore prefer to expand existing quarries rather than develop new sites. When constructing production and plant facilities, we also take care to use as little land as possible.

### Subsequent use and reclamation

Reclamation plans are now an integral part of approval processes. These plans define the goals and timetable for the reintegration of a quarry into the surrounding landscape. Even while a quarry is still in operation, we reclaim those areas of the quarry that are no longer used. In 2019, the proportion of quarries with after-use plans was 88% for cement and 79% for aggregates. We intend to increase these figures to 100% by 2030 at the latest.

### Reclamation plans

# 88%

of our quarries in the cement business line and 79% in the aggregates business line have reclamation plans.

### Biodiversity management at our quarries

As early as 2010, we began to collect and analyse information about the biodiversity value of our quarries. In cooperation with our partner, BirdLife International, we conducted a study to determine how far our quarries are from areas of recognised high biodiversity value in Europe, Africa, and Asia. The study has now been extended to cover all our active extraction sites worldwide. We are collecting data about the proportion of active quarries in areas with a high level of biodiversity and for which biodiversity management plans are being implemented. In 2019, this proportion amounted to 47% of cement quarries and 49% of aggregates quarries. We are steadily extending biodiversity monitoring to more and more quarries and implementing corresponding management plans.

### Protecting biodiversity and habitats

We believe in helping to conserve habitats and biodiversity features throughout the life cycle of our quarrying sites. Even during the extraction phase at an operational site, we can create optimal conditions for threatened species that are associated with early stages





At numerous locations of HeidelbergCement, projects are realised to increase the population of pollinators by providing habitats and nesting places.

of ecological succession. Through the reclamation process, we are also able to create new habitats, such as wetlands and species-rich grasslands, and integrate biodiversity features into any intended subsequent use. In Europe in particular, our quarries are now important refuges and stepping-stone habitats for specially protected species such as the sand martin, the yellow-bellied toad, the eagle owl, and the Eurasian otter, which are accordingly also the focus of numerous biodiversity projects.

In 2019, in support of the massive population decline in insect populations, we held an awareness raising campaign across the Group on pollinators and sort site staff engagement through a photo competition. Specific practical advice was disseminated to all employees about how to increase not only the value of quarries for pollinators, but also our office/industrial locations and even employees' homes. The initiative was picked up across our estate with example projects including a pollinator picnic event held in

Poland for 150 community members, pollinators becoming a key criteria when developing planting plans in Australia and in Benin we are trialing bee hives created out of our own product – concrete. We furthered our work on invasives by supplementing our 2018 internal guidelines on European invasive alien plant species by developing identification guides tailored to each of the regions we operate in. These guides provide a first step in enabling site staff to identify problematic species and integrate appropriate actions into biodiversity management plans.

#### Cooperation with nature conservation organisations

We work with many local nature conservation organisations worldwide. Our partnership with the largest international nature conservation organisation, BirdLife International, which we began in 2012, was extended for a further three years in 2018, for the third time in succession. The interaction with BirdLife International and our cooperation with its national partner organisations help us to minimise our impact on the environment and promote biodiversity at our quarrying sites and in their surroundings. Besides the projects connected with the Quarry Life Award, over 30 local projects were undertaken at locations in Europe and in African countries between the beginning of the partnership and the end of 2018. An interactive map on the BirdLife website provides information about a selection of our joint projects:

→ [www.birdlife.org/europe-and-central-asia/project/project-map](http://www.birdlife.org/europe-and-central-asia/project/project-map)

→ [www.birdlife.org](http://www.birdlife.org)



The sand martin is a frequent visitor to many of our quarries: the little birds nest in the freshly created quarry faces to breed.

One of our most iconic quarry birds, particularly in Europe is the sand martin which is a migratory bird, travelling north from Africa each spring to nest in our sites before heading back south to overwinter. In recognition of the role our quarries play for migratory birds such as the sand martin, during 2019 we sponsored the BirdLife International yearly campaign: Spring Alive. Predominately an educational campaign, Spring Alive engages children, their families and teachers through the BirdLife partners across Eurasia and Africa about migratory birds and the threats they face during their biannual migration. Our involvement in the campaign resulted in the inclusion of sand martin as a focus species, and special events took place at our sites across six countries: Ghana, Morocco, Czechia, Poland, Romania, and Georgia.

## Quarry Life Award

HeidelbergCement's research and education competition, the Quarry Life Award, is targeted at scientists, university students, and non-governmental organisations as well as our neighbours in the communities where our facilities are located. All of these groups are invited to develop and – provided they qualify to participate in the competition – implement biodiversity-related projects focused on our company's quarries worldwide. In this way, we want to promote the evaluation of the quarries' biological value and support the development of new methods that benefit scientists and government authorities as well as our company.



Up to 2018, we have successfully organised four Quarry Life Award competitions. In order to allow more time for the winning projects to be implemented, the competition will now be held every three years rather than every two years. Because of the COVID-19 pandemic, the start of the fifth edition of the Quarry Life Award had to be postponed to 2021.

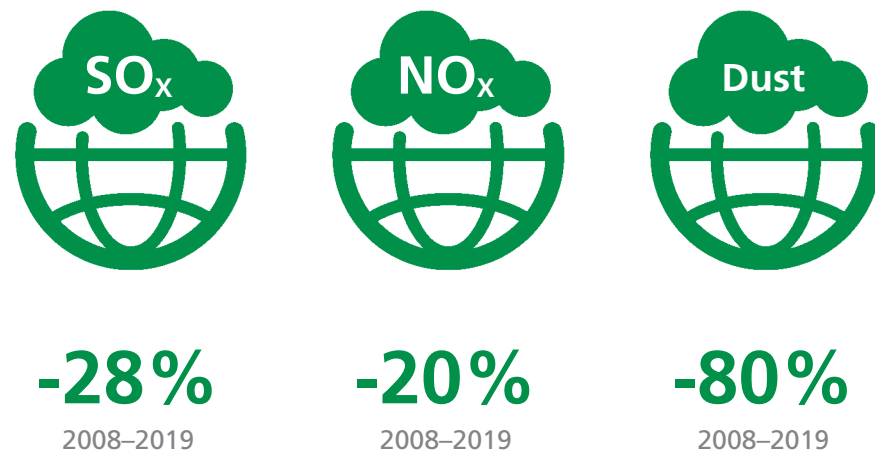
→ [www.quarrylifeaward.com](http://www.quarrylifeaward.com)

## Local environmental impact

### Air pollutants and noise

In addition to addressing the issues of dust and noise, HeidelbergCement faces a particular challenge in terms of the air pollutant emissions from the cement business line. While dust and noise are emitted from different points in the production process, nitrogen oxides, sulphur oxides, and other air pollutants are mainly emitted from kiln lines. There are national legal limits that must be observed by all production locations. As part of its Sustainability Commitments 2030, HeidelbergCement has also pledged to reduce air pollutants. By 2030, we aim to reduce the SO<sub>x</sub> and NO<sub>x</sub> emissions generated in our cement production by 40% – and dust emissions by 80% – in comparison with 2008 levels. This is in addition to our objective to continuously reduce all other air pollutant emissions, bringing them down below the average of the industry.

#### Reduction of specific emissions (g/t clinker)



We monitor emissions of air pollutants on an ongoing basis. By using new filter technologies and innovative production processes, we reduce pollutants and thus mitigate the impact of our activities on the environment and neighbouring communities. For example, we made several investments in 2019 to reduce dust emissions: an electrostatic precipitator was replaced by a fabric filter in kiln line 4 at the Bukhtarma plant in Kazakhstan, while several smaller filter systems were modernised at other cement plants.

In order to reduce NO<sub>x</sub> emissions, we commissioned a high-dust selective catalytic reduction (SCR) system at the Geseke plant in Germany during the reporting year. At the new kiln line in Schelklingen, Germany, the calciner technology, which makes use of a selective non-catalytic reduction (SNCR) system, is able to achieve very low concentrations of NO<sub>x</sub> emissions. Besides a significant reduction in these emissions, this investment has also led to a decrease in the carbon footprint.

A modern scrubber was installed in the Kjöpsvik cement plant in Norway to reduce SO<sub>x</sub> emissions.

### Water management

HeidelbergCement has committed itself to the goal of minimising the impact of its activities on natural water resources. We comply with stringent environmental regulations to ensure that our raw material quarrying will not endanger local bodies of surface water or groundwater resources.

Water is hugely important for our production processes and is used, for example, when washing gravel and sand as well as for cooling or cleaning transport vehicles. Water is also one of the source materials for concrete manufacturing and becomes part of the building material during its production. We obtain some of the water we use from the public water supply, but the majority comes from the groundwater or from rivers and lakes. Withdrawals from groundwater and surface waters are heavily regulated by



governments worldwide and regularly monitored. Some of the water – the water used for cooling, for instance – evaporates and is released into the atmosphere. The remaining industrial water from production is returned to the surface water after being cleaned and subjected to stringent checks. The cleaning water that accumulates when transport vehicles are washed is recycled completely. We dispose of the domestic wastewater accruing at our company buildings via the municipal wastewater systems.

In recent years, we have introduced a water reporting system at all of our company's cement plants. The specific water consumption amounted to roughly 270 litres per tonne of cement in 2019. The reduction achieved in the last two years is due to the conversion to closed cooling circuits and the complete recycling of process water. In 2015, we also started to introduce key figures on water reporting in our aggregates and ready-mixed concrete business lines. As there are more than two thousand operational sites in all, implementation is not expected to be completed until 2030.

#### Water management

# 267 L

was the specific water consumption per tonne of cement in 2019.



Water is hugely important for our production processes and is used as shown here, for example, for the wet mining of sand and gravel. We minimise the impact of our activities on natural water resources.

In 2014 already, a global water-risk study supplied us with fundamental information for the creation of a Group-wide guideline concerning sustainable water management in the cement, aggregates, and ready-mixed concrete business lines. We updated this data in 2019, while adjusting our methodology. To do this, we made use of the World Resources Institute's online Aqueduct database, which provides information on water risks worldwide. The updated study showed that around 36% of our plants are located in regions where water scarcity is projected for 2030. The increase in this proportion from 14% in the previous year is due to the change in our methodology and the use of a more comprehensive definition of water scarcity<sup>1)</sup>, reflecting the huge significance of this topic.

1) We define water scarcity as high or extremely high water stress in a region, projected for 2030. Around 16% of our locations are in regions with extremely high water stress, and around 20% in regions with high water stress.

Back in 2015, in response to the first water-risk study, we began developing individual water management plans for those plants in regions suffering from water scarcity. The plans include concepts and measures to ensure careful use of scarce water resources and enable local stakeholders to become involved so that the water utilisation concepts support the common good and thus minimise local water risks. Implementation of these plans will begin at those locations where water scarcity is an especially urgent problem. These activities were continued in 2019 and will be expanded over the next few years. Our objective is to have water management plans in place by 2030 for all plants in regions affected by water scarcity. Alongside this process, we are developing a global strategic water reduction plan, which aims to coordinate the work at Group level and reduce water consumption locally, wherever economically and technically possible. Because we are facing a water surplus in other regions of the world, where we need to pump off large quantities of water in order to operate our quarries, it does not make sense to define a general reduction target based on water withdrawals for the Group.

In 2019, we once again reported on the key figures for water from 2018 and on our strategy and governance on this topic to the CDP (formerly the Carbon Disclosure Project). Thanks to our long-term success and our transparent reporting, we repeated the success of the previous year and achieved an “A-” classification in the water security category of the CDP company ranking for 2019. This distinction confirms HeidelbergCement’s leading role within the industry.

→ [www.cdp.net](http://www.cdp.net)

### Waste materials

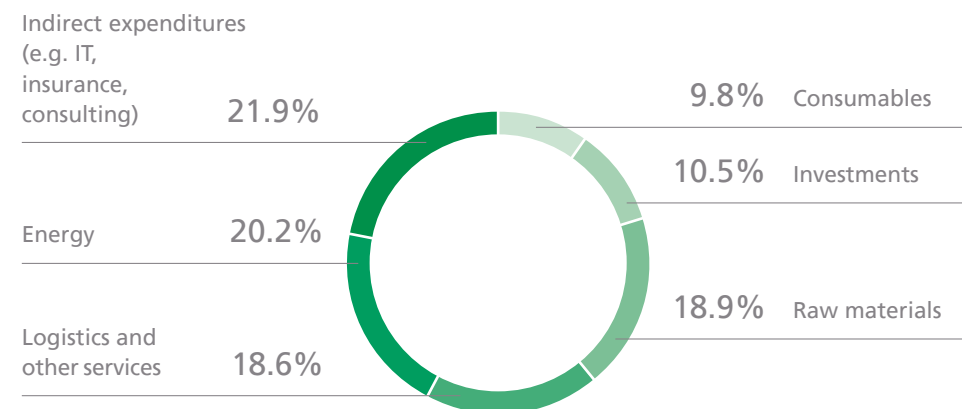
Our primary focus in terms of waste management concerns the kiln dust that is a by-product of clinker production. This dust has to be removed from the kiln systems at several facilities in order to prevent disruptions to proper kiln operations. We generally use the kiln dust as an alternative raw material in cement production, thereby

improving our ecological efficiency. In some exceptional cases, the locally produced cement type portfolio prevents us from being able to recycle it in full. A second possibility for us is to use the kiln dust as a raw material for the production of special concrete. If no other option is available, it can be deposited in underground landfill sites in a controlled process. The local operating permit at each plant specifies the allowable amount of process-related waste products and how it is to be used.

## Management of supplier relations

In the reporting year, HeidelbergCement procured goods and services with a total value of €12,654 million. This corresponds to 67.1% of total revenue.

### Expenditure by category





HeidelbergCement strives to ensure compliance with sustainability standards in the supply chain. Group-wide purchasing guidelines therefore provide clear instructions regarding our supplier relations and purchasing activities. The most important tool used for this purpose is our Supplier Code of Conduct, which we consistently communicate to our global and local suppliers, who are obligated to act in line with the principles defined in the Code. The Code incorporates the key elements of the SA 8000 International Social Accountability Standard, the ISO 14001 international environmental standard, and the principles of the International Labour Organization (ILO). If a supplier fails to abide by the Code and does not correct a weakness or deficiency that has been identified, this can result in the termination of the contractual relationship.

Our Supplier Sustainability Initiative was also further developed and rolled out to other locations in 2019. In cooperation with our sustainability partner BROWZ/Avetta, additional suppliers were reviewed according to defined sustainability criteria. The process actively monitors our suppliers' compliance with the principles outlined in the Supplier Code of Conduct. This goes well beyond the previous self-commitment by suppliers to the Supplier Code of Conduct. In 2019, we drove forward the use of our central online platform for supplier management. This platform simplifies the systematic recording and consolidation of supplier data as well as its assessment in accordance with the sustainability aspects addressed in our Supplier Code of Conduct.

### Measures for 2020

In 2020, we will continue to expand the use of the Group-wide on-line platform for supplier management. We will keep consistently seizing opportunities offered by digitalisation in order to guarantee transparency and sustainability in the supply chain.

The global Supplier Sustainability Initiative will also be implemented in additional countries, with the aim of introducing a comprehensive global standard. However, where appropriate, we will also take into account specific local requirements relating to supplier sustainability. The 2020 rollout will focus on critical suppliers who are new and/or have not yet been reviewed.



As a company with global operations, we are committed to acting responsibly along the entire supply chain.

**Dr. Ines Ploss**

Director Group Purchasing



## Employees & Employment

- 56 → Figures, data, facts
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Image: Employees of the Cementa AB cement plant in Slite, Sweden



## Good work needs a positive environment

Qualified and motivated employees are an important prerequisite for the success of HeidelbergCement. Identifying our employees' talents and developing them is therefore at the core of the Group-wide personnel policy. We attach particular importance to **occupational safety** and the **protection of our employees' health**.



Development of accident figures → p. 62

# A 9.5%

reduction in the **accident frequency rate** across the Group was achieved in 2019. We continuously strive to minimise the risks for our employees, contractors, and third parties and to achieve our goal of "zero harm".

Ongoing training → p. 63

## More than 3,000 employees

have now registered for our **Cement Manufacturing Curriculum**, a web-based learning programme. In 2019, the range of e-learning programmes was expanded considerably, particularly in the areas of **pyroprocessing** and **materials handling technology**.

Diversity as a success factor → p. 65

## Employees from 52 countries

work at the Group headquarters in Heidelberg and at our technical centers in Heidelberg and Leimen. We benefit considerably from **their experience** and **their knowledge** of our local markets.





Around 55,000 women and men work for HeidelbergCement worldwide. Their achievements make us one of the leading companies in our sector. That's why it is crucial to provide them with attractive working conditions. As a manufacturing company, we also attach particular importance to occupational safety and the protection of our employees' health.

## Principles

For us, a good personnel policy means having due and proper regard for our employees with their range of talents and wealth of experience. And it therefore means creating the right conditions to allow them to do their job with efficiency and dedication. This includes fair remuneration and tailor-made qualification opportunities in addition to a non-discriminatory working environment and flexible conditions that allow them to reconcile professional and family demands. Another area of particular importance to us as a manufacturing company is occupational safety and the protection of our employees' health. We are proud of the international nature of the workforce at our headquarters and in our technical centers in Heidelberg and Leimen, which is made up of local managers and employees from 52 countries. Our staff form the foundation of the worldwide success of HeidelbergCement.

Our Leadership Principles prescribe binding rules for personnel management. They concern, for example, respectful behaviour towards co-workers, employee development, and a commitment to our company's strong feedback culture. The main leadership principles are embedded in standard human resources processes and described in detail in HeidelbergCement's Human Resources Guidelines.



Our 55,000 employees at HeidelbergCement are at the center of our personnel policy. With their professional and social capabilities, they contribute to the company's success.

We believe that law-abiding and ethical behaviour is a key requirement of good leadership and of each and every employee. This is why the Managing Board has approved a Code of Business Conduct that is binding across the Group and specifies our values as well as the ethical and legal standards upheld at our company. In particular, this includes non-discriminatory employment conditions and an open and fair dialogue with employee representatives.

HeidelbergCement also subscribes to the core labour standards of the International Labour Organization (ILO), the OECD Guidelines for Multinational Enterprises, and the United Nations' Universal Declaration of Human Rights as well as the UN Guiding Principles on Business and Human Rights. Moreover, we have enshrined this commitment in our Leadership Principles. We expect our employees and our business partners worldwide to comply with these central guidelines and recommendations.



## Employees

# 55,047

people were employed by HeidelbergCement at more than 3,000 locations in over 50 countries at the end of 2019.

## Employment & co-determination

### Development of the number of employees worldwide

At the end of 2019, the number of employees at HeidelbergCement came to 55,047 (previous year: 57,939). The decrease of around 2,900 employees essentially results from two opposing developments. On the one hand, around 3,700 jobs were cut across the Group due to portfolio optimisations, the realisation of synergies, efficiency increases in sales and administration, as well as location optimisations. On the other hand, approximately 800 new employees joined the Group. This increase was due to first-time consolidations in France and North America as well as new hires in some countries in the Northern and Eastern Europe-Central Asia and Asia-Pacific Group areas.

### GRI 102-41

### Dialogue with employee representatives

HeidelbergCement has a long tradition of employee co-determination, which has demonstrated its worth at our locations in Germany. Members of the employee committees at the individual locations form the General Council of Employees for HeidelbergCement AG as well as the Group Council of Employees. Moreover, employees are equally represented on the Supervisory Board.

Group management and employee representatives also engage in a continuous, constructive dialogue in the European Council of Employees. This council supplements the information and consultation processes that take place at a local level in the individual European countries.

In addition, there are trade unions and similar organisations in nearly all of the countries in which HeidelbergCement operates. As required by our Code of Business Conduct, we also engage in a fair and open dialogue with representatives of these organisations.

In the event of a reorganisation or job cuts, we work in close consultation with employee representatives to achieve a socially responsible solution. For example, we initially examine the possibility of transferring employees within the Group. If this is not feasible, we try to cushion the individual impact through retraining, early-retirement schemes, outplacement, and severance payments.

## Remuneration policy & working time regulation

Our remuneration systems are based on performance and results in accordance with the market standards for internationally operating companies in our sector. Alongside fixed salaries governed by a collective agreement or an individual work contract, our employees also receive variable remuneration elements based on their individual performance and on corporate success.

We consciously aim to achieve a high variable element as part of the total remuneration of our managers in order to directly reflect the connection between personal performance and corporate success.



The employees in our foreign subsidiaries benefit from attractive remuneration systems that correspond to the respective local market conditions. Collective regulations apply to more than half of the Group's employees.

#### Personnel costs and social benefits

Expenditure on wages and salaries, social security costs, costs of retirement benefits, and other personnel costs rose by 5.1% in comparison with the previous year to €3,187 million (previous year: 3,032). This corresponds to a share in revenue of 16.9% (previous year: 16.8%).

The amount of the contribution to the pension scheme at HeidelbergCement is based on accepted market standards. In Germany, we have created a matching model of contributions from the employer and the employees within the framework of the pension scheme. In countries without statutory retirement or health insurance, we support our employees at least in line with local practices.

#### Working time regulation

In our working time regulations, we conform to the legal requirements in effect at our locations. We promote adherence to these regulations by means of our compliance system, which enables employees to individually report possible violations (passive monitoring). To promote flexible working time options, we offer models such as flexitime, working time accounts, part-time work, and leaves of absence to our employees in many countries. Older employees have the option of switching to partial retirement. The part-time ratio at HeidelbergCement AG is 11% (previous year: 12%); for the Group as a whole, it is unchanged at 2.3%.



To prevent job-related illnesses, we check our work sites for exposure to factors hazardous to health and we train our employees in a wide range of occupational safety topics.

## Occupational health & safety

Occupational health and safety has top priority at HeidelbergCement and is an integral part of our key corporate values. Our declared aim is to achieve "zero harm". With effective preventative measures, we intend to minimise the risk of accidents and injuries as well as the risk of occupational illness. Our principles for protecting the workforce are specified in our Group policy on occupational health and safety.

→ [www.heidelbergcement.com/en/occupational-health-and-safety](http://www.heidelbergcement.com/en/occupational-health-and-safety)

#### Responsibility and organisation

At HeidelbergCement, all management levels are accountable for occupational health and safety. Our occupational safety organisation falls within the remit of the Chairman of the Managing Board, to whom the Director Group Human Resources, who is responsible



for Group Health & Safety, reports directly. The Managing Board members who oversee the different Group areas are in turn supported by H&S advisors who report directly to them.

Individual occupational health and safety measures designed to tackle any weak points are defined either by Group Health & Safety or the local units, depending on the nature and impact. Occupational safety measures are part of the personal goal agreements for the Managing Board and the top operations managers in the various countries, who adapt them to relevant target groups at location level. Last but not least, each individual employee, contractor, and visitor is responsible for following the occupational safety regulations.

Occupational health and safety management systems, such as those in accordance with the internationally accepted OHSAS 18001 and ISO 45001 standards, have already been implemented in 88% of our locations. These systems require a structured approach from the local line managers with planning, clear and safe work procedures, responsibilities, and controls to ensure an ongoing improvement process and thus prevent accidents.

#### Occupational safety

# 88%

of our operational sites already have a work management system.



The health and safety of our employees is a top priority for HeidelbergCement. We work hard every day to achieve our “Zero Harm” goal, whether through extensive training activities or the optimisation of safety measures at our locations.

**Dr. Klaus Hormann**

Manager Health & Safety, Group Human Resources

#### Targets and commitments

We believe that injuries, occupational illnesses, and work-related health impairments are avoidable. That’s why we continuously strive to minimise the risks for our employees, contractors, and third parties and to achieve our goal of “zero harm”, which we also reiterated in our Sustainability Commitments 2030.

In all countries, occupational health and safety is subject to legal requirements that have to be fulfilled. Furthermore, as a member of the Global Cement and Concrete Association (GCCA), HeidelbergCement is bound by its guidelines. These have been integrated into our internal standards.

As part of our Group policy on occupational health and safety, we have defined a set of “cardinal rules” that are mandatory for all employees and contractors. They relate in particular to those activities that have been identified as main risk areas for accidents. They are therefore also addressed in specific Group standards and must be translated into local regulations. Through intensive training measures, we aim to ensure that everyone affected remains aware of these risk areas in order to decrease the number of accidents – especially those resulting in fatalities.

 WASH Pledge

We signed the  
**Access to Safe Water,  
Sanitation, and Hygiene  
(WASH) at the Workplace**

Pledge. By doing so, we made a commitment to guarantee all our employees have access to drinking water as well as sanitation and hygiene facilities.

## The WASH Pledge: consistent with our Sustainability Commitments 2030

HeidelbergCement actively supports the United Nations' Sustainable Development Goal to ensure that everyone has access to safe and affordable drinking water. In May 2018, we therefore signed the Access to Safe Water, Sanitation, and Hygiene (WASH) at the Workplace Pledge, organised by the World Business Council for Sustainable Development (WBCSD).

## Most of our locations already meet the WASH standards

The HeidelbergCement Group's first self-assessment was carried out in 2018 and revealed that most locations already meet the WASH standards. This result was confirmed by the 2019 self-assessment. Above all, we are using the self-assessment tool, which is provided by the WBCSD, to continuously improve our processes and to take action where there is still potential for improvement. By 2021, we aim to satisfy all of the requirements of the WASH Pledge at our around 3,000 locations. For this reason, a special focus in 2019 was placed on actively supporting the country organizations in carrying out the self-assessment and on drawing up action plans at sites that show potential for improvement.



### Occupational safety as a management task

We train our employees in a wide range of occupational safety topics that are both legally mandated and defined internally, to raise their awareness of the risks connected with their tasks and thus decrease the number of accidents – especially those resulting in fatalities. We make use of conventional training held in classrooms, training centers, or on site, in addition to e-learning courses, which are only ever used to supplement face-to-face training. Occupational safety topics account for around 48% of all training hours at HeidelbergCement, corresponding to an average of around 12.7 hours per employee across the Group.

### Development of accident figures

Occupational health and safety is one of the core values of our company and therefore a fundamental element of our work processes. Our priority is to ensure that employees return home healthy at the end of the working day. In 2019, we decreased the accident frequency rate across the Group by 9.5%. Although many of our operational sites remained accident-free in 2019, we have not yet achieved our self-imposed Group goal of “zero harm”. We must therefore continue to focus on suitable preventative measures.

It was with great regret that in 2019 we had to announce the death of four of our own employees, who died as a result of accidents at work, one in a road accident. Furthermore, ten employees from external companies lost their lives, three of whom died in road accidents. We analyse each accident and share the findings across the Group in order to prevent similar accidents at other locations. Fatal accidents are also discussed by the Managing Board.

#### Accident trends for the HeidelbergCement Group

	2017	2018	2019
Accident frequency rate <sup>1)</sup>	1.9	1.7	1.5
Accident severity indicator <sup>2)</sup>	90	70	80
Fatality rate <sup>3)</sup>	0.4	0.4	0.7

1) Number of accidents involving Group employees with at least one lost working day per 1,000,000 hours worked.

2) Number of working days lost due to accidents involving Group employees per 1,000,000 hours worked.

3) Number of fatalities of Group employees per 10,000 Group employees.

In 2019, traffic accidents occurring during the transportation of our products once again formed a significant proportion of all accidents resulting in fatalities. Many of these transportations were carried out by external forwarding companies working on our behalf. When we revised the Driving Safety Group standard in 2019, we therefore incorporated the new safety requirements drawn up by experts in working groups. These include, for example, equipping trucks with retroreflective markings or retrofitting heavy vehicles used at our production sites with rear-view cameras. By including these requirements in our Group standard, we have made a commitment to implementing these measures promptly and carrying out appropriate checks during plant inspections.

### Occupational illnesses

The general illness rate at HeidelbergCement has been low for many years and amounted to 1.1% of all hours worked in 2019. Most of the cases of occupational illness acknowledged in recent years have involved noise-induced hearing impairment. In addition, some employees suffered from back problems and other musculo-skeletal disorders or respiratory illnesses.



To prevent job-related illnesses, we check our work sites for exposure to factors hazardous to health and regularly send our employees for medical examinations. In countries with less-developed statutory healthcare systems, our subsidiaries offer comprehensive health check-ups for all employees and in some instances for their families. In regions where HIV/AIDS, Ebola, or malaria frequently occur, the local units have set up programmes to advise the employees and inform them of the risks. These services are mostly offered through our own medical stations or the medical staff of in-house clinics.

## Human resources development

### Talent management

Qualified and motivated employees are an important prerequisite for the success of HeidelbergCement. Identifying our employees' talents, developing them, and – in competition with other companies – retaining those employees within the Group are therefore at the core of the Group-wide personnel policy. We use the HeidelbergCement competence model to do so. This model defines the essential professional and personal capabilities and skills that are critical for the success of our business. It thus enables the respective superiors to perform systematic, Group-wide assessments of performance and potential in accordance with standardised regulations and serves as a basis for the strategic development of managers and successor planning. Superiors and employees discuss development opportunities and prospects within the framework of structured appraisal interviews. The dialogue is primarily targeted at upper and middle management, those in specialist roles, and future executives. It helps us to attain three goals:

- To fill key positions worldwide with top-class candidates from within the business
- To develop top talent at HeidelbergCement in a targeted way
- To retain employees in the Group for the long term by means of personalised development planning

In 2019, we focused on the Africa-Eastern Mediterranean Basin region. A central screening process was carried out in this region for all senior managers as well as middle management talent, and subsequent development planning also took place. The management training for the region will be harmonised further in 2020.

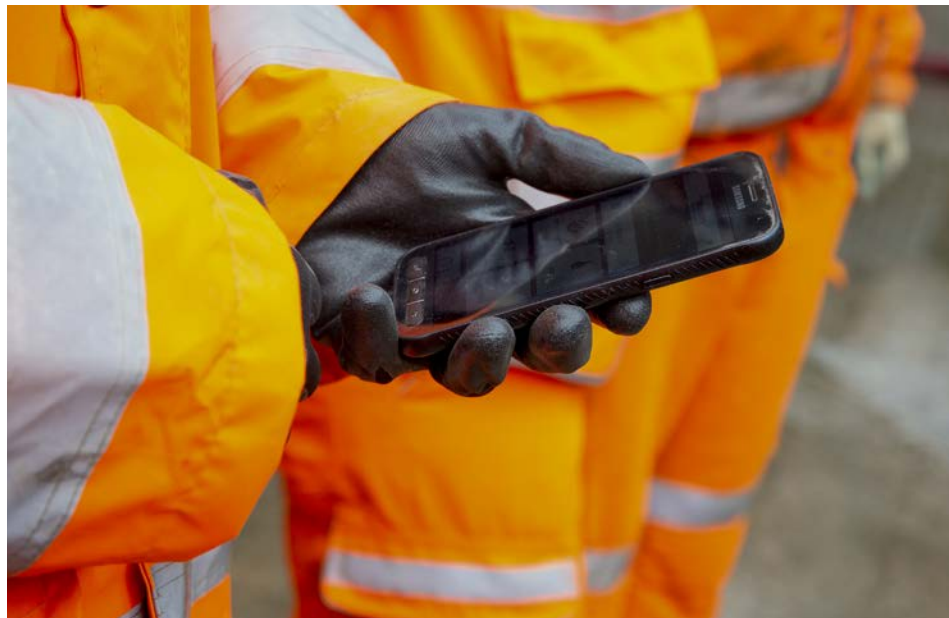
### Ongoing training

Forward-looking HR management means consistently investing in training, that is to say, employing and training qualified talent. The proportion of apprentices in Germany is 4% (previous year: 4%). The retention rate of these apprentices stands at 90% (previous year: 85%).

Technical skills are essential in ensuring the functionally sound operational management of process technology and maintenance in our plants. For a few years already, we have offered multilingual e-learning courses about cement production, specifically developed by the German Cement Works Association (VDZ).

As in the previous year, a focus of our training programmes throughout the Group was on occupational safety, which made up around 48% (previous year: 61%) of the total training measures. Other priorities were specialist training, which made up 28% (previous year: 23%), and the training of our managers, which made up 7% (previous year: 4%).

Our extensive training programmes in virtually every work area are characterised by practical and business-oriented learning and enable our employees to develop their skills.



The targeted building and expanding of our employees' digital competences was a key component of our initiative to support the digital transformation, which we started in 2019.

The Cement Academy at our Heidelberg Technology Center (HTC) offers seminars and training sessions around the world for the engineers and technicians at our cement plants. In particular, the course programme includes process technology and operations-related content. In 2019, 1,500 participants from all Group areas attended 124 classroom training sessions, each lasting up to one week. The majority of the courses were delivered in cement plants and involved practical learning units on the equipment.

To supplement our classroom courses, we offer various web-based learning programmes, including the multilingual Cement Manufacturing Curriculum, on which more than 3,000 employees are enrolled. During the reporting year, the range of e-learning programmes was expanded considerably, particularly in the areas of pyroprocessing and materials handling technology. We continue to offer our process control operators regular training on a process simulator (virtual cement plant).

Our Aggregates Academy also continued its employee training offer in the aggregates business line. Over 100 training sessions on the topic of aggregates were held in 16 countries. These were mostly carried out locally in the form of practical training at production sites for the plant management teams. In 2019, a priority initiative on the topic of maintenance was launched, with numerous training sessions taking place.

### **Strengthening digital competences**

In 2019, we started an initiative to support the digital transformation. From an HR perspective, this includes building and expanding our digital competences, supporting change processes for digital transformation, and further digitalising personnel processes and systems. Our efforts are focused on fundamental digital media skills as well as topics related to specific functions. To increase the transparency of our digital activities for employees, a platform was set up to provide information on the key global digitalisation projects and the tools used within the Group. In addition, e-learning courses on various digitalisation topics are available.

### **Management training**

The motivation and skills of our managers play a crucial role in determining how well HeidelbergCement positions itself among its global competitors and how prepared the Group is for future challenges. To equip our managers for their future tasks, we offer training programmes tailored specifically to the needs of our company. This applies both to traditional topics, such as strategy, leadership, and management, or the method of capital expenditure budgeting, and to special training topics, for instance in the area of technology. Uniform training content ensures that a common understanding of strategy, integrated management approach, and leadership is developed everywhere.

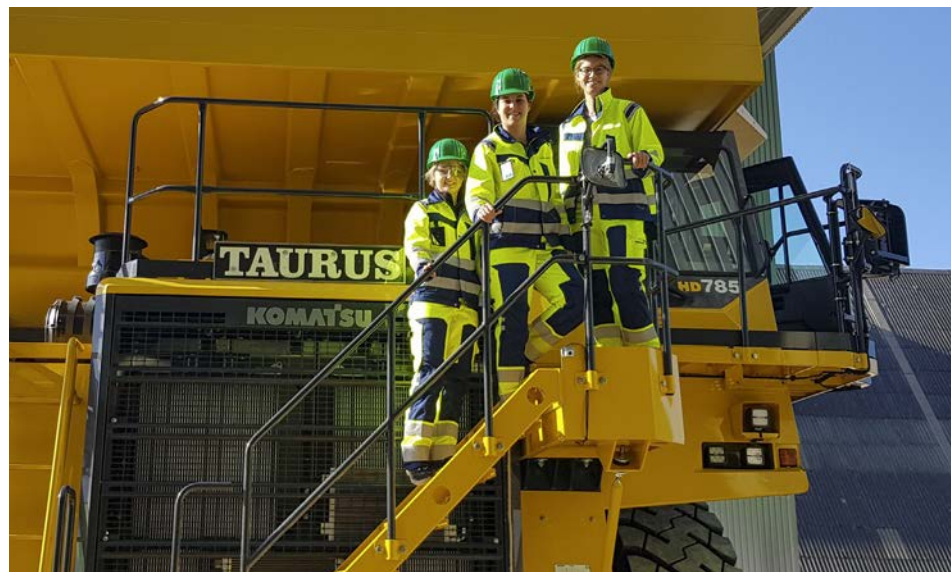




### Securing and advancing future executives

Since 2013, HeidelbergCement has been awarded the trainee seal of the German Initiative für karrierefördernde und faire Trainee-Programme (initiative for career-enhancing and fair trainee programmes) each year for its high-quality programmes for the advancement of future executives. As a member of the Fair Company initiative, we have been voluntarily committed to the creation of fair working conditions for interns and young professionals since 2004 and have carried the Fair Company seal since then.

In the reporting year, we continued our efforts to advance future executives. We offer university graduates international trainee programmes focusing on the areas of technology, sales, finance, HR, purchasing, and IT, and we also provide interdisciplinary trainee programmes. In 2019, we hired 269 (previous year: 327) university graduates overall. After intensive recruiting activities in the past year, the numbers were thus only slightly below the target level.



The participants in the trainee programme of HeidelbergCement Deutschland (Germany) are gaining an insight into our three core businesses along the value chain: raw material extraction, cement production, and construction sites.

### Recruiting future executives

# 269

university graduates were hired by us in 2019.

Moreover, we continued to work on expanding our programmes for the advancement of future executives and strengthening our recruitment of university graduates and graduates with first professional experience worldwide. In 2019, 490 (previous year: 474) employees took part in programmes that prepared them for more advanced tasks. Through a special programme, we prepare highly qualified engineers in the cement business for senior engineering positions. The participants undergo individually tailored training programmes that allow them to gain the necessary knowledge, skills, and experience to prepare them for the next stage of their career. Spending time at cement plants that are operated in exemplary fashion in different countries is a key element of the programme's success.

### Diversity management

#### Diversity as a success factor

When putting together teams of employees, it is our Group-wide personnel policy to prioritise diversity. We understand diversity as a management concept that brings together different cultures, personalities, talents, and levels of experience in a way that reflects the international and multiform character of our markets, our customer structure, and our business environment.



We achieve this goal with the following measures:

- Local country management and therefore an international management team
- An international workforce at the Group headquarters
- A complementary composition of management and other teams (internationality, expertise, experience, age, gender, etc.)
- Women in management positions reflecting the proportion of women in the total workforce in Germany

Our goal is to attract and advance highly qualified and committed employees around the world who can bring various social and professional skills to our company and thus contribute to our business success.

With the international composition of our management team, we hope to benefit from a broad range of experience and different cultural backgrounds. This is linked to our goal of being able to respond flexibly and quickly to global challenges as well as local market needs. The proportion of local managers at the upper management level amounts to around 80%.

#### Diversity

# 80%

was the proportion of local managers at our upper management level in 2019.

At the Group headquarters, we consciously aim to ensure that the workforce is composed of employees from the countries in which we operate. We benefit considerably from their local knowledge, and this also facilitates cooperation with the local personnel. We have 669 employees at the Group headquarters and at our technical centers in Heidelberg and Leimen, with around two-thirds of these employees coming from Germany and one-third from 51 other countries.

In early 2013, we signed the Diversity Charter as an affirmation of all our activities in this area to date and as a public statement of our respect for diversity. As in previous years, HeidelbergCement took part in activities connected with the German Diversity Day in 2019.

→ [www.charta-der-vielfalt.de/en/](http://www.charta-der-vielfalt.de/en/)

#### Women in leadership positions

For us, diversity also means that we reflect the ratio of women to men in our workforce as a whole when hiring to fill management positions. Within the Group, women made up 13% of the total workforce and held 10% of the upper management positions in 2019. As a listed and co-determined company, we have to set targets for the proportion of women in the two leadership levels below the Managing Board. Managers who report directly to the Managing Board form the first level at HeidelbergCement, and any of their employees with leadership responsibility form the second level below the Managing Board. In 2019, the proportion of women in leadership positions in Germany at the first level below the Managing Board was 10% (previous year: 12%), and 14% (previous year: 13%) at the second level. The aim is to increase the proportion of women in Germany in both leadership levels below the Managing Board to 15% by the end of June 2022. HeidelbergCement is also committed to increasing the proportion of women in the Managing Board. For this reason, the Supervisory Board of HeidelbergCement has set itself the goal of appointing at least one female member of the Managing Board in the future.

We have worked on the promotion of women in the last few years and achieved significant success. The proportion of women in programmes for the advancement of future executives across Germany is 31% (previous year: 26%) and therefore significantly higher than the proportion of women in the total workforce. We have made good progress in the appointment of women to leadership positions in staff functions. A big challenge remains the development in operational functions, such as sales and plant management, especially, since the number of women studying technical subjects relevant for building materials production is still rather small. Experience in these fields is a key qualification for assuming higher leading positions in these areas.

The global NOW – Network of Women at HeidelbergCement is an initiative that brings together female employees worldwide. NOW is implemented on a country-by-country basis through a personal exchange of information and experiences, as well as special, one-off events.

It aims, among other things, to support the network's members in developing their career potential and to increase awareness throughout the company of the changing demands on working and living environments.

#### Improving the work-life balance

In the race for the best employees, we adapt ourselves globally to social changes. In terms of what we offer to encourage a good work-life balance, we focus on flexible working time models and mobile forms of work. Because of the small size of our locations, cooperation with external networks has proven itself, for example in terms of children's day care and holiday programmes or caring for family members. Employees benefit from having easy access to a professional and flexible network at reasonable costs. As part of our FIT for FAMILY initiative, we have entered into cooperation with day-care centers for the location in Heidelberg, Germany. These arrangements mean we have our own quota of places to offer our employees.

#### Generation management

Our Group, too, is faced with the consequences of demographic change. Around 12% (previous year: 12%) of our employees are under the age of 30. The majority of the employees are aged between 30 and 49, making up around 52% (previous year: 54%) of the Group's total workforce, and 37% (previous year: 34%) of our employees are over 50 years of age.

We are responding to the effects of demographic change with numerous measures adapted to regional requirements. In Germany, for example, we have continued to develop our health management activities and have incorporated them in the FIT for LIFE initiative. This includes a prevention programme for the early diagnosis of illnesses and risk factors, but primarily focuses on the initiative of individuals to adopt a healthy lifestyle.

In the future, our health management activities will continue to focus on preventing typical age-related health risks and supporting health-conscious behaviour. We are therefore specifically promoting company sports activities for all age groups.

” With their knowledge and skills, our employees make a key contribution to HeidelbergCement's success. Our offers are aimed at the best possible development of their skills and preparation for future challenges. We also support a healthy work-life balance.

**Carmen Rex**

Director Group Human Resources



## Society & Corporate Responsibility

- 69 → Figures, data, facts
- 70 → Social responsibility
- 72 → Social engagement at our locations

Image: Employees of Ciments du Maroc organised activities as part of the "Clean Beaches" campaign on the beach of Safi, Morocco.





## Creating local value

We have production sites almost everywhere around the globe. Through our entrepreneurial activities, we create **added value for the communities** in which we operate. We are also involved in **community projects** at our sites.



Social responsibility → p. 70

## “Being a good neighbour”

is one of the six goals in our Sustainability Commitments 2030. We involve the communities near our production sites in our business activities, for example through various **dialogue formats**, as well as through local **community engagement plans**.

Social responsibility → p. 70

## Transparency and efficiency

are at the heart of our social engagement. That is why country-specific **Corporate Social Responsibility (CSR) policies** were developed at several subsidiaries in 2019.

Social engagement at our locations → p. 72

## Numerous projects and initiatives

in the areas surrounding our locations received our support in 2019: for example, we organise regular **environmental campaigns** at our plants in Russia, while in Morocco we have **renovated a number of schools** in the communities surrounding our plants.



It is important to us that people in the areas surrounding our approximately 3,000 locations worldwide are involved in our business activity and benefit from our products as well as the jobs that we create. Our economic performance allows us to generate added value for local communities. In line with our principle “think global – act local”, we also take measures that protect the environment and promote social progress.

GRI  
102-40

## Social responsibility

Good cooperative relationships with the communities in the areas where we are active are indispensable for our business operations and one of the keys to our business success. In these areas, we establish business contacts, capitalise on local know-how, and maintain a dialogue with our neighbours. By making this voluntary commitment to society, we strengthen the exchange of ideas and achieve long-term socio-economical added value for local communities.

We have made an express commitment to social responsibility in the Leadership Principles adopted by our Managing Board. Taking social responsibility and maintaining good relationships with our stakeholders are therefore management tasks. Together with the site managers, all country managers are responsible for these tasks in their respective countries. This also includes analysing local requirements as well as selecting, implementing, and monitoring charitable projects. Given the decentralised nature of these responsibilities, it is not possible at present to make a statement as to the financial scope of this Group-wide social engagement.

We involve local communities in our business activities through various dialogue formats, for example, as well as through local community engagement plans. This also includes long-term partnerships with local non-governmental organisations. Moreover, we keep the communities at our locations informed by means of newsletters, open days, and so on. The Group Handbook for Community Relationship Management is a useful source of design and implementation strategies for dialogue formats, partnerships, and charitable involvement for countries and locations.

In addition, the Group-wide Corporate Citizenship Policy defines the general criteria and objectives related to our social engagement. This engagement is focused on three areas in which we have specific expertise and can achieve the best results for society:

- Building, architecture, and infrastructure: We provide practical help in the construction of buildings and infrastructure by making products, financial means, and expertise available.
- Environment, climate, and biodiversity: We support initiatives that promote environmental protection and strengthen the diversity of nature at our locations.
- Education, training, and culture: In this area, we are guided by the specific needs of our locations.

We have also defined clear evaluation criteria to ensure that our activities are both transparent and effective. We support projects, initiatives, and organisations that are active at our locations or to which we have a direct link. We attach great importance to ensuring that the guidelines and principles of these organisations align with our own corporate philosophy.



📍 Protecting the environment at the Atlantic coast of Morocco



# On 3 beaches

around the Moroccan coastal town Safi, Ciments du Maroc shows its commitment to environmental protection.

## Ciments du Maroc: social commitment at our location in Safi

For almost 20 years, our subsidiary Ciments du Maroc has been active in the “Let our beaches smile” initiative in the Safi region. In 2019, numerous activities again took place at the beaches of Safi, Lalla Fatna, and Kouram Eddif in the context of the “Clean Beaches” campaign. Each of the three beaches has the “Blue Flag” certification, which marks beaches and marinas that meet sustainable tourism standards.

## Promoting education and environmental awareness

With sports tournaments, games, and workshops, Ciments du Maroc called the beach visitors’ attention to environmental protection and other topics such as waste recycling, first aid, and ecologically sound behaviour during the 2019 summer season. Several thousand people participated at each of the events, which were offered by employees at the Safi plant of Ciments du Maroc as part of their voluntary commitment to society.



“Being a good neighbour” means tying the knot between business and social development. This creates win-win situations for HeidelbergCement and local communities.

**Tobias Hartmann**

Corporate Social Responsibility Manager  
Global Environmental Sustainability

In 2019, we again took further steps to strengthen the processes and improve the management structure of our social commitment in the various countries. The aim is to make our social commitment more systematic and more transparent, as well as more efficient and targeted. During the year, country-specific Corporate Social Responsibility (CSR) policies were therefore developed at several subsidiaries. We continued to roll out Group Internal Audit's programme for the targeted handling of donations and CSR activities. The Group also pursues a decentralised approach in this area, and the countries can contact the Global Environmental Sustainability department for content-related support as required.

The exact wording of our Corporate Citizenship Policy can be found here:

→ [www.heidelbergcement.com/society](http://www.heidelbergcement.com/society)

As part of the Sustainability Commitments 2030, adopted in October 2017, we defined specific performance indicators that will allow us to measure the quality of our relationships with the communities at our locations:

- Percentage of locations with a community engagement plan
- Total value of annual donations (monetary/material donations)
- Number and type of development programmes supported by HeidelbergCement
- Hours of voluntary charitable work per year

## Social engagement at our locations

In 2019, many of our larger production locations worldwide once again took steps to initiate dialogue with local residents at open days, for example. To support local communities and demonstrate that we are a responsible corporate citizen, we took a number of measures and promoted various initiatives during the reporting year: for example, we organise regular environmental campaigns at our plants in Russia, while in Morocco we have renovated a number of schools in the communities surrounding our plants.

In Germany, we have already been pursuing the project “Kooperation Industrie-Schule” (KIS) for some years in Heidelberg, where our headquarters are located, and in several locations of our plants. This cooperation between industry and schools includes activities ranging from plant visits and special lectures at schools to holiday programmes and supervised work with KiTec boxes, helping children to discover the world of technology. Both sides benefit from this cooperation: for the children, it facilitates access to technology, and our employees profit from the experience gained when dealing and talking with the pupils.





## 📍 Practical training for masons and joiners in Togo



**In Togo,**  
we are creating new profes-  
sional opportunities for young  
people while improving the  
quality of the local building  
trade.

## Being a good neighbour

We have set ourselves the objective of supporting social and economic development in our neighbouring communities. In doing so, we strive to take a strategic approach and establish a link to our core business. In the area surrounding our plant in Tabligbo, Togo, we are working with the German Agency for International Cooperation (GIZ) to develop modular training courses for masons and joiners.

## Creating new opportunities

In Togo, particularly in rural areas, the quality of services and products in the building trade is often inadequate. This is primarily due to a lack of opportunities for practical training. For this reason, many of the workers at the operating units are insufficiently qualified. At the same time, the lack of training opportunities for young people hinders their integration into working life, which in turn encourages migration to towns and cities. The aim of the project is therefore to create new professional opportunities for young people while improving the quality of the local building trade.



## Targets

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Image: Employees of our subsidiary in Kazakhstan.

## Strategy & Management

Target	Measures	Achieved in 2019	Deadline	Status	Page
Commitment to sustainable cement production at industry and association level.	Continuation of the reporting on the implementation of the GCCA guidelines for cement production.	In 2019, the environmental and occupational safety indicators were once again subjected to an external audit in line with GCCA obligations.	Ongoing	■	→ 18-21, 37, 60, 89

## Business & Compliance

Target	Measures	Achieved in 2019	Deadline	Status	Page
Further development of the Group compliance management programme and of Group compliance activities with regard to current developments.	Realisation of concrete measures to protect human rights, including implementation of a human rights analysis. Target: Risk assessment for all countries in which HeidelbergCement is active. Between 2018 and 2020, one-third of the country organisations are audited each year.	By the end of 2019, human risks analyses were carried out in over two-thirds of the country organisations. The methodical approach was audited externally and was deemed appropriate.	Ongoing	■	→ 25-28
Continuous improvement of customer satisfaction.	Introduction of the Net Promoter System® (NPS) at HeidelbergCement in 2015 – for the ongoing analysis of customer satisfaction and needs, in order to continuously improve the customer experience and our business results.	Net Promoter System® introduced in 35 countries. – Net Promoter Score® for HeidelbergCement Group: 2017: 47 2018: 45 2019: 49	Ongoing	■	→ 31
Efficient use of resources in order to earn a premium on our cost of capital.	Disciplined investment and cash flow management. Continuation of programmes to increase efficiency.	ROIC of 6.9% compared with the weighted average cost of capital (WACC) of 6.6%.	Ongoing	■	→ 25, AR 2019 p. 39

■ Target achieved   ■ Target partly achieved   ■ Target not achieved   □ New target

## Product & Innovation

Target	Measures	Achieved in 2019	Deadline	Status	Page
Identification of sustainable products in the Heidelberg-Cement portfolio.	Development of a product evaluation tool (PET) and introduction in a selection of representative countries.	Introduction of the PET tool in 4 additional countries. PET has thus been launched in a total of 10 countries: Germany, Netherlands, Norway, Sweden, Belgium, Czechia, Poland, Indonesia, France, Canada.	2023	■	→ 38
	Extension of the application of the PET Tool to a selection of countries with revenue amounting to at least 25% of Group revenue.	The 10 country organisations PET has so far been introduced in account for 34.5% of Group revenue.	2023	■	→ 38
Innovation in the areas of low-carbon concretes and cements, building materials recycling, and special concretes.	Continuation of the activities in the area of research and technology. This includes participation in and coordination of a research project in Germany to develop practice-oriented concepts for the use of recycled aggregates in concrete production.	Consistent continuation of research and cooperation in the areas of low-carbon concretes and cements, building materials recycling, and special concretes. Initiation of the "C2inCO2" research project with HeidelbergCement as project coordinator and approval by the BMBF.	Ongoing	■	→ 32-38, 44

## Production & Supply Chain

Target	Measures	Achieved in 2019	Deadline	Status	Page
<b>Environmental management</b>					
All integrated cement plants are to operate with a certified environmental management system.	Implementation of an action plan for the Group-wide control and monitoring of the ongoing introduction of certified environmental management systems.	93.5% of all integrated cement plants worldwide operate with an environmental management system. The number was 96% in 2018, the decline is due to plant closures.	2020	■	→ 41, 76
<b>CO<sub>2</sub> emissions and alternative raw materials and fuels</b>					
Reduction of the specific net CO <sub>2</sub> emissions by 30% over the period from 1990 to 2030.	Investment for research in the following areas: energy-efficient production processes, CO <sub>2</sub> capture and use, composite cements with reduced clinker content, and new clinker technologies. Increased use of alternative fuels and biomass. Investment for research into technologies for CO <sub>2</sub> capture and CO <sub>2</sub> recycling.	As at 2019: – Reduction of approx. 22% to 589.8 kg CO <sub>2</sub> per tonne of cement	2030	■	→ 32-38, 43-47, 82
Lowering clinker content of cement to 70%.	Development of new composite cements. Use of alternative raw materials.	As at 2019: – Clinker proportion: 74.5% (previous year: 74.8%)	2020	■	→ 34-35, 84
Increasing the share of alternative fuels used to 30%.	Focus on three waste flows: sorted fractions of household and domestic waste with high calorific values, sewage sludge, and hazardous waste.	As at 2019: – Proportion of alternative fuels: 24% (previous year: 22%)	2030	■	→ 47, 84

■ Target achieved ■ Target partly achieved ■ Target not achieved □ New target

## Production & Supply Chain

Target	Measures	Achieved in 2019	Deadline	Status	Page
<b>Local environmental effects</b>					
Monitoring of water consumption in all business lines. Implementation of measures to reduce consumption where economically and technically feasible.	Monitoring of water consumption and introduction of key figures on water reporting initially in the cement business line and subsequently in the concrete and aggregates business lines. Implementation of water management plans at all sites located in water scarcity areas.	<ul style="list-style-type: none"> <li>Monitoring of water consumption in the cement business line. Specific water consumption in 2019: 267.3 L/t cement (previous year: 269,9 L/t cement).</li> <li>Development of initial individual water management plans for cement plants.</li> </ul>	2030	■	→ 51-53, 85
Measuring emissions of heavy metals, volatile organic compounds (VOC), and dioxins/furans at all locations.	Continuous emission measurements.	As at 2019: <ul style="list-style-type: none"> <li>106 kilns report on mercury emissions (previous year: 112); the decline is due to the decommissioning of kilns, and biennial measurement cycles in some countries.</li> <li>108 kilns report on dioxins/furans (previous year: 108).</li> </ul>	Ongoing	■	→ 84
Lowering emissions per tonne of clinker (reference year: 2008): <ul style="list-style-type: none"> <li>Dust: by 80%</li> <li>Nitrogen oxides: by 40%</li> <li>Sulphur oxides: by 40%</li> </ul>	Continuous optimisation and modernisation of processes (best available technology, or BAT) in the cement plants.	As at 2019: <ul style="list-style-type: none"> <li>Dust: -80%</li> <li>Nitrogen oxides: -20%</li> <li>Sulphur oxides: -28%</li> </ul>	2030	■	→ 51, 84
<b>Subsequent use and biodiversity management</b>					
Restoration plans for 100% of the active quarries for cement and aggregates (in Europe, Africa, and Asia).	Continuous expansion of restoration plans.	As at 2019: <ul style="list-style-type: none"> <li>In the cement business line: 88% (previous year: 88%)</li> <li>In the aggregates business line: 79% (previous year: 76%)</li> </ul>	2030	■	→ 17, 48, 85
Implementation of biodiversity management plans at 100% of quarries in areas with a high biological value (in Europe, Africa, and Asia).	Development of training documentation and manuals; provision of corresponding training on site. Continuous expansion of biodiversity management plans.	As at 2019: <ul style="list-style-type: none"> <li>In the cement business line: 47% (previous year: 47%)</li> <li>In the aggregates business line: 49% (previous year: 41%)</li> </ul>	2030	■	→ 48, 85

## Employees & Employment

Target	Measures	Achieved in 2019	Deadline	Status	Page
Reduction of accident frequency and the accident severity indicator to zero for Group employees.	Further intensification of proactive measures such as the performance and analysis of safety conversations, the reporting of near-accidents with the corresponding measures, continuation of the "Clean site/ Safe site" initiative, updating of Group standards.	As at 2019: <ul style="list-style-type: none"> <li>Accident frequency rate: 1.5 (previous year: 1.7)</li> <li>Accident severity indicator: 80 (previous year: 70)</li> </ul> Occupational safety topics accounted for around 48% of all training hours at HeidelbergCement, corresponding to almost 12.7 hours per employee.	Ongoing	■	→ 59/60, 62/63, 88
Reduction of the number of fatalities to zero for Group employees.	Further intensification of proactive measures such as the performance and analysis of safety conversations, the reporting of near-accidents with the corresponding measures, continuation of the "Clean site/ Safe site" initiative, updating of Group standards.	As at 2019: <ul style="list-style-type: none"> <li>Fatality rate: 0.7 (previous year: 0.4)</li> </ul>	Ongoing	■	→ 59/60, 62/63, 88

■ Target achieved ■ Target partly achieved ■ Target not achieved □ New target

## Employees & Employment

Target	Measures	Achieved in 2019	Deadline	Status	Page
Implementation of the WASH Pledge of the World Business Council for Sustainable Development (WBCSD).	Performing a yearly self-assessment to monitor the success of the implementation, and publication of the results. Aspects monitored include compliance with local and national regulations and laws, the supply of drinking water to the workplace, and access to sanitation and hygiene at the workplace.	Implementation of the annual self-assessment regarding the fulfilment of the requirements with an extended coverage of 40 countries in Africa, Europe, Asia and Australia (20 countries in the previous year). Evaluation of the results: Requirements in the areas of access to water and sanitary facilities over 90% fulfilled, requirements in the area of hygiene over 85% fulfilled. Preparation of initial action plans for sites with potential for improvement.	2021	■	→ 61
Share of women in management positions (first level) in Germany: 15%. Share of women in management positions (second level) in Germany: 15%.	Targeted support of women by means of appropriate management programmes and programmes for the advancement of future executives.	As at 2019: – Share of women in management positions in Germany: 10% at first management level, 14% at second management level – Share of women in programmes for the advancement of future executives in Germany: 31.2%	2022	■	→ 66/67, 87
Sustainable talent management.	Key positions are filled internally with top-class candidates worldwide.	As at 2019: – 29% of all positions are filled internally (worldwide) – 24% of all positions within Group functions at the headquarters are filled internally	Ongoing	■	→ 63-65
Promoting diversity in the workforce.	Promoting an international composition of the workforce at Group headquarters, bringing together different cultures, talents, and experiences, and reflecting the company's presence on international markets.	As at 2019: – 227 international employees from 52 countries at Group headquarters (of a total of 669 employees)	Ongoing	■	→ 65/66

## Society & Corporate Responsibility

Target	Measures	Achieved in 2019	Deadline	Status	Page
Ensuring transparent communication with stakeholders.	Strengthening of contact with stakeholders and intensification of dialogue on both local and Group levels. Development of guidelines for country organisations to ensure structured involvement of local players.	Conducting numerous different kinds of dialogues with the stakeholders at national level. Expansion of the auditing programme of Group Internal Audit in the area of CSR.	Ongoing	■	→ 18, 70, 72
Support for the economic and social development of neighbouring communities.	Provision of in-kind and monetary donations for non-profit organisations as well as the development of strategic "shared value" projects. Development and promotion of corporate volunteering.	Strengthening of the structure in the area of CSR in different countries. Development of several internal guidelines to improve CSR management. Implementation of numerous projects to support the local communities.	Ongoing	■	→ 70-73

■ Target achieved ■ Target partly achieved ■ Target not achieved □ New target

## Appendix

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Image: Mining aggregates at our site in Eagle Quarry/Ohio, USA.



# Key figures

## Strategy & management

		2017	2018	2019	Unit	Assurance <sup>1)</sup>
Revenue/result	Total Group revenue	17,266	18,075	18,851	€ million	●
	Result from current operations before depreciation and amortisation (RCOBD) <sup>2)</sup>	3,297	3,100	3,580	€ million	●
	Result from current operations (RCO) <sup>2)</sup>	2,188	2,010	2,186	€ million	●
	Profit for the financial year	1,058	1,286	1,242	€ million	●
	Group share of profit	918	1,143	1,091	€ million	●
	Dividend per share	1.90	2.10	0.60	€	●
	Earnings per share	4.62	5.76	5.50	€	●
Investments in tangible fixed assets	Including maintenance, optimisation, and environmental protection measures	1,035	1,061	1,183	€ million	●
Depreciation and amortisation		1,109	1,090	1,394	€ million	●
Balance sheet	Equity (including non-controlling interests)	15,987	16,822	18,504	€ million	●
	Balance sheet total	34,558	35,783	38,589	€ million	●
	Net debt <sup>3)</sup>	8,695	8,323	8,410	€ million	●
Material costs and other operating expenses		6,782	7,478	7,586	€ million	●
Expenditure on research and technology		141.0	145.7	134.0	€ million	●
Group sales	Cement and clinker:					
	– Western and Southern Europe	28.9	30.8	29.9	million t	●
	– Northern and Eastern Europe-Central Asia	25.9	25.6	23.9	million t	●
	– North America	16.4	16.2	16.1	million t	●
	– Asia-Pacific	34.7	36.9	35.8	million t	●
	– Africa-Eastern Mediterranean Basin	19.0	19.7	19.5	million t	●
	– Total	125.7	130.0	125.9	million t	●
	Aggregates:					
	– Western and Southern Europe	78.5	81.3	83.5	million t	●
	– Northern and Eastern Europe-Central Asia	52.3	51.3	48.2	million t	●
	– North America	120.8	123.4	128.1	million t	●
	– Asia-Pacific	41.5	43.4	39.8	million t	●
	– Africa-Eastern Mediterranean Basin	12.4	10.1	8.9	million t	●
	– Total	305.3	309.4	308.3	million t	●

1) External assurance of the key figures for 2019 within the framework of the Annual Report 2019 or in line with our obligation with regard to the Global Cement and Concrete Association (GCCA). According to the GCCA Sustainability Framework, baseline/historical data must be adjusted following acquisitions or divestments.  
 2) 2018 amount was restated, see Annual Report 2019, page 119 f.  
 3) 2018 amount was restated due to adjusted net debt definition.



## Strategy & management

		2017	2018	2019	Unit	Assurance <sup>1)</sup>
Group sales	Ready-mixed concrete:					
	– Western and Southern Europe	17.3	17.5	18.4	million m <sup>3</sup>	●
	– Northern and Eastern Europe-Central Asia	6.9	7.0	6.8	million m <sup>3</sup>	●
	– North America	6.8	7.1	7.7	million m <sup>3</sup>	●
	– Asia-Pacific	10.6	11.6	12.0	million m <sup>3</sup>	●
	– Africa-Eastern Mediterranean Basin	5.1	5.3	5.3	million m <sup>3</sup>	●
	– Total	47.2	49.0	50.7	million m <sup>3</sup>	●
	Asphalt:					
	– Western and Southern Europe	3.3	3.6	3.6	million t	●
	– North America	4.0	4.1	5.0	million t	●
	– Asia-Pacific	1.8	2.1	2.3	million t	●
	– Africa-Eastern Mediterranean Basin	0.6	0.5	0.4	million t	●
	– Total	9.6	10.3	11.3	million t	●
	Cement type portfolio	– Ordinary Portland cement	40.0	39.0	37.6	%
– Limestone cement		17.7	18.0	18.1	%	–
– Pozzolana/fly ash cement		7.5	9.2	8.3	%	–
– Slag cement		13.4	12.1	12.2	%	–
– Multi-component cement		18.4	18.5	20.1	%	–
– Oilwell/white cement		0.7	0.6	0.5	%	–
– Masonry cement/special binder		0.9	0.8	1.6	%	–
– Ground granulated blast furnace slag		1.4	1.7	1.7	%	–
Share of integrated cement plants with a certified environmental management system		89.3	96.0	93.5	%	–
Production facilities in which independent environmental audits have been carried out within the last five years	– Cement	68	71	68	%	–
	– Aggregates	68	83	78	%	–

1) External assurance of the key figures for 2019 within the framework of the Annual Report 2019 or in line with our obligation with regard to the Global Cement and Concrete Association (GCCA). According to the GCCA Sustainability Framework, baseline/historical data must be adjusted following acquisitions or divestments.

## Product & innovation

		2017	2018	2019	Unit	Assurance <sup>1)</sup>
Sustainable construction	Sales of recycled aggregates	–	3.4	2.2	million t	–
	Membership of Green Building Councils and Sustainable Infrastructure Councils	11	12	13	number	–
Revenue from sustainable products	Share of revenue	–	11.4 <sup>2)</sup>	11.4 <sup>3)</sup>	%	●

## Production & supply chain

		1990	2017	2018	2019	Unit	Assurance <sup>1)</sup>
Reduction in CO <sub>2</sub> emissions	Cement business line:						
	– Absolute gross CO <sub>2</sub> emissions (Scope 1)	83.2	73.8	75.7	72.6	million t	●
	– Absolute net CO <sub>2</sub> emissions (Scope 1)	81.6	69.9	71.7	68.4	million t	●
	– Specific gross CO <sub>2</sub> emissions per tonne of cementitious material (Scope 1)	759.5	636.1	627.6	621.8	kg CO <sub>2</sub> /t	●
	– Specific net CO <sub>2</sub> emissions per tonne of cementitious material (Scope 1)	751.7	607.6	598.9	589.8	kg CO <sub>2</sub> /t	●
	– Indirect CO <sub>2</sub> emissions	7.8	4.7	4.2	4.4	million t	●
	Aggregates business line:						
	– Absolute CO <sub>2</sub> emissions from fuels (Scope 1)	–	–	–	0.48	million t	–
	– Absolute CO <sub>2</sub> emissions from purchased electricity (Scope 2)	–	–	–	0.30	million t	–
	– Specific CO <sub>2</sub> emissions from fuels (Scope 1)	–	–	–	1.63	kg CO <sub>2</sub> /t	–
	– Specific CO <sub>2</sub> emissions from purchased electricity (Scope 2)	–	–	–	1.02	kg CO <sub>2</sub> /t	–
	All business lines:						
	– CO <sub>2</sub> emissions from purchased goods and services (Scope 3)	–	–	–	9.42	million t	●
	– CO <sub>2</sub> emissions from purchased fuels (Scope 3)	–	–	–	3.89	million t	●
	– CO <sub>2</sub> emissions from upstream and downstream transportation and distribution (Scope 3)	–	–	–	9.40	million t	●

1) External assurance of the key figures for 2019 within the framework of the Annual Report 2019 or in line with our obligation with regard to the Global Cement and Concrete Association (GCCA). According to the GCCA Sustainability Framework, baseline/historical data must be adjusted following acquisitions or divestments.  
 2) Collected in the following countries: DEU, BEL, NLD, POL, CZE, NOR, SWE.  
 3) Collected in the following countries: DEU, BEL, NLD, POL, CZE, NOR, SWE, IDN, FRA, CAN. Value for 2019 on a like-for-like basis: 12.19%.

## Production & supply chain

		1990	2017	2018	2019	Unit	Assurance <sup>1)</sup>
Energy/raw materials	Absolute energy consumption:						
	– Cement	454,393	367,950	376,882	363,607	TJ	●
	– whereof clinker production	389,111	312,512	319,705	307,996	TJ	●
	– Aggregates	n.a.	8,109	9,203	9,281	TJ	–
	Specific energy consumption:						
	– Cement	4,186	3,200	3,150	3,136	MJ/t	●
	– whereof clinker production	4,363	3,602	3,566	3,573	MJ/t	●
	– Aggregates	n.a.	31.0	32.1	31.6	MJ/t	–
	Fuel mix for clinker production:						
	– Hard coal	52.4	47.7	46.8	44.2	%	●
	– Lignite	0.0	2.3	2.1	1.7	%	●
	– Petroleum coke	8.7	19.7	18.3	19.6	%	●
	– Natural gas	17.0	7.3	8.2	9.6	%	●
	– Light fuel oil	0.6	0.2	0.2	0.2	%	●
	– Heavy fuel oil	16.2	1.5	2.1	0.4	%	●
	– Other fossil fuels	2.2	0.3	0.2	0.3	%	●
	– Alternative fossil fuels	2.8	13.2	13.5	14.8	%	●
	– Biomass	0.2	7.9	8.5	9.1	%	●
	– Proportion of biomass in mix of alternative fuels	6.3	37.4	38.7	38.1	%	●

1) External assurance of the key figures for 2019 within the framework of the Annual Report 2019 or in line with our obligation with regard to the Global Cement and Concrete Association (GCCA). According to the GCCA Sustainability Framework, baseline/historical data must be adjusted following acquisitions or divestments.

## Production & supply chain

		1990	2017	2018	2019	Unit	Assurance <sup>1)</sup>
Energy/raw materials	Alternative fuel mix for clinker production:						
	– RDF	1.6	25.4	26.8	25.7	%	●
	– Waste oil	29.0	3.4	3.2	3.6	%	●
	– Used tyres	17.1	11.8	12.1	9.8	%	●
	– Solvents	30.8	7.6	6.0	6.0	%	●
	– Dried sewage sludge	0.0	2.1	2.0	1.7	%	●
	– Meat and bone meal	0.0	4.2	3.8	3.4	%	●
	– Agricultural waste and waste wood	0.0	3.7	6.5	6.0	%	●
	– Other biomass	6.3	27.5	26.4	26.9	%	●
	– Other alternative fuels	15.1	14.5	13.2	16.8	%	●
	Proportion of alternative fuels (incl. biomass)	3.0	21.0	22.0	24.0	%	●
	Clinker content in cementitious material	82.0	75.4	74.8	74.5	%	●
	Proportion of alternative raw materials:						
	– Clinker	n.a.	2.7	3.1	2.9	%	●
– Cement	n.a.	11.1	11.3	11.3	%	●	
		2008	2017	2018	2019	Unit	Assurance <sup>1)</sup>
Emissions	Absolute NO <sub>x</sub> emissions	84,571	119,642	114,514	110,079	t	●
	Specific NO <sub>x</sub> emissions	1,585	1,373	1,263	1,273	g/t clinker	●
	Absolute SO <sub>x</sub> emissions	27,007	31,989	31,858	31,639	t	●
	Specific SO <sub>x</sub> emissions	506	367	351	366	g/t clinker	●
	Absolute dust emissions	17,043	7,862	7,272	5,454	t	●
	Specific dust emissions	319	90	80	63	g/t clinker	●
	Proportion of clinker produced in kilns with continuous or discontinuous measurement of all emissions	65	87	83	78	%	●
	Proportion of clinker produced in kilns with continuous measurement of dust, NO <sub>x</sub> , and SO <sub>x</sub> emissions	87	88	90	87	%	●
	Mercury:						
	– Specific emissions	n.a.	0.034	0.030	0.038	g/t clinker	●
	– Number of kilns reporting	n.a.	107	112	106		–
	Dioxins and furans:						
	– Specific emissions	n.a.	0.059	0.035	0.056	µg TEQ/t clinker	●
	– Number of kilns reporting	n.a.	111	108	108		–

1) External assurance of the key figures for 2019 within the framework of the Annual Report 2019 or in line with our obligation with regard to the Global Cement and Concrete Association (GCCA). According to the GCCA Sustainability Framework, baseline/historical data must be adjusted following acquisitions or divestments.

## Production & supply chain

		2017	2018	2019	Unit	Assurance <sup>1)</sup>
Biodiversity and conservation of resources	Proportion of quarries in areas with a high biological value, with biodiversity management plan:					
	– Cement	43	47	47	%	–
	– Aggregates	38	41	49	%	–
	Proportion of active quarries with a restoration plan:					
	– Cement	80	88	88	%	–
	– Aggregates	–	76	79	%	–
Water management (cement)	Total water withdrawal	60.4	65.4	66.8	million m <sup>3</sup>	●
	By source:					
	– Surface water	29.3	33.6	34.7	million m <sup>3</sup>	●
	– Groundwater	9.7	9.5	12.1	million m <sup>3</sup>	●
	– Seawater	2.3	3.2	3.5	million m <sup>3</sup>	●
	– Public/private water supply	5.2	5.5	5.4	million m <sup>3</sup>	●
	– External wastewater	0.1	0.0	0.0	million m <sup>3</sup>	●
	– Quarry water	9.4	9.4	9.5	million m <sup>3</sup>	●
	– Collected rainwater	4.5	4.1	1.6	million m <sup>3</sup>	●
	Total water discharge/wastewater	25.2	33.1	29.9	million m <sup>3</sup>	●
	By place of discharge:					
	– Surface water	21.2	27.7	24.6	million m <sup>3</sup>	●
	– Groundwater	1.0	0.0	0.1	million m <sup>3</sup>	●
	– Seawater	2.7	1.2	3.9	million m <sup>3</sup>	●
	– External water treatment systems	0.7	1.2	0.8	million m <sup>3</sup>	●
	– Other discharge area	0.6	0.6	0.6	million m <sup>3</sup>	●
	Water consumption (water withdrawal minus wastewater discharge)	35.2	32.2	36.9	million m <sup>3</sup>	●
	Quarry water not used	64.2	57.1	62.3	million m <sup>3</sup>	–
	Specific water withdrawal for clinker	692.8	721.2	630.2	L/t	●
	Specific water withdrawal for cement	526.2	547.8	484.0	L/t	●
Specific water consumption for clinker	403.5	355.4	348.1	L/t	●	
Specific water consumption for cement	306.5	269.9	267.3	L/t	●	

1) External assurance of the key figures for 2019 within the framework of the Annual Report 2019 or in line with our obligation with regard to the Global Cement and Concrete Association (GCCA). According to the GCCA Sustainability Framework, baseline/historical data must be adjusted following acquisitions or divestments.

## Employees & employment

	2017	2018	2019	Unit	Assurance <sup>1)</sup>
<b>Employees and employment</b>					
Number of employees as at 31 December:					
– Western and Southern Europe	15,497	15,903	15,608	employees	●
– Northern and Eastern Europe-Central Asia	13,531	12,515	11,251	employees	●
– North America	8,726	8,750	9,047	employees	●
– Asia-Pacific	14,039	14,086	13,190	employees	●
– Africa-Eastern Mediterranean Basin	6,856	6,214	5,498	employees	●
– Group Services	405	472	454	employees	●
– Total	59,054	57,939	55,047	employees	●
Employee turnover:					
– Western and Southern Europe	13	14	12	%	–
– Northern and Eastern Europe-Central Asia	15	14	12	%	–
– North America	18	20	20	%	–
– Asia-Pacific	11	9	9	%	–
– Africa-Eastern Mediterranean Basin	13	5	5	%	–
– Total	13	13	11	%	–
Personnel costs and social benefits:					
– Wages, salaries, social security costs	2,801.8	2,816.0	2,975.1	€ million	●
– Costs of retirement benefits	153.3	176.4	179.2	€ million	●
– Other personnel costs	34.6	39.3	33.1	€ million	●
– Total	2,989.7	3,031.7	3,187.4	€ million	●
Proportion of part-time employees (Group)	2.5	2.5	2.3	%	–
Proportion of part-time employees (HeidelbergCement AG)	11.1	11.6	11.3	%	●
Age structure (Group):					
– Younger than 30	12	12	11.7	%	●
– 30–49	52	54	51.8	%	●
– 50 and older	36	34	36.5	%	●

1) External assurance of the key figures for 2019 within the framework of the Annual Report 2019 or in line with our obligation with regard to the Global Cement and Concrete Association (GCCA). According to the GCCA Sustainability Framework, baseline/historical data must be adjusted following acquisitions or divestments.

## Employees & employment

	2017	2018	2019	Unit	Assurance <sup>1)</sup>
<b>Employees and employment</b>					
Share of female employees (Group)	13	13	13	%	●
Share of female employees in top management positions (Group)	10	10	9.8	%	●
Share of female employees in programmes for the advancement of future executives (Group)	22	22	17.8	%	–
Share of female employees (Germany)	16	15	15.3	%	●
Share of female employees in top management positions (Germany)	9	9	9.1	%	●
Share of female employees N-1 (Germany)	11	12	10.3	%	●
Share of female employees N-2 (Germany)	11	13	13.6	%	●
Share of female employees in programmes for the advancement of future executives (Group)	36	26	31.2	%	●
Share of local managers in senior management positions (Group)	74	79	79.7	%	●
Proportion of disabled employees:					
– Germany	4.3	4.1	4.4	%	–
– HeidelbergCement AG	4.4	4.8	4.3	%	–
<b>Apprenticeships and employee training</b>					
Employees in programmes for the advancement of future executives	719	474	490	individuals	●
Training hours per employee	26	28	26.3	hours	–
Structure of training hours:					
– Management training	5	4	6.8	%	●
– Soft skills training	4	3	3.4	%	●
– Specialist training	28	23	27.6	%	●
– Occupational safety training	50	61	48.2	%	●
– Language courses	4	3	7.8	%	●
– Other	9	5	6.1	%	●
Percentage of trainees in Germany	5	4	4.1	%	●
Percentage of trainees retained as permanent employees in Germany	82	85	90	%	●

1) External assurance of the key figures for 2019 within the framework of the Annual Report 2019 or in line with our obligation with regard to the Global Cement and Concrete Association (GCCA). According to the GCCA Sustainability Framework, baseline/historical data must be adjusted following acquisitions or divestments.

## Employees & employment

		2017	2018	2019	Unit	Assurance <sup>1)</sup>
Occupational health and safety	Accident frequency <sup>2)</sup>	1.9	1.7	1.5		●
	Accident frequency, cement business line	1.4	1.0	1.1		●
	Accident severity indicator <sup>3)</sup>	90	70	80		●
	Accident severity indicator, cement business line	69	39	62		●
	Fatality rate <sup>4)</sup>	0.4	0.4	0.7		●
	Fatality rate, cement business line	0.8	0.4	0.8		●
	Number of fatalities:					
	– Group employees	2	2	4	individuals	●
	– Employees of other companies	9	8	10	individuals	●
	– Third parties	3	19	11	individuals	●
	– thereof outside our plants	2	19	10	individuals	●
	Accident frequency by region:					
	– Western and Southern Europe	3.2	2.1	2.6		–
	– Northern and Eastern Europe-Central Asia	2.3	2.2	1.7		–
	– North America	1.7	1.6	1.2		–
	– Asia-Pacific	1.1	1.2	1.0		–
	– Africa-Eastern Mediterranean Basin	0.9	1.4	0.6		–
	Occupational illness rate <sup>5)</sup>	0.94	0.91	1.16		–
	Illness rate <sup>6)</sup>	1.95	1.90	1.11		–
	Proportion of employees represented by H&S committees	98.4	99.8	99.9		–
Proportion of employees represented by H&S committees with trade union representation <sup>7)</sup>	93.0	91.1	94.3		–	

1) External assurance of the key figures for 2019 within the framework of the Annual Report 2019 or in line with our obligation with regard to the Global Cement and Concrete Association (GCCA).

According to the GCCA Sustainability Framework, baseline/historical data must be adjusted following acquisitions or divestments.

2) Number of accidents involving Group employees with at least one lost working day per 1,000,000 hours worked.

3) Number of working days lost due to accidents involving Group employees per 1,000,000 hours worked.

4) Number of fatalities of Group employees per 10,000 Group employees.

5) Number of officially recognised occupational illnesses suffered by Group employees per 1,000,000 hours worked.

6) Proportion of working hours lost due to illness relative to the total number of working hours (excluding Egypt, Morocco, North America, and United Kingdom, as the general illness hours are not recorded there).

7) The lower proportion is due to the lack of appropriate trade unions in several countries.



# About this report

GRI 102-45, 102-46

HeidelbergCement is publishing a Group Sustainability Report for the eleventh time. In this publication, we explain how the company is fulfilling its economic, environmental, and social responsibilities and report on the progress we have made in 2019. The report is aimed at our employees, investors and analysts, and business partners as well as political players and non-governmental organisations.

## Report content and organisation

This Sustainability Report has been prepared according to the GRI Standards of the internationally recognised Global Reporting Initiative (GRI). This report has been created in accordance with the GRI Standards: "Core" option. At the same time, it is our annual progress report (Communication on Progress) on the status of the implementation of the ten principles of the UN Global Compact (UNGC).

→ [GRI content index p. 90](#)

When deciding on the most important sustainability themes for the articles in our report, we were guided by the GRI principles (materiality, stakeholder inclusiveness, sustainability context, completeness). We continuously refine our reporting processes in line with these standards.

→ [Materiality analysis p. 21, 22](#)

## Precise definition and methodology of the report

This Sustainability Report for 2019 deals with the 2019 financial year, which runs from 1 January to 31 December. The key facts and figures included in this report correspond to those in the consolidated financial statements and the Group management report of HeidelbergCement's Annual Report 2019. This also applies to the facts and figures concerning our employees. In 2016, we adjusted the consolidation of the key environmental figures to the international accounting standards. In accordance with the revenue consolidation process, joint ventures are not taken into account, even retrospectively. We report our key figures for environmental performance and occupational safety according to the guidelines of the Global Cement and Concrete Association (GCCA). The guidelines in their original wording:

→ <http://bit.ly/GCCAGuidelines>

Some of the key figures on environmental protection and occupational safety from the cement business line were once again subject to an independent limited assurance and are marked as such in this report. As a member of the GCCA, we are required to have these key figures reviewed. The results of this audit can be found on our website:

→ <https://www.heidelbergcement.com/en/sustainability-report>

## Data collection

Methods and systems that have been defined across the Group are used to collect data at our business locations. Internal reporting and consolidation of the data take place via centralised electronic KPI data management systems at the Group; here, the key figures are checked for completeness and credibility. Uniform Group-wide definitions of all the relevant key figures, as well as process guidelines for the reporting processes, are available on the intranet.

## Information about the editing process

This Sustainability Report is published in German and English. The editorial deadline was 10 June 2020. The previous Sustainability Report was published in July 2019. In line with this annual reporting cycle, the next report will be published in 2021.

## Disclaimer of liability

We have compiled the information and key figures contained in this report with extreme care. All of the contents of this report were examined by the employees responsible for this task. However, we cannot completely exclude the possibility that this report includes erroneous information. The report and the information contained in it do not constitute a test of compliance with the current laws, legal regulations, or recognised sustainability practices in the industry.

# GRI content index

The Sustainability Report 2019 was available to the Global Reporting Initiative (GRI) for the implementation of the GRI Materiality Disclosures Service. The correct positioning of the materiality disclosures (102-40 to 102-49) in the report was confirmed by the GRI Services team.



GRI standard	Page	Comments	UN GC principle
<b>GRI 101: Foundation 2016</b>			
<b>GRI 102: General disclosures 2016</b>			
<b>Organisational profile</b>			
GRI 102-1: Name of the organisation	→ 96		
GRI 102-2: Activities, brands, products, and services	→ 6, 8/9		
GRI 102-3: Location of headquarters	→ 56		
GRI 102-4: Location of operations	→ 6, 26		
GRI 102-5: Ownership and legal form	→ AR 2019 p.17		
GRI 102-6: Markets served	→ 6, 8/9		
GRI 102-7: Scale of the organisation	→ 7, 25/26, 58		
GRI 102-8: Information on employees and other workers	→ 58, 86/87		6
GRI 102-9: Supply chain	→ 8/9, 53		
GRI 102-10: Significant changes to the organisation and its supply chain	-	In the reporting year, there were no significant changes.	
GRI 102-11: Precautionary principle or approach	→ 28		
GRI 102-12: External initiatives	→ 2/3, 19/20, 42-44		
GRI 102-13: Membership of associations	→ 18/19		
<b>Strategy</b>			
GRI 102-14: Statement from senior decision-maker	→ 2/3		1-10
GRI 102-15: Key impact, risks, and opportunities	→ 12-14, 16/17, 22, AR 2019 p. 63 ff		
<b>Ethics and integrity</b>			
GRI 102-16: Values, principles, standards, and norms of behaviour	→ 13, 24/25, 57		10
GRI 102-17: Mechanisms for advice and concerns about ethics	→ 26-28		10

GRI standard	Page	Comments	UN GC principle
<b>Governance</b>	GRI 102-18: Governance structure	→ 14, 16, AR 2019 p. 93 ff	
	GRI 102-19: Delegating authority	→ 14, 16	
	GRI 102-20: Executive-level responsibility for economic, environmental, and social topics	→ 14, 16, 41, 59/60	
	GRI 102-21: Consulting stakeholders on economic, environmental, and social topics	→ 18–20	
	GRI 102-22: Composition of the highest governance body and its committees	→ AR 2019 p. 93/94	
	GRI 102-23: Chair of the highest governance body	→ AR 2019 p. 93/94	
	GRI 102-24: Nominating and selecting the highest governance body	→ AR 2019 p. 93	
	GRI 102-25: Conflicts of interest	→ AR 2019 p. 11/12, 167	
	GRI 102-26: Role of highest governance body in setting purpose, values, and strategy	→ 14, 16, AR 2019 p. 47 ff	
	GRI 102-27: Collective knowledge of highest governance body	→ 11, 14, 16	
	GRI 102-29: Identifying and managing economic, environmental, and social impacts	→ 16/17, 21	
	GRI 102-30: Effectiveness of risk management processes	→ 28	
	GRI 102-31: Review of economic, environmental, and social topics	→ 41, AR 2019 p. 47 ff	
	GRI 102-33: Communicating critical concerns	→ AR 2019 p. 47 ff	
	GRI 102-35: Remuneration policies	→ AR 2019 p. 79 ff, 92	
GRI 102-36: Process for determining remuneration	→ AR 2019 p. 79 ff		
<b>Stakeholder engagement</b>	GRI 102-40: List of stakeholder groups	→ 18/19, 31, 70	
	GRI 102-41: Collective bargaining groups	→ 58	3
	GRI 102-42: Identifying and selecting stakeholders	→ 18/19	
	GRI 102-43: Approach to stakeholder engagement	→ 18–20	
	GRI 102-44: Key topics and concerns raised	→ 21/22	
<b>Reporting practice</b>	GRI 102-45: Entities included in the consolidated financial statements	→ 89, AR 2019 p. 120	
	GRI 102-46: Defining report content and topic Boundaries	→ 21, 89	
	GRI 102-47: List of material topics	→ 22	
	GRI 102-48: Restatements of information	–	In the reporting year, the information was not restated.
	GRI 102-49: Changes in reporting	–	In the reporting year, there were no changes in reporting.
	GRI 102-50: Reporting period	→ 89	
	GRI 102-51: Date of most recent report	→ 89	
	GRI 102-52: Reporting cycle	→ 89	
	GRI 102-53: Contact point for questions regarding the report	→ 96	
	GRI 102-54: Claims of reporting in accordance with the GRI Standards	→ 89	
	GRI 102-55: GRI content index	→ 90	
GRI 102-56: External assurance	→ 89		

GRI standard		Page	Comments	UN GC principle
<b>Material topics</b>				
<b>GRI 201: Economic performance 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 13		7
	GRI 201-1: Direct economic value generated and distributed	→ 7, 25/26, 59, 80		
	GRI 201-2: Financial implications and other risks and opportunities due to climate change	→ 17, 68/69		7
	GRI 201-3: Defined benefit plan obligations and other retirement plans	→ 59, AR 2019 p. 100, 112/113		
	GRI 201-4: Financial assistance received from government	→ 44/45		
<b>GRI 202: Market presence 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 65/66		6
	GRI 202-2: Proportion of senior management hired from the local community	→ 66		6
<b>GRI 203: Indirect economic impacts 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 22, 69/70		
	GRI 203-2: Significant indirect economic impacts	→ 22, 70		
<b>GRI 204: Procurement practices 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25/26		
	GRI 204-1: Proportion of spending on local suppliers	→ 26		
<b>GRI 205: Anti-corruption 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25/26		10
	GRI 205-1: Operations assessed for risks related to corruption	→ AR 2019 p. 56		10
	GRI 205-2: Communication and training about anti-corruption policies and procedures	→ 27	We do not currently report on trained employees by region and employee category because the data is not available. We plan to introduce a data collection process and report on this data in the future.	10
	GRI 205-3: Confirmed incidents of corruption and actions taken	→ 28		10
<b>GRI 206: Anti-competitive behaviour 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25/26		
	GRI 206-1: Legal actions for anti-competitive behaviour, antitrust, and monopoly practices	→ 28, AR 2019 p. 72	In the reporting year, there were no new legal proceedings for anti-competitive behavior, cartels or monopolies.	
<b>GRI 301: Materials 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 32/33		7–9
	GRI 301-1: Materials used by weight or volume	→ 34/35	We do not report on the weight or volume of the materials used, as this information is subject to confidentiality. This information is relevant to competition. We report on sales.	7, 8
	GRI 301-2: Recycled input materials used	→ 35, 37/38		7, 8
<b>GRI 302: Energy 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 35/36		7–9
	GRI 302-1: Energy consumption within the organization	→ 39, 83/84		7, 8
	GRI 302-3: Energy intensity	→ 83		8
	GRI 302-5: Reductions in energy requirements of products and services	→ 37, 47		7–9

GRI standard		Page	Comments	UN GC principle
<b>GRI 303: Water 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 12, 41, 51–53		7, 8
	GRI 303-1: Water withdrawal by source	→ 52, 85		7, 8
	GRI 303-3: Water withdrawal	→ 52/53, 85		8
<b>GRI 304: Biodiversity 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 12, 48/49		8
	GRI 304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	→ 48/49, 85	We do not report on the details for each extraction site, as this is not possible due to the large number of extraction sites involved.	8
	GRI 304-2: Significant impacts of activities, products, and services on biodiversity	→ 48/49		8
	GRI 304-3: Habitats protected or restored	→ 48–50		
<b>GRI 305: Emissions 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 12–14, 41–43		7–9
	GRI 305-1 Direct (Scope 1) GHG emissions	→ 42, 84		7, 8
	GRI 305-2: Energy indirect (Scope 2) GHG emissions	→ 42, 84		7, 8
	GRI 305-4: GHG emissions intensity	→ 84		8
	GRI 305-7: Nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ), and other significant air emissions	→ 51		7, 8
<b>GRI 306: Effluents and waste 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 12, 41		8
	GRI 306-1: Water discharge by quality and destination	→ 85		8
<b>GRI 307: Environmental compliance 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25, 41		8
	GRI 307-1: Non-compliance with environmental laws and regulations	→ 41		8
<b>GRI 308: Supplier environmental assessment 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 54		8
	GRI 308-2: Negative environmental impacts in the supply chain and actions taken	→ 54		8
<b>GRI 401: Employment 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 57/58		6
	GRI 401-1: New employees hires and employee turnover	→ 58, 86	We do not report data on new hires and employee turnover by gender and age group because the data is not available and not material to us.	6
	GRI 401-2: Benefits provided to full-time employees that are not provided to temporary or part-time employees	→ 58/59		
<b>GRI 402: Labour/management relations 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 57/58		3
	GRI 402-1: Minimum notice periods regarding operational changes	→ 58		3

GRI standard	Page	Comments	UN GC principle
<b>GRI 403: Occupational health and safety 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 12, 59/60	1, 6
	GRI 403-1: Workers representation in formal joint management-worker health and safety committees	→ 88	
	GRI 403-2: Types of injury and rates of injury, occupational diseases, lost days, absenteeism, and number of work-related fatalities	→ 62, 88	We do not report the information broken down by gender and region as this information is subject to confidentiality. It may not be recorded in part for reasons of privacy.
	GRI 403-3: Workers with high incidence or high risk of diseases related to their occupation	→ 62/63	
<b>GRI 404: Training and education 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 63/64	6
	GRI 404-1: Average hours of training per year per employee	→ 63/64, 87	We do not report average training hours by gender and employee category because the data is not available. We plan to introduce a data collection process and report this data in the future.
	GRI 404-3: Percentage of employees receiving regular performance and career development reviews	→ 63	6
<b>GRI 405: Diversity and equal opportunity 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 65/66	1, 6
	GRI 405-1: Diversity of governance bodies and employees	→ 66/67, 87, AR 2019 p. 93/94	6
	GRI 405-2: Ratio of basic salary and remuneration of women to men	-	Our Code of Business Conduct sets out fair working conditions for all employees. Naturally, this also includes equal pay for women and men.
<b>GRI 406: Non-discrimination 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25-27, 57, 65/66	6
	GRI 406-1: Incidents of discrimination and corrective actions taken	→ 28	6
<b>GRI 407: Freedom of association and collective bargaining 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25-27, 54, 58/59	2, 3
	GRI 407-1: Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	→ 27, 54	2, 3
<b>GRI 408: Child labour 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25-27, 54, 57	2, 5
	GRI 408-1: Operations and suppliers at significant risk for incidents of child labour	→ 27, 54	2, 5
<b>GRI 409: Forced or compulsory labour 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25-27, 54, 57	2, 4
	GRI 409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labour	→ 27, 54	2, 4

GRI standard		Page	Comments	UN GC principle
<b>GRI 412: Human rights assessment 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 12, 25, 27, 57		1, 2
	GRI 412-1: Operations that have been subject to human rights reviews or impact assessments	→ 24, 27		2
	GRI 412-2: Employee training on human rights policies or procedures	→ 27		
	GRI 412-3: Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	→ 54		
<b>GRI 413: Local communities 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 12, 70, 72		1
	GRI 413-1: Operations with local community engagement, impact assessments, and development programs	→ 71-73		1
<b>GRI 414: Supplier social assessment 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25, 27, 54		2
	GRI 414-2: Negative environmental impacts in the supply chain and actions taken	→ 27, 54		2
<b>GRI 416: Customer health and safety 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 31		
	GRI 416-1: Assessment of the health and safety impacts of product and service categories	—	We sell standardised products whose effects have been analysed in detail. Specific safety data sheets are required for all these products and are made available to customers.	
<b>GRI 418: Customer privacy 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25, 31		
	GRI 418-1: Substantiated complaints concerning breaches of customer privacy and losses of customer data	—	We are not aware of any justified complaints regarding violations of the protection or loss of customer data.	
<b>GRI 419: Socioeconomic compliance 2016</b>	GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	→ 25-27		
	GRI 419-1: Non-compliance with laws and regulations in the social and economic area	→ 28		

# Imprint

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Heidelberg, Germany: page 19; Heidelberg-  
Cement AG / Steffen Fuchs, Heidelberg,  
Germany: page 23; Attila Bartha, Ungarn:  
page 24; Peri GmbH (3D Printing in action  
video): page 29; Fabio Toschi, Bergamo, Italy:  
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Pictograms: Fotolia, rotwerk visuelle  
kommunikation (p. 8 and 9)

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