Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Heidelberg Materials is one of the world's largest integrated manufacturers of building materials and solutions and operates on 5 continents. Our core products are cement, aggregates (sand, gravel, and crushed rock), ready-mixed concrete, and asphalt. The key business processes include extraction of raw materials and production of building materials, as well as their sales and distribution to the customers. Other services offered are sea worldwide trading, especially in cement and clinker. We operate around 130 cement plants (plus 20 as part of joint ventures), just under 600 quarries and aggregates pits, and around 1,320 ready-mixed concrete production sites worldwide. In total, we employ 50,780 people at around 2,500 locations in over 50 countries (plus over 350 production sites belonging to joint ventures). In 2022, the Group revenue amounted to €21.1 bn.

At the center of actions lies the responsibility for the environment. As front runner on the path to carbon-neutrality, Heidelberg Materials crafts material solutions for the future. With our new and global corporate brand Heidelberg Materials, we are giving our transformation a face and an anchor. At the same time, we remain true to the "Heidelberg" in our name – a 150-year legacy synonymous with reliability, down-to-earthiness, and market leadership. With "Materials," we look to the future – more than cement, sustainable, with a focus on the circular economy.

In March 2023, we published our first "combined Annual Report"- by providing in-depth information about both our financial development and our sustainability commitment. While doing so, we are considering reporting standards such as GRI, HGB, IFRS, SASB, and TCFD.

Our new Sustainability Commitments 2030

The United Nations Sustainable Development Goals (SDGs) shape our strategy and sustainability commitments.

In February 2023, we published our new Sustainability commitments 2030 (SC2030) aiming at supporting our vision to build a more sustainable future that is:

1. Net zero: We drive the decarbonisation of our sector and provide low-carbon products.
2. Safe and inclusive: We place the health and wellbeing of employees, communities, and suppliers at the core of our business operations.
3. Nature positive: We contribute to a nature positive world through our industry-leading biodiversity programme & sustainable water management

4. Circular and resilient: We drive circularity to reduce and reuse materials and natural resources.

Due to the large quantities of fuel used during the cement manufacturing process and the release of CO2 from raw materials, the global cement industry generates approximately 5-8% of global anthropogenic CO2 emissions. That is why climate protection is a key topic for us and is an integral part of our strategy. Our ambitious climate protection targets have a special strategic role to play. By 2030, we aim to reduce specific net CO2 emissions to 400 kg per tonne of cementitious material. This corresponds to a reduction of almost half compared with 1990. We will achieve this, among others, by optimising the product mix and making process improvements, such as maximising the use of alternative fuels, switching to electricity from renewable energy sources, and investing in plant efficiency.

Sustainability management:
At Group level, the topic of sustainability has been organisationally combined under the umbrella of the Sustainability Office and the leadership of member of the Managing Board and Chief Sustainability Officer (CSO). The CSO is the leading person in sustainability and is responsible for promoting and coordinating all sustainability activities. The CSO in collaboration with the Managing Board and consultation with the Supervisory Board drive the sustainability strategy. This structure, designed for cooperation and interdisciplinarity, is intended to ensure that sustainability criteria are incorporated into every decision taken at Heidelberg Materials.

The CSO is heading the Sustainability Office which bundles the future-oriented sustainability activities at Group level and is drawing up potential business models and establishing a strong, cross-industry partnership network. In this context, the CSO is responsible for four major departments: ESG, Research and Development, Technologies & Partnerships, and the Innovation Hub. The ESG department is headed by a Vice President Environmental, Social & Governance and is mainly responsible at Group level for preparing key decisions regarding the sustainability strategy and its implementation. Experts on CO2 emissions, biodiversity, water, CSR, sustainable construction, associations & partnerships, ESG reporting and ESG ratings are working together and are pursuing one common goal: Creating a more sustainable future!

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

No

C0.3

(C0.3) Select the countries/areas in which you operate.

Australia
Bangladesh
Belgium
Benin
Bosnia & Herzegovina
Brunei Darussalam
Bulgaria
Burkina Faso
Canada
China
Croatia
Czechia
Democratic Republic of the Congo
Denmark
Egypt
Estonia
France
Gambia
Georgia
Germany
Ghana
Greece
Hungary
Iceland
India
Indonesia
Israel
Italy
Kazakhstan
Latvia
Liberia
Lithuania
Malaysia
Morocco
Mozambique
Netherlands
Norway
Poland
Romania
Russian Federation
Sierra Leone
Singapore
Slovakia

South Africa
Spain
Sweden
Thailand
Togo
Turkey
United Kingdom of Great Britain and Northern Ireland
United Republic of Tanzania
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C-CE0.7

(C-CE0.7) Which part of the concrete value chain does your organization operate in?

Limestone quarrying
Clinker production
Portland cement manufacturing
Blended cement
Alternative ‘low CO2’ cementitious materials production
Aggregates production
Concrete production
Concrete pavement / asphalt / tarmac

C-MM0.7

(C-MM0.7) Which part of the metals and mining value chain does your organization operate in?

Row 1

Mining

Other mining, please specify

Pig iron

Not applicable

Processing metals

Not applicable

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	DE0006047004

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Chief Sustainability Officer (CSO)	Our Chief Sustainability Officer (who is also a member of the Managing Board) is the highest-level individual with direct responsibility for all issues pertaining to Environmental Social Governance with climate change being an integral part of it. Our CSO is heading the Sustainability Office which is clearly focused on transforming our industry. In this context, she is responsible for four major departments: ESG, Research and Development, Technologies & Partnerships and the Innovation Hub. Climate-related issues do play a major role in all these activities. Our ESG team regularly identifies the most material ESG topics in terms of risk and opportunity via a double materiality analysis. As a major result, climate is a leading topic here. The definition of strategic ESG priorities and programs as integral part of the overall company strategy clearly focus on climate-related activities which are then spread across the organisation. In this context, we encourage all employees to position sustainability at the core of their businesses by creating a PULL instead of a PUSH on sustainability topics. Moreover, our CSO is driving our strategic approach to foster a Net-Zero pathway by developing a CO2 roadmap and to always look for alternative ways of carbon reduction, as e.g., the use of alternative fuels (including biomass fuels) in the

	cement business. Our CSO is informed by the Vice President ESG, the Group CO2 Strategy Manager and other related Group functions. She regularly reviews and reports on the developments of emissions reductions to the Management Board as well as to the Directors who are heading the four above-mentioned departments. The CSO also heads the interdisciplinary working group on CO2 management which ensures the involvement of all relevant internal stakeholders as well as structured and efficient management of climate-related issues and risks, called the CO2 Program Management Office (PMO). In 2022, the Managing Board and the CSO took the decision to accelerate our ambitious climate targets. We want to achieve 30% reduction in specific net CO2 emissions compared with 1990 by 2025. By 2030, we intend to reduce our specific net CO2 emissions to 400 kg per tonne of cementitious material. Apart from that we introduced our revised and updated Sustainability Commitments 2030. Those incorporate key targets related to the UN SDGs, guiding our corporate sustainability management.
Board-level committee	The Sustainability and Innovation Committee, which was newly formed on 12 May 2022, is responsible for advising and monitoring the Managing Board on all aspects of sustainability, particularly in connection with the decarbonisation roadmap, the reduction of our carbon footprint and the resulting innovation topics and growth opportunities, digital transformation, and other ESG issues.
Chief Executive Officer (CEO)	The acceleration of sustainability transformation with a special focus on the CO2 roadmap and a sustainable product portfolio is an integral part of the CEO´s individual target achievement.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing the setting of corporate targets	The SC2030 which serve as a strategic guiding principle for setting the tone for our sustainability strategy now incorporate several new and targets and a broader range of commitments as part of corporate sustainability management. By 2030, we intend to reduce our specific net CO2 emissions to 400 kg per tonne of cementitious materials. Our sustainability targets are regularly discussed, reviewed and monitored to ensure that our country operations achieve them. The Board also sets performance objectives for senior managers and Managing Board members themselves have climate-related targets. Climate-related issues are an integral

	Monitoring progress towards corporate targets	part of all regularly scheduled board meetings (one a month, but if needed more often) and one-on-one meetings between the CEO, the CSO, and our Vice President ESG. The Board reviews and guides strategy, for instance by having approved the new and updated Sustainability Commitments 2030 which serve as a strategic guiding principle for setting the tone for our sustainability strategy. Our Climate Transition Plan (CTP) which can be found on our corporate website clearly outlines our overall engagement and focus areas when it comes to our pathway to a net-zero future. It is signed and overseen by the CSO and provides a framework for monitoring and tracking our ambitious targets and activities as well as implementing them accordingly. We have several feedback mechanisms in place in order to directly exchange on our climate-related issues and activities with our stakeholders (e.g. via AGM´s, customer and supplier events, investor roadshows, one-on-one and group discussions etc.). In 2022, the investor relations team met more than 200 investors physically and virtually and introduced and discussed about the Group strategy with regard to portfolio management and the transformation topics of sustainability and digitalisation. Major topics were our progress towards climate neutrality and our pioneering role in researching and trialling carbon capture, utilisation, and storage (CCUS) technologies were discussed intensively. In the future, we will continue the constructive discussions in order to further strengthen trust in our company and our share.
Scheduled – some meetings	Overseeing and guiding employee incentives Overseeing and guiding public policy engagement Overseeing value chain engagement Reviewing and guiding the risk management process	Every quarter, country managers (GMs) and Financial directors report to the Managing Board by reporting to their respective area's Board Member. Country managers (GMs) and Financial directors are reporting on a quarterly basis to the Managing Board resp. their respective area´s Board Member (Quartely Management Meetings). During those high-level management meetings, strategic targets as well as risks and opportunities both for us and our stakeholders are being discussed and assessed along all value chains.
Scheduled – some meetings	Reviewing innovation/R&D priorities	Current as well as new R&D projects which explicitly address climate-related issues are key for us, e.g., we are setting a focus on the recarbonation of the hardened

		cement paste of recycled concrete fractions. The aim of this process called “enforced recarbonation” is to store the same amount of CO2 in this material as was previously released during the cement production process. The results of our R&D efforts are encouraging, demonstrating a CO2 uptake potential close to the amount of process- greenhouse gases emitted during clinker production. This can contribute immensely to the decarbonisation of the industry, and it gives us the opportunity to access new markets with recarbonated products.
Scheduled – some meetings	Overseeing and guiding scenario analysis	While analysing physical climate risks, Heidelberg Materials has considered both the current risk potentials and – for the periods to 2030 and 2050 – the recognised scenarios (Representative Concentration Pathways) RCP 2.6 (optimistic), RCP 4.5 (stabilisation), and RCP 8.5 (pessimistic) of the Intergovernmental Panel on Climate Change (IPCC). There are significant geographical variations in climate risks. The impact of extreme weather scenarios, such as floods or droughts, can lead to damage to our production sites, interrupt the supply to our customers, or have adverse effects on the supply of upstream products to our operating units. In 2022, for example, the prolonged dry period in Western Europe caused low water levels, which made delivering raw materials by ship difficult.
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures	Major plans of actions such as Capex e.g., for plant modernisations lowering CO2 emissions, have to be approved by the entire Managing Board. When it comes to M&A decisions, both the emissions performance of the plants to be acquired as well as their climate risk profile are being assessed. Heidelberg Materials also incorporates specific ESG criteria into its investment and divestment decisions.
Scheduled – some meetings	Overseeing acquisitions, mergers, and divestitures	When it comes to M&A decisions, both the emissions performance of the plants to be acquired as well as their climate risk profile are being assessed. Heidelberg Materials also incorporates specific ESG criteria into its investment and divestment decisions

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	Since September 2021, Heidelberg Materials has a Chief Sustainability Officer (CSO) who is also member of the Managing Board. Areas of responsibility are ESG (focus on climate-related issues), R&D, Technologies and Partnerships, and the Innovation Hub. The CSO has a strong competence on climate-related issues and is well-experienced since many years in the field of sustainability and business engineering in different industries. Especially the cross-industry experience is crucial for overseeing the topic from an overall perspective coming in so many facets. The CSO is responsible for strategic planning as well as reviewing the progress and status of Greenhouse gas emissions reductions at Heidelberg Materials and is briefed several times a week on the developments of emissions reductions in the Group by the Vice President ESG. Overseeing, driving and regularly reviewing and updating of the CO2 roadmap and implementation of sustainability projects (e.g., CCUS, circular economy, etc.) is an integral part of the CSO´s individual target achievement. Besides strategic knowledge on how to plan, manage and implement climate-related issues and corresponding CO2 reduction activities, a deep operational involvement and understanding of activities linked to all business lines and value chains in the whole product portfolio is essential. Our CSO is well-experienced on both product and process level as well as on a group-wide company level. For us, this is a major driver for success. Examples of process optimisation is the use of alternative fuels (including biomass fuels) in the cement business line and the group's overall performance on climate change issues linked to plant operations, as well as driving the acceleration of Carbon Capture Utilisation, and Storage Technologies and strengthening of Partnership towards various industries.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The response strategy of Heidelberg Materials to climate change is based on a structured and comprehensive master plan that involves all relevant company stakeholders and resources. Our focus is on the step-by-step reduction of carbon emissions, with clear milestones. Our target is to achieve specific net CO2 emissions of 400 kg per tonne of cementitious material by 2030 and to achieve net zero emissions by 2050 at the latest. The overall responsibility for the achievement of this commitment lies with the Managing Board and in particular with the Chief Sustainability Officer (CSO). Moreover, the CSO is responsible for the development and establishment of sustainable products, ESG reporting and rating improvement, water management, and the protection of biodiversity.

The CSO is heading the Sustainability Office which is intended to ensure that sustainability criteria are incorporated into every decision taken at Heidelberg Materials. The Sustainability Office is responsible for the design of the sustainability strategy, including the associated targets, and consists of 4 departments: The Group ESG department drives our key sustainability topics to ensure that they are anchored in our strategy, business processes, and decisions. Teams from the Global Research & Development department play a leading role in developing innovative new materials and technologies, and in optimising conventional products and processes. Together with leading partners, the Technology & Partnerships department scouts carbon capture, utilisation, and storage (CCUS) technologies and co-develops pioneering projects. The purpose of the Innovation Hub is to devise business models around sustainable construction solutions together with internal and external partners.

The CSO is informed and briefed regularly by the Vice Presidents of all 4 mentioned departments. This might be in one-on-one meetings, board meetings, ESG or R&D meetings where all relevant experts come together.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Developing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The areas of responsibility of the CEO are Communication & Investor Relations, Strategy & Development/M&A, Human Resources incl. Health & Safety, Internal Audit, Legal, Compliance.

As climate-related targets and activities are an essential part of our overall Heidelberg Materials strategy, our CEO is directly responsible for ESG and climate issues. Our CCUS (carbon capture, utilisation, and storage) roadmap as the key to decarbonisation describes our journey towards climate-neutrality and is a crucial tool for us when it comes to dealing with the raw material-related process emissions that have been unavoidable up to now. In the course of 2024, we will put the world's first industrial scale carbon capture facility at a cement plant into operation in Brevik, Norway. This will make us a front runner in the use of this key technology for decarbonising our industry. The CEO is also responsible for M&A decisions which are strongly aligned with our climate-related targets. We have defined specific ESG criteria which serve as a basis for both our investment and divestment decisions. Our CEO has the overall responsibility of sustainability transformation with a focus on sustainable products, our CO2 roadmap and reporting. We aim to achieve a share of 50% of our Group revenue coming from sustainable products and solutions by 2030. The CEO is informed and briefed regularly

by the CSO and our Vice President ESG. This might be in one-on-one meetings, board meetings or any kind of possible communication channel.

Position or committee

President

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Other, please specify

Chief Sustainability Officer (CSO)

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The Vice President ESG is responsible for the achievement of our net-zero targets and our ESG commitments. Moreover, the development and establishment of sustainable products, ESG reporting and rating improvement and the development of our CO2 roadmaps are part of the individual target agreement of the Vice President ESG. The Vice President ESG is heading the ESG department in which several ESG experts are working on topics as CO2, reporting & ratings, biodiversity, water, associations, ESG controlling and sustainable construction. The Vice President is informed and briefed regularly by the employees of the Group ESG department. This might be in one-on-one meetings or monthly ESG department meetings where all employees of the ESG department come together.

Position or committee

Chief Procurement Officer (CPO)

Climate-related responsibilities of this position

Managing value chain engagement on climate-related issues

Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Responsible sourcing plays a decisive role in meeting our Sustainability Commitments 2030 as well as supporting the UN's Sustainable Development Goals. We are working towards a transparent, sustainable, and forward-looking approach to procuring products and services by going beyond the legal requirements for our business activity. We select and evaluate our suppliers not only on the basis of economic criteria, but also integrate social, ethical, and environmental performance factors into the process. Most importantly, human and labour rights are non-negotiable for us when forming and maintaining a business relationship.

The Chief Procurement Officer (CPO) is responsible for the achievement of CO2 emissions in the value chain by defining a clinker/cement substitution, use of alternative fuels, energy efficiency and CCUS related activities. Moreover, the engagement of suppliers on increasing transparency and compliance with Heidelberg Materials' ESG standards (including emissions) are part of individual targets of the CPO. The CPO is briefed by its Responsible Procurement team on a daily basis. The Responsible Procurement team is driving a focus on human rights and fostering a sustainable supply chain. This indicates the calls upon suppliers to commit to reducing greenhouse gases. Since the end of 2021, we have been proactively communicating this message in various ways, including at meetings with suppliers and through initiatives such as virtual supplier days on the topic of sustainability. These ambitions, which extend beyond the Supplier Code of Conduct, are also published on the corporate website.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	CO2 component is part of the variable pay component of all bonus-eligible employees. The absolute Group performance is the key indicator for the benefit of all management positions. On Board Management level CO2 is also key directive payment indicator.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Board approval of climate transition plan
Shareholder approval of climate transition plan
Progress towards a climate-related target
Achievement of a climate-related target
Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased investment in low-carbon R&D
Increased share of revenue from low-carbon products or services in product or service portfolio

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The remuneration system of the Managing Board is aligned with the Group strategy. By selecting appropriate performance criteria for the variable remuneration, incentives are given to implement the Group strategy and to promote the long-term and sustainable development of Heidelberg Materials. Both financial and non-financial performance criteria are used to represent the company's success as a whole. The consideration of ESG targets in the variable remuneration underlines the desire for excellent economic performance as well as environmentally and socially responsible conduct. The remuneration of the company's Managing Board is based on the principle that members of the Managing Board should be remunerated appropriately according to their performance. With the high proportion of variable and thus performance-based remuneration elements, the Supervisory Board pursues a strict payfor-performance approach.

Sustainability as important component of Managing Board remuneration through CO2 component in variable remuneration. Pay for performance and the focus on the sustainable and long-term development of the company are central principles of the remuneration of its Managing Board. With these principles in mind, 71% of the target

direct remuneration for the Chairman of the Managing Board and around 67% for the members of the Managing Board consist of variable remuneration elements. The fixed annual salary thus accounts for 29% of the target direct remuneration for the Chairman of the Managing Board and around 33% for the members of the Managing Board. To ensure the long-term focus of the remuneration of the Managing Board, the share of the long-term bonus exceeds that of the annual bonus within the variable remuneration elements.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Our Climate Transition Plan (CTP) which can be found on our corporate website consists of several elements and our CO2 roadmap is a crucial part of it.

The CEO's variable pay is linked with the climate transition plan as it is dependent on the achievement of the group-wide CO2 Roadmap set by Heidelberg Materials. The main levers to achieve the reductions are CO2 emissions reductions in the operations, clinker/cement substitution, use of alternative fuels, energy efficiency and CCUS related activities.

Incentivized KPIs: Heidelberg Materials´ CO2 roadmap has different components, including emissions reduction. The KPIs applicable also relate to clinker/cement substitution, use of alternative fuels and energy efficiency, as these are the main levers for GHG reduction in our company. KPIs are set out in the Sustainability Commitments 2030 with clear targets. Besides the mentioned senior management positions, the CO2 component is also part of the variable pay component of the bonus-eligible employees.

Entitled to incentive

Chief Sustainability Officer (CSO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Board approval of climate transition plan
Achievement of climate transition plan KPI
Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased share of low-carbon energy in total energy consumption
Increased share of renewable energy in total energy consumption
Increased investment in low-carbon R&D

Increased share of revenue from low-carbon products or services in product or service portfolio
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The remuneration system of the Managing Board is aligned with the Group strategy. By selecting appropriate performance criteria for the variable remuneration, incentives are given to implement the Group strategy and to promote the long-term and sustainable development of Heidelberg Materials. Both financial and non-financial performance criteria are used to represent the company's success as a whole. The consideration of ESG targets in the variable remuneration underlines the desire for excellent economic performance as well as environmentally and socially responsible conduct. The remuneration of the company's Managing Board is based on the principle that members of the Managing Board should be remunerated appropriately according to their performance. With the high proportion of variable and thus performance-based remuneration elements, the Supervisory Board pursues a strict payfor-performance approach.

Sustainability as important component of Managing Board remuneration through CO2 component in variable remuneration. Pay for performance and the focus on the sustainable and long-term development of the company are central principles of the remuneration of its Managing Board. With these principles in mind, 71% of the target direct remuneration for the Chairman of the Managing Board and around 67% for the members of the Managing Board consist of variable remuneration elements. The fixed annual salary thus accounts for 29% of the target direct remuneration for the Chairman of the Managing Board and around 33% for the members of the Managing Board. To ensure the long-term focus of the remuneration of the Managing Board, the share of the long-term bonus exceeds that of the annual bonus within the variable remuneration elements.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Our Climate Transition Plan (CTP) which can be found on our corporate website consists of several elements and our C02 roadmap is a crucial part of it.

The CSO's variable pay is linked with the achievement of the group-wide CO2 Roadmap set by Heidelberg Materials. The main levers to achieve the reductions are CO2 emissions reductions in the operations, clinker/cement substitution, use of alternative fuels, energy efficiency and CCUS related activities. Moreover, the development and establishment of sustainable products, ESG reporting, ESG rating improvement, the update of the CO2 roadmap and implementation of sustainability projects, occupational health & safety, water management, and the protection of biodiversity are part of the CSO´s individual target agreement.

Incentivized KPIs: Heidelberg Materials ´CO2 roadmap has different components, including emissions reduction. The KPIs applicable also relate to clinker/cement substitution, use of alternative fuels and energy efficiency, as these are the main levers for GHG reduction in our company. KPIs are set out in the Sustainability Commitments 2030 with clear targets.

Entitled to incentive

Board/Executive board

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased share of low-carbon energy in total energy consumption
Increased investment in low-carbon R&D

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The remuneration system of the Managing Board is aligned with the Group strategy. By selecting appropriate performance criteria for the variable remuneration, incentives are given to implement the Group strategy and to promote the long-term and sustainable development of Heidelberg Materials. Both financial and non-financial performance criteria are used to represent the company's success as a whole. The consideration of ESG targets in the variable remuneration underlines the desire for excellent economic performance as well as environmentally and socially responsible conduct. The remuneration of the company's Managing Board is based on the principle that members of the Managing Board should be remunerated appropriately according to their performance. With the high proportion of variable and thus performance-based remuneration elements, the Supervisory Board pursues a strict payfor-performance approach.

Sustainability as important component of Managing Board remuneration through CO2 component in variable remuneration. Pay for performance and the focus on the sustainable and long-term development of the company are central principles of the remuneration of its Managing Board. With these principles in mind, 71% of the target direct remuneration for the Chairman of the Managing Board and around 67% for the members of the Managing Board consist of variable remuneration elements. The fixed annual salary thus accounts for 29% of the target direct remuneration for the Chairman of the Managing Board and around 33% for the members of the Managing Board. To

ensure the long-term focus of the remuneration of the Managing Board, the share of the long-term bonus exceeds that of the annual bonus within the variable remuneration elements.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Our Climate Transition Plan (CTP) which can be found on our corporate website consists of several elements and our C02 roadmap is a crucial part of it.

Given the global ambition of our CO2 roadmap, all Area Board Members of the Management Board have their variable pay linked with its achievement. The main levers to achieve the reductions are CO2 emissions reductions in the operations, clinker/cement substitution, use of alternative fuels, and energy efficiency. Moreover, collaboration with scientific institutions as well as the development of low-carbon products are relevant goals for specific board members as well.

Incentivized KPIs: Heidelberg Materials´ CO2 roadmap has different components, including emissions reduction. The KPIs applicable also relate to clinker/cement substitution, use of alternative fuels, energy efficiency and CCUS related activities, as these are the main levers for GHG reduction in our company. KPIs are set out in the Sustainability Commitments 2030 with clear targets. Besides the mentioned senior management positions, the CO2 component is also part of the variable pay component of the bonus-eligible employees.

Entitled to incentive

President

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI
Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Reduction in emissions intensity
Increased share of revenue from low-carbon products or services in product or service portfolio
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The remuneration systems at Heidelberg Materials are based on performance and results in accordance with the market standards for internationally operating companies in our sector. Alongside fixed remuneration 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. Our CO2 reduction. Targets are consistently anchored in our global remuneration systems as well: the full variable remuneration can only be achieved if both the financial targets and the sustainability target are met. This regulation has applied to all members of the Managing Board and to every bonus-eligible employee worldwide since the start of the 2021 financial year.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Our Climate Transition Plan (CTP) consists of several elements and our C02 roadmap is a crucial part of it.

The variable pay of the Vice President ESG is linked with the achievement of the group-wide CO2 Roadmap set by Heidelberg Materials. The main levers to achieve the reductions are CO2 emissions reductions in the operations, clinker/cement substitution, use of alternative fuels, energy efficiency and CCUS related activities. Moreover, the development and establishment of sustainable products, ESG reporting, ESG rating improvement, the update of the CO2 roadmap and implementation of sustainability projects are part of the individual target agreement of the Vice President ESG.

Entitled to incentive

Chief Procurement Officer (CPO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Increased engagement with suppliers on climate-related issues
Increased supplier compliance with a climate-related requirement
Increased value chain visibility (traceability, mapping, transparency)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The remuneration systems at Heidelberg Materials are based on performance and results in accordance with the market standards for internationally operating companies in our sector. Alongside fixed remuneration 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. Our CO2 reduction. Targets are consistently anchored in our global remuneration systems as well: the full variable remuneration can only be achieved if both the financial targets and the sustainability target are met. This regulation has applied to all members of the Managing Board and to every bonus-eligible employee worldwide since the start of the 2021 financial year.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Our Climate Transition Plan (CTP) which can be found on our corporate website consists of several elements and our value chain engagement with suppliers is a crucial part of it.

The variable pay of the CPO and all Area Procurement Directors & Country Procurement managers is linked with the achievement of the group-wide CO2 Roadmap set by Heidelberg Materials. The main levers to achieve the reductions are CO2 emissions reductions in the operations, clinker/cement substitution, use of alternative fuels, energy efficiency and CCUS related activities. Moreover, the engagement of suppliers on increasing transparency and compliance with Heidelberg Materials' ESG standards (including emissions) are part of individual targets of procurement managers globally.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	Our Climate Transition Plan (CTP) which can be found on our corporate website clearly outlines our forward planning and includes our process for identifying, assessing, and responding to climate related risks and opportunities. For the climate risks we consider the following time horizons: We define short-term as the time frame current - 2025. This relates to our regular financial and business planning routines as well as existing and readily foreseeable regulatory requirements.

Medium-term	5	10	Our Climate Transition Plan (CTP) which can be found on our corporate website clearly outlines our forward planning and includes our process for identifying, assessing, and responding to climate related risks and opportunities. The medium-term is defined as the time frame beyond our regular business planning, but for which a broad strategy is in place and strategic roadmaps exist. Hence the medium-term ranges until 2030. For instance, we have set our Sustainability Commitments 2030 for that year, in accordance with the UN Sustainable Development Goals. Furthermore, we have a CO2 strategic plan already in place that sets out a path for CO2 reduction plant by plant until 2030.
Long-term	10	30	Our Climate Transition Plan (CTP) which can be found on our corporate website clearly outlines our forward planning and includes our process for identifying, assessing, and responding to climate related risks and opportunities. Long-term refers to any plan that exceeds the 10-year time horizon. More specifically, we define long-term as the time frame after 2030 and until 2050. This includes investments in assets, R&D for new product lines, and strategic investments in new technologies, such as research into CCUS research as well as recarbonation (recarbonation refers to returning CO2 into the material cycle of cement and concrete by making use of CO2 from ambient air being absorbed by concrete). This time frame and the technologies we are developing now in order to be deployed then will be crucial for achieving the targets of the Paris Agreement. Also, Heidelberg Materials' goal is to be net-zero across our product portfolio by 2050 at the latest.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Our Climate Transition Plan (CTP) which can be found on our corporate website outlines how we identify, assess and respond to o climate related risks and opportunities. It serves as a framework on our pathway to a net-zero future and is a guiding principle for sharing this approach with our stakeholders. Our transition plan is underpinned by robust roadmaps that consider the long-term plan and a yearly improvement in each of the reduction levers: alternative fuels, biomass, process efficiency, clinker incorporation factor, etc.

The CO_2 roadmaps have been drafted by the country teams in close collaboration with Heidelberg Materials Global expertise: Competence Center Cement, Competence Center Ready Mix, ESG, Strategy and Development/M&A, Technologies and Partnerships, Procurement and Commercial. The respective area board members are closely involved in the development the roadmaps, to ensure the highest management level engagement in the process. Once the roadmaps are considered ready by the countries, they are being reviewed

and challenged through different iterations by a panel of internal stakeholders, including the CSO, to be refined. Finally, the roadmaps are subject to the approval of the Managing Board. As they have been approved by the board, then ESG and Technical departments engage in a yearly implementation review, punctuated by regular tracking.

At Heidelberg Materials, we consider events that may have a negative impact on the achievement of short-term and long-term operational and strategic corporate targets to be risks. We distinguish between quantitative and qualitative risks. For short term quantitative risks (next 12 months), we consider an impact on the key parameters „Results from current operations “, „profit for the financial year “or „cash flow “as substantive financial impact for the Group if the effect is > €120 million. For mid- to long-term risks of strategic nature, we consider an impact of > €300 million as a substantive impact. Those impacts thresholds were defined as tolerance limits in relation to current Group's RCOBD.

While we strive for quantification of all risks, specific risks such as reputation risk are of qualitative nature. The potential extent of damage of non-financial risks is assessed according to qualitative criteria from low to critical in a top-down approach based on specific loss scenarios that could trigger the event. Those risks might represent a threat to our business model requiring a shift or adjustment in activity in the future and are therefore might also be considered as significant. Most of the transition risks are of qualitative nature.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Our Climate Transition Plan (CTP) which can be found on our corporate website outlines how we identify, assess and respond to o climate related risks and opportunities. It serves as a framework on our pathway to a net-zero future and is a guiding principle for sharing this approach with our stakeholders. Please find the CTP on

our corporate website.

The analysis of climate-related risks is part of Heidelberg Materials' overall risk management approach and climate related risks are fully integrated in the regular risk management process of the Group. The process of identifying risks is performed regulary a) bottom-up in a decentralised way by the country management on a quarterly basis b) top-down from a global perspective by the ESG department at least yearly (+ ad-hoc reporting if necessary). General macro-economic data as well as other industry-specific factors and risk information sources serve as auxiliary parameters for the process, as does the internal risk catalogue, which records the various financial and non-financial climate-related risk categories. The analysis focuses on the impact on our own operations but also covers value chain risks, for example the impact on droughts or floods on receiving or delivering goods.

Frequency of assessment and time horizons:
a) Bottom-up approach (every quarter): appropriate impact reporting thresholds were established at country level for the regular risk reporting process, taking into account their specific circumstances. ESG coordinators were nominated in each country as experts for climate related risks. Based on the Group's risk policy together with a specific guidance for climate-related risks, the risks are identified and assessed every quarter in a quantitative way whenever possible with reference to a minimum probability of occurrence of 10% and their potential extent of damage. Risks that cannot be quantified are assessed in a qualitative way. The operational planning cycle is used as the period for the probability forecast of this bottom-up approach. This part of the bottom-up reporting is taking place on a quarterly basis.

Additionally, we developed a specific risk reporting process for physical climate-related risks that is updated annually. Each country must assess their physical climate risks at plant level. This covers the short-term (current) risks, mid-term (2030) and long-term (2050) time horizons. Specific plants were selected around the world for this exercise based on multiples criteria (Munich Re Scoring, EU Taxonomy relevance, Total insured value). Each plant must assess and quantify their physical climate risks including potential impact on financial items such as revenue or book value in the mid- to long-term. The results of this analysis are consolidated by the ESG department and flow into the Group's overall risk assessment.

b) Top-down approach: climate-related risks are also identified and assessed on an annual basis at Group level by our departments, particularly GICR, ESG and Group Strategy and Development/M&A. We distinguish between physical and transition risks. For the physical risks, we developed a standardised approach to estimate the potential impact of chronic or acute physical events on selected plants. This top-down assessment completes the local assessment done locally by the countries and enables us to get an estimate of our exposure to physical climate risks within the next 12 months. The analysis however also covers the mid- and long-term time horizon. Moreover, transition risks are analysed annually at Group level in close collaboration between relevant department and are assessed on a strategic level in a qualitative and (whenever possible) in a quantitative way.

Identified risks are discussed at local level by Country management and reported to Group to be consolidated into our Global risk map by GICR. GICR presents a Risk Report on a quarterly basis to the Managing Board. The Managing Board of Heidelberg Materials sets up and supervises the internal control and risk management system. It also has overall responsibility for the scope and organisation of the established systems. The process of identification within the regular risk management process is supplemented with an ad-hoc risk report in the event of a sudden occurrence of serious risk. The Quarterly Management Meetings (QMMs) provide a platform for the Managing Board and responsible country managers to discuss and determine appropriate risk control measures promptly. Decisions are thus made as to which risks will be intentionally borne independently and which will be transferred to other risk carriers, as well as which measures are suitable for reducing or avoiding potential risks. All measures must be properly documented and are monitored within the regular risk management process. Risks of strategic nature are closely monitored by the Managing Board. The Supervisory Board and its Audit Committee also review the effectiveness of the risk management system every 6 months.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Relevance & inclusion in risk assessment: In 2022, around 40% of Heidelberg Materials' worldwide clinker production is affected by financial CO2 regulations such as emissions trading systems and CO2 taxes (e.g., EU ETS, Guangdong ETS, Canada CO2 provincial regulations). The potential costs associated with such schemes are factored into our climate-related risk assessments in order to inform strategy and forecast accordingly. We assess risks associated with carbon pricing schemes across the globe and manage these risks with comprehensive allocation and forecasting models managed by our Group CO2 Manager in conjunction with the CO2 steering committee and. Risks with a potential impact on our result and our cash flow are for instance reported to the Global Insurance & Corporate Risk (GICR) department and the Group Finance & Accounting (GFA) department. Example & explanation how risk is included: We deem current regulation a relevant risk as we are already subject to carbon pricing legislation e.g., in the EU, China and Canada, which means a cost factor for us that is related to climate change. E.g., cap and trade schemes bear the risk of having to buy emission allowances in case there are no Carbon leakage protection measures implemented or production volumes exceed free allocation. The prices for emission

		allowances are not fixed which means that prices with a huge volatility can barely be anticipated. This increases the risk exposure to high financial expenses, e.g., the prices for allowances in the EU ETS are driven by multiple factors besides the normal demand and supply, such as current discussions in national governments and on a European level, anticipation of different weather forecasts influencing the purchasing behaviour of the power sector, and interests from financial institutes, speculative traders and hedge funds. As a result, the CO2 costs in the EU ETS have almost tripled since 2020 and were around €90 during 2022.
Emerging regulation	Relevant, always included	Relevance & inclusion in risk assessment: Emerging carbon pricing policies are an example which we include in our risk assessment. This covers on the one hand changes in existing regulation such as the EU ETS and on the other hand, the introduction of new regulations. In the Chinese province of Guangdong, an emissions trading scheme was introduced in July 2021, with annual emission reductions of 1% envisaged since 2022. In Indonesia, a CO2 tax on coal-fired power plants was introduced. Thailand also continues to introduce CO2 regulations to reduce national emissions and achieve the Paris climate targets in the coming years. In the EU, the gradual introduction of a CO2-related import regulation was established with the Carbon Border Adjustment Mechanism (CBAM) as part of the “Fit for 55” climate protection programme within the EU. To assess and manage this risk, our Public Affairs staff monitors developments worldwide and engages in close alignment with relevant industry associations and other stakeholders (e.g., think tanks, NGOs) as well as decision-makers regarding emerging regulation. For instance, we engage with policy makers and other stakeholders at EU level in order to develop policy instruments to enable decarbonisation of heavy industries. Our Public Affairs staff regularly aligns internally with ESG, Group Strategy & Development/M&A (GSD) departments on these issues in order to reflect recent developments in our risk analysis processes. Example & explanation how risk is included: ESG takes over the responsibility and coordinates in close alignment with GSD and GICR departments further actions developing allocation scenarios and forecasting models to help in quantifying the risks associated with emerging regulation, more specifically emerging carbon pricing policies such as the fourth phase of the EU ETS. If it is a risk with a potential impact on our result and our cash flow, ESG in conjunction with the GICR department assesses the risk with the help of a Risk Atlas (Mapping tool for potential risks and losses). This information is used by ESG to update the scenarios and allocation model on a regular basis according to new developments. Based on these models, GSD together with ESG developed a plant-by-plant

		roadmap to ensure a uniform approach. For all plants, but especially plants located at the border of the EU assessments on consequences of the introduced border adjustments measures are calculated as well.
Technology	Relevant, always included	Relevance & inclusion in risk assessment: Climate-related inherent technology risk is highly relevant for us as a technology-driven company. Hence, technology risks are reported to Group Insurance & Corporate Risk accordingly. Experts at the Heidelberg Technology Centre and the Environmental Social Governance department assess for example the risk associated with failure to application of the carbon capture technology for certain plants especially in Europe, as regards consolidation effects of the market for instance resulting in stranded assets. We consider it a technology risk that certain plants might not be able to operate anymore unless they have a carbon capture installation in place. Our low carbon transition plan in turn constitutes a management of such risks. For each country, but in fact for each plant, local conditions and especially availability of alternative materials (fuels and raw materials) have to be considered. Example & explanation how risk is included: While in Central and Northern Europe Alternative Fuels are common practices, permission and public acceptance of Alternative Fuel usage in other countries still presents a challenge. In some other countries, e.g., in South-East Asia, there is high competition for use of highly available biomass as fuel due to competition with the power sector. Hence, such risks are monitored by countries and with support of regional Alternative Fuel managers with the help of our low carbon transition plan. For each country, but in fact for each plant, local conditions and especially availability of alternative materials (fuels and raw materials) are considered, and the different situations in different countries are taken into account. Emerging technologies revolving around alternative raw materials, especially for Cement (Calcined Clay, Pozzolana, recycled concrete paste (RCP)), Concrete and Asphalt production, are assessed in detail and based on the local availability of respective sources and sourcing permits, as well as norms for products and construction.
Legal	Relevant, always included	Relevance & inclusion in risk assessment: Exposure to climate-related litigation or other legal risks is closely monitored and assessed by our Group Legal department. An example of a risk would be a lawsuit related to the adverse effects of climate change on certain groups of people and our role as an emitter of CO2 accordingly, which shows the relevance of these risks to Heidelberg Materials. Globally, we see an increased number of such litigation cases (Shell being the most prominent). Given the importance of the cement industry for global CO2 emissions, we see it as a potential target for such litigation. Example & explanation how risk is included:

		At Heidelberg Materials, a working group consisting of different departments monitors the situation, assesses potential risks for Heidelberg Materials and develops potential counter strategies. The identified and assessed risks are then reported to the Group Insurance & Corporate Risk department. Separate from this general assessment we have on country levels, separate assessments of country specific issues.
Market	Relevant, always included	Relevance & inclusion in risk assessment: Market risks are included in Heidelberg Materials' risk assessment. We look at developments regarding new products and changing customer behaviour having a potential impact on our current product portfolio and sales, for instance in regard to the demand for low-carbon cements. For example, in mature markets, the demand for low-carbon products can rise due to an increased awareness of the embodied carbon in our products, which might lead to customers demanding products with a lower CO2 footprint. This poses a risk to Heidelberg Materials as sales could decline if the company is not able to supply such low-carbon products. The Group Strategy & Development department liaises with our R&D and Marketing & Sales personnel on this to manage this risk. The same departments also monitor and assess risks related to product substitution and competition from other materials such as timber for housing. Any identified and assessed risks are then reported to the Group Insurance & Corporate Risk department. Each country is different in this respect and therefore also our activities in these markets are different and not group-uniform. For example, the competition in Nordic countries in building materials for residential buildings is completely distinct from that in Southern Europe. Example & explanation how risk is included: In almost all markets, we now offer low carbon products to our customers. For instance, an increase of awareness in the Norwegian market was pushing the Construction Industry towards low-CO2 cement to be competitive against other local construction materials. Heidelberg Materials managed this risk by importing cementitious materials and producing other blended cements which can save approximately 30% of the CO2 emissions in the production process. This was possible due to close monitoring of the market and the customer preferences by Marketing & Sales personnel in conjunction with the local operations. Together with Group Strategy & Development/M&A and R&D, a solution was found by offering an alternative material with a better carbon footprint.
Reputation	Relevant, always included	Relevance & inclusion in risk assessment: We consider reputational risks relevant for our assessment as they have the potential to adversely affect our business performance or impact the investors' attitude towards Heidelberg Materials. This trend could lead to increased financing costs (e.g., when issuing corporate

		bonds) or lower market capitalisation. Furthermore, we envisage the possibility of negative feedback from certain stakeholders should we delay or fail to achieve our sustainability targets, which could create a reputational risk for the company. Those risks are assessed jointly by the Environmental Social Governance and the Group Communication & Investor Relations department. Experts in the teams monitor developments and are in constant exchange with external stakeholders, so that they are able to assess and gauge climate-related inherent risks related to reputation. As these risks are assessed on a constant basis, the departments are able to manage and neutralise them accordingly. Example & explanation how risk is included: The risk of loss of trust of stakeholders can be mitigated with open and regular communication. On a regular basis, Group Communication & Investor Relations department is organising investor dialogues and meetings, where we openly address our ESG strategy and challenges. Moreover, we increase our transparency by expanding our external communication and linking financial and non-financial information even more closely. Lastly, we also directly embrace ESG in our financing strategy, for example with our sustainability-linked bond framework and the issuance of our first sustainability-linked bond in 2022 whose coupon payments are linked to our achievement of the CO2 targets.
Acute physical	Relevant, always included	Relevance & inclusion in risk assessment: We deem acute physical climate-related risks relevant to us as they could impact our production facilities, and result in costs and damages, and opportunity losses to our operations. Analysis of acute physical risks, such as extreme weather events, is part of Heidelberg Materials' overall risk management approach. The process of identifying risks is performed annually for the whole Group and combines bottom-up reporting at country-level with a top-down global analysis of our physical risk exposure by the Environmental Social Governance and Group Insurance & Corporate Risk (GICR) departments. As part of our work on the TCFD recommendations, Heidelberg Materials conducts annual assessments of the physical risks associated with climate change covering a wide range of climate-related risks, such as flooding. We have rated each of our own operations separately according to the exposure to the main acute and chronic risks and have developed climate change adaptation plants for our most material operations. In addition, we already do so for new assets as part of our investment due diligence process that covers physical as well as transition risks. Example & explanation how risk is included: An example of an acute physical risk would be a flooding of our plant as a result of a storm or heavy rainfalls, which would cause production stops (opportunity losses) and damage to the plant. Especially in

		countries located near the sea or in river basins, e.g., in the Netherlands or Bangladesh, there is an increased danger of plants being flooded and incurring financial losses due to production stops or necessary reparations. With the increasing occurrence of extreme weather conditions due to climate change, the risk exposure to acute physical risk is expected to increase. Indeed, a sound assessment of such risks sets the basis for negotiating the right insurance contracts for our production sites, which is why GICR and ESG assess such risks in conjunction with our country and plant teams as well as put adaptation plans in place to address the identified risks.
Chronic physical	Relevant, always included	Relevance & inclusion in risk assessment: Chronic physical risks such as water scarcity are assessed by the Environmental Social Governance (ESG) department in close cooperation with other departments such as Group Insurance & Corporate Risk. As part of our work on the TCFD recommendations, Heidelberg Materials conducts annual assessments of the physical risks associated with climate change covering a wide range of climate-related risks, such as droughts. Among other tools, we use the WRI Aqueduct tool to assess our exposure to water shortages at each of our plants world-wide. Water is required in various steps of cement production, for instance for cooling heavy equipment, and de-dusting and cleaning. It is also required for emission control systems, such as wet scrubbers and in older so-called wet process kilns. Therefore, the availability of water is important for our production process and chronic physical risks are relevant for our risk assessments. We have rated each of our own operations separately according to the exposure to the risks and have developed climate change adaptation plants for our most material operations. In addition, we already do so for new assets as part of our investment due diligence process that covers physical as well as transition risks. Example & explanation how risk is included: For the cement plants located in water scarcity areas according to the tools used in our assessment (e.g., in India and in Egypt), we have set up the target to establish comprehensive water management plans. These plans contain tailor made local efficiency and water stewardship measures at watershed level for cost effective implementation at site level, such as implementing water saving production-technologies or investing in water recycling on-site. This is part of our Sustainability Commitments 2030 in order to manage water efficiently and thereby manage chronic physical risks. In order to set up these plans, ESG and the country operations work together closely.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Company-specific description

Heidelberg Materials is present in more than 50 countries and 40% of the clinker production fall into the scope of emissions trading systems. The main markets affected for this type of risk are EU countries. The magnitude of this risk depends on the regulatory climate requirements, the market price for allowances, the volume of free allocation, and our cement or clinker production volume. The trading system that has established very detailed requirements to our operations is the EU ETS. The cost of CO2 emissions is directly linked to the clinker production and the ability of Heidelberg Material plants to achieve a lower level than the benchmark (693 kg CO2/t clinker). In 2022 the price for EUAs fluctuated between 65€ and up to almost 100 €/tonne. The prices are expected to increase as it was seen in the first quarter of the year 2023 where CO2/t reached 100€. This could create additional burdens as a result of higher manufacturing costs and clear competitive disadvantages in comparison with producers from countries without climate regulations. The emission rights will be allocated free of charge according to the benchmark rules, and will be further reduced after 2026 with the implementation of the Carbon Border Adjustment Mechanism. As announced by the EU the reduction of allowances will be as follows: 2026: 2.5%, 2027: 5%, 2028:10%, 2029: 22.5%, 2030: 48.5%, 2031:61%, 2032:73.5%, 2033: 86%, and 2040: 100%.

The main risk is a competitive disadvantage with respect to producers from outside emissions trading (carbon leakage).

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

190,000,000

Explanation of financial impact figure

The potential financial impact of the CO2 cost in the EU ETS countries has been estimated based on the estimated yearly EU Allowances requirements based on EU production levels and free allowance allocation. We have assumed a minimum potential impact figure considering the CO2 price of 90€ and a maximum potential impact figure of 100€. The review of the scenarios reflects different yearly needs of the plants that could range between deficit and surplus. Since the results of this analysis depend greatly on production figures, the bottom-up review performed showed that depending on market needs, in the short term, if changes are implemented, there might not be an impact within this time frame, however, if the CO2 reductions are not achieved, in the EU countries the monetary impact could reach a total of 190,000,000 € in the period up to 2026. The potential financial impact could increase in the following years once there is more certainty on the market price of CO2, changes in EU regulation, as well as the production needs of Heidelberg Materials plants.

Cost of response to risk

3,250,000,000

Description of response and explanation of cost calculation

The figure describe above, represents the investment that Heidelberg Materials will do on climate related topics from now until 2030.

By 2030, Heidelberg Materials plans to invest a total of €3,250.0 million €280.0 million in OpEx for the reduction of our CO2 emissions and to meet the criteria of the EU Taxonomy.

The Capex related to the manufacture of cement will be mainly distributed across our 3 pillars

1) Products: Clinker incorporation/low carbon products

2) Process: alternative fuels incl. biomass initiatives
3) New emission reduction technologies, like CCUS

To set up the transition plan, all countries have to develop a long-term plan to reduce CO2 emissions among this 3 pillars. Heidelberg Materials targets are clearly linked to the pillars above.
1. Products: low clinker products, for which its revenue will be considered sustainable , must reach 50% of our company revenue
2. Processes: as energy intensive company, we aim to use less fossil fuels, and more alternative fuels in our burning processes, so we aim to achieve 45% of alternative fuels ratio and 20% of biomass
3. New technologies: we aim to capture and store 10 million tons of CO2, one clear example is Brevik.
Brevik further info:
The construction started in 2022 and the plant will start operating in the course of 2024. We expect to store 400,000-tonne CO2 p/year, contributing to reduce Brevik emissions by ~50%. Although this Carbon Capture project is only one example of our actions to reduce its CO2 footprint.

Comment

More information on the financial CO2 regulations that we operate under can be found in our Annual Report.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Sustainable building materials with the smallest possible carbon footprint are playing an increasingly important role for us and our customers. Our research and product innovation labs have developed various alternatives to traditional cement with reduced environmental impacts, including cements and concretes with improved carbon footprints as well as building materials with characteristics that support the use of less material and enable society to implement climate-friendly solutions. We provide such resilient infrastructure solutions in over 50 countries. Our climate-related products imply a strong strategic impact on our business and offer a business opportunity for our company. We are observing an increasing demand for climate change adaptation products, which both address our overall sustainability commitment and enhance our revenue.

Special concrete products' use includes flood barriers and other protective structures, hydraulic works and coastal defenses, sustainable urban drainage systems that can cope with heavy rainfall and protect the built environment against flash floods, water conservation and management in dams and reservoirs. Our patented product TerraFlow® can also be used in underwater applications, so that Heidelberg Materials positions itself to reap the benefits of the substantial underwater application market.

An example for this opportunity is the provision of eco-friendly concrete blocks for the refurbishment of the Afsluitdijk dike in the Netherlands. 32km of this dike, which protects large parts of the Netherlands against floodings, are renewed / reinforced in this project. This gave us the opportunity to profit financially from our sustainability performance by supplying eco-friendly materials for the building of resilient infrastructure.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

6,300,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We expect a growth in the quantity demand of sustainable products and concrete for building resilient infrastructures to adapt to climate change within the next decade or two. Our aim is that 50% of our total revenue is coming from sustainable products and applications.

Currently our sustainable revenue is 34% of total revenue of 21.095 m€. This translates to ca. 7.200 m€. In our target year 2030, we expect, due to inflation and GDP growth that our total revenue will reach 27.000 m€. If we meet our 50% goal, sustainable revenue would therefore be 13.500 m€ in 2030. The difference of additional sustainable products and applications is thus 6.300 m€.

Cost calculation:
Current group Revenue (21.095) * GDP Growth & Inflation until 2030 = Total Revenue 2030 (27.000 m€)
Sustainable Revenue 2030 (= 50% of total revenue = 13.500) – current sustainable revenue (=34%* 21.095) = 6.300 m€

Cost to realize opportunity

410,200,000

Strategy to realize opportunity and explanation of cost calculation

We are engaging in peer-group specific marketing initiatives, e.g., the Concrete Initiative. The initiative promotes the capabilities of concrete to tackle future infrastructure and climate change challenges by disseminating information. Heidelberg Materials with the Concrete Initiative has, e.g., published on how concrete can enhance thermal comfort by minimising or avoiding overheating during heat waves, especially when combined with natural ventilation and appropriate building architecture.

Case Study:
The city of Venice is suffering from increasingly frequent floodings. As a consequence, the city invested into the MOSE (MOdulo Sperimentale Elettromeccanico, Experimental Electromechanical Module) system. It is a system of retractable mobile floodgates at the lagoon port inlets to defend Venice and the entire lagoon ecosystem from high waters. It is the largest hydraulic engineering project in the world.
Heidelberg Materials subsidiary Calcestruzzi was involved in the project with the supply of i.idro Marine Concrete, a concrete specifically developed for the use in marine environments or exposed to environmental conditions subject to the corrosive action of the sea or air. Although submerged in the sea, the product is able to resist various corrosive actions such as those caused by chlorides and sulphates, the mechanical actions by waves and the resulting actions of the shoreline. With its specific composition for MOSE, it is able to guarantee a lifespan of more than 100 years. After more than 15 years of construction, the MOSE system was completed in 2022.

Costs associated with the management of this opportunity stem from R&D activities in the fields of consumer-related development and technical service, which focus on developing special added value products e.g., suited for special infrastructure purposes.

This refers to our activities of our subsidiaries, to develop and optimise the products that are tailored to local needs, often in close cooperation with customers. In 2022, we spend 58 .6 million Euro of on central R&D, mainly salary costs, as well as costs for equipment and testing applications as well as the own financial contribution in publicly funded research projects.

Cost calculation/breakdown of costs:
If we calculate with constant R&D costs for the next 7 years, we end up with cumulative costs by 2030 of € 410.2m = 58.6 million € (annual R&D costs) * 7 years.

Comment

Our portfolio includes special products, e.g., special cements, binders, and concretes for flood protection, to manage the opportunity of enhanced demand for climate change adaptation products, enhance our revenue and offer infrastructure solutions.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Resilience

Primary climate-related opportunity driver

Other, please specify

Sequestration potential of depleted gas fields and saline aquifers

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

In February 2023, the Science Based Targets initiative (SBTi) validated Heidelberg Materials' 2030 CO2 reduction targets according to its new 1.5°C framework. The commitments towards the SBTi are consistent with Heidelberg Materials' own previously communicated target to reduce specific net CO2 emissions to 400 kg per tonne of cementitious material by 2030.

We are making use of innovative carbon capture, utilization, and storage (CCUS) technologies: CCUS is a key component of our climate strategy. Our facility in Brevik, Norway, is scheduled to go into operation in 2024. By 2030, we will have implemented further projects at Edmonton in Canada, Padeswood in the United Kingdom, and Slite on the Swedish island of Gotland. With our already launched CCUS projects alone, we aim to cut our carbon emissions by 10 million tonnes cumulatively by 2030. The facility in Slite will be designed to capture up to 1.8 million tonnes of CO2 per year, equivalent to the plant's total emissions. In addition, the use of biobased fuels for the production of cement in Slite will be increased. After a feasibility study addressed questions

concerning technology choices, environmental impact, legal aspects, financing, logistics, and energy supply, the project has now entered a more detailed engineering phase. The captured CO2 will be transported to permanent storage site below the North Sea CCUS technology is key to decarbonising our cement and concrete products. The world's first industrial-scale carbon capture plant in the cement industry has been under construction at our plant in Brevik, Norway. Starting within 2024, 400,000 tonnes of CO2 per year will be captured and transported by ship to an onshore terminal on the west coast of Norway. From there, the liquefied CO2 will be transported by pipeline to the storage site below the North Sea, where it will be held permanently.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

900,000,000

Potential financial impact figure – maximum (currency)

1,500,000,000

Explanation of financial impact figure

The potential financial impact of this opportunity is to save indirect operating costs by reducing CO2 emissions through Carbon Capture and Storage and reduce / avoid the costs that would incur for these emissions through emission trading systems. While we analyse various scenarios in order to forecast or estimate the financial impact of cap-and-trade schemes, it is important to note that the following estimate is merely the outcome of one of the scenarios we have looked at: EU ETS is expected to increase from €90/t CO2 in 2022 to €150/t CO2 in 2030. This is an estimate based the development of prices in the past years and on the fact that prices for emission rights are expected to increase, because the EU's ambitious climate targets (Green Deal) and the implementation of the Carbon Border Adjustment Mechanism (CBAM) are expected to lead to a tightening of the reduction target in the EU ETS, which will be reflected in increased demand for CO2 allowances on the market. Brevik project will be operational in 2024. The CCS plant will avoid 0.4 million tonnes CO2 per year x 5 year ahead of others is 2 million tonnes CO2 avoided for EU ETS payments. With the release of the CCUS project pipeline considered within Heidelberg Materials amounting a 9 industrial-scale CCUS projects until 2030, we will capture a total of 10mtCO2 until 2030 and see a competitive advantage of a total of 1,500 million €.

Cost to realize opportunity

3,250,000,000

Strategy to realize opportunity and explanation of cost calculation

The figure describe above, represents the investment that Heidelberg Materials will do on climate related topics from now until 2030.

By 2030, Heidelberg Materials plans to invest a total of €3,250.0 million €280.0 million in OpEx for the reduction of our CO2 emissions and to meet the criteria of the EU Taxonomy.

The Capex related to the manufacture of cement will be mainly distributed across our 3 pillars

1) Products: Clinker incorporation/low carbon products
2) Process: alternative fuels incl. biomass initiatives
3) New emission reduction technologies, like CCUS

To set up the transition plan, all countries have to develop a long-term plan to reduce CO2 emissions among this 3 pillars. Heidelberg Materials targets are clearly linked to the pillars above.
1. Products: low clinker products, for which its revenue will be considered sustainable , must reach 50% of our company revenue
2. Processes: as energy intensive company, we aim to use less fossil fuels, and more alternative fuels in our burning processes, so we aim to achieve 45% of alternative fuels ratio and 20% of biomass
3. New technologies: we aim to capture and store 10 million tons of CO2, like our plant in Edmonton

At our plant in Edmonton, we are developing North America’s first large-scale CCUS facility for the cement industry. A memorandum of understanding has been signed with Enbridge Inc. for the captured CO2, which will be transported via a pipeline and permanently stored. A detailed FEED study will be carried out before the final investment decision is made. Subject to the granting of carbon sequestration rights and regulatory approvals, the project could go into operation as early as 2026.

Comment

In 2022, progress was also made on the LEILAC 2 (Low Emissions Intensity Lime And Cement) carbon capture project. Heidelberg Materials will work together with Australian technology company Calix and a European consortium to build a demonstration plant that will be integrated into the cement plant in Hanover, Germany. The first phase of the LEILAC 1 project was completed in Lixhe, Belgium. The aim of the project was to develop a technology that would completely transform the calcination section of the cement plant. All targets set by the LEILAC 1 consortium, and the EU have been met. Another method of carbon capture uses oxyfuel technology. Together with three other European cement manufacturers, Heidelberg Materials has conducted a detailed study into the construction of an oxyfuel pilot kiln line to test the new process and prepare for

the construction of an industrial-scale installation using the knowledge gained. The study was successfully completed in December 2021 and based on its findings, the decision was made to build the pilot plant. The contract with the supplier was signed in May 2022. The pilot plant is expected to go into operation in 2024. Heidelberg Materials also continues to work on optimising another technology to use CO2 to breed microalgae for the manufacture of a high-quality ingredient for fish food and other animal feed. The projects was launched in 2019. In cooperation with Omega Green, we are producing 25 tonnes of dried microalgae annually on a 0.5 ha area at our Moroccan cement plant in Safi. In 2022, we commissioned a spray dryer that produces dry algae. Depending on demand, we aim to gradually expand capacity.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

The following 6 key elements determine the cornerstones of our Climate Transition Plan (CTP).: Governance & Stakeholder, Engagement, CO_2 Roadmaps, Risks & Opportunities, Targets, Financial planning, Production & Products.

We at Heidelberg Materials support the aim of the UNFCCC Paris Agreement to limit global warming to 1.5°C. We clearly commit ourselves to contribute to build a net zero future and therefore, we are transforming our business and are placing sustainability at the core of what we do. Our 1.5°C aligned climate transition plan serves as a guiding principle and outlines our net zero journey.

With the help of established feedback mechanisms, we ensure both regular tracking progress and engaging with our key stakeholders on our climate transition activities. We are stepping into a direct discussion with them during e.g., our AGM, regular capital markets days, quarterly conference calls, investor roadshows, and conferences. With regards to customers, we are offering a broad variety of customer events in which we discuss and challenge our climate transition. On the supplier side, we are conducting

open feedback discussions and surveys, as well as targets in terms of external green ratings, which are clearly tailored to address our net zero activities. To ensure the integration of climate transition into the political landscape, we are facilitating an open exchange with policymakers on a global scale. We acknowledge that our climate commitment also needs to be mirrored in our political engagements at global, regional and local level in order to support the transformation of our industry. We advocate for comprehensive carbon pricing systems coupled with a level playing field to enhance climate solutions.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

HM Climate Transition Plan (CTP) attached

07-2023_Heidelberg Materials Climate Transition Plan.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 8.5	Company-wide		Our Climate Transition Plan (CTP) which you find attached in C3.1 and also on our website clearly outlines our climate-related scenario analysis. One industry-specific risk for Heidelberg Materials is the dependence of construction activities on weather conditions. Harsh winters with extremely low temperatures or high precipitation throughout the year can have a short-term negative effect on construction activity, with direct consequences for our revenue and operating performance. There are significant geographical variations in climate risks. The impact of extreme weather scenarios, such as floods or droughts, can lead to damage to our production sites, interrupt the supply to our customers,

			or have adverse effects on the supply of upstream products to our operating units. In 2022, for example, the prolonged dry period in Western Europe caused low water levels, which made delivering raw materials by ship difficult. At the same time, flooding in large parts of Australia led to interruptions in production and supply. We respond to weather scenarios like these in various ways, including by using water-saving production techniques and by optimising our wastewater management. In this context, river flooding is currently a major concern for our business. According to forecasts, some operational sites that have so far had a low drought risk will become high-risk sites between 2030 and 2050. We are monitoring these long-term effects and are stepping up measures to mitigate risks and adapt to climate change. By assessing the probability of being affected by any of the aforementioned climate risks, we aim to develop a risk-specific adaptation plan for the affected locations in order to reduce their exposure within the next five years. Climate change also plays a role when it comes to the planning and implementation of takeovers. In the acquisition of new sites and companies, considering climate risks as well as different climate change scenarios and their potential impact is part of our standard due diligence. We use acquisitions as a strategic tool to achieve the goals of our CO2 roadmap. Usage of the MRe Tool for top-down assessment complemented bottom-up approach. The severity and the materialisation of the risks per plant increase in correlation with the projected absolute greenhouse gas concentration in the atmosphere.
Transition scenarios IEA NZE 2050	Company-wide		Our Climate Transition Plan (CTP) which you find attached in C3.1 and also on our corporate website clearly outlines our climate-related scenario analysis. Considering tightened EU regulations (e.g., maximum emission levels, minimum required number of recycled materials in new constructions, etc.), and potentially a similar approach from related economies, Heidelberg

			Materials foresee the following impacts: 1. Potential cost increases due to the purchase of emission allowances 2. Increasing carbon leakage depending on the final set up of the Carbon Border Adjustment Mechanism (CBAM) 3. Substitution of existing products with lower-emission ones 4. Investing in technologies that could not be successful in the market 5. Roll-out costs of new technologies 6. Increase of operating costs: due to new regulatory measures on energy-intensive inputs, and the indirect competition for low carbon alternatives 7. Investor preferences towards sustainable investments in companies with low CO2 emissions. On light of the above, Heidelberg Materials is strongly positioned to play a key role in the transition to a low-carbon and climate-resilient economy. In the medium term, we see an opportunity in the increased demand for durable building materials that helps against the physical effects of climate change. Our goal is to provide our customers with net-zero concrete by 2050 at the latest. We aim to offer a product portfolio that fulfils sustainability requirements and we are reviewing our entire product portfolio accordingly. We will advocate for the usage of CO2-reduced products with our customers. Our R&D efforts have been on the research of possible uses for recycled concrete with a special focus on the recarbonation. The aim is to bind the same amount of CO2 in the material that was previously released in the cement production. Most important capital expenditure projects in the strategic planning (2020-2024) and its financial assessment consider the underlying CO2 price assumptions (mainly based on developments in particularly regions, i.e. the EU, and the corresponding targets up to 2050). When choosing the fuel type, the cost of alternative fuels is deducted based on the proportion of biomass (considered CO2-neutral). This encourages investment in these plants, accordingly, leading to emission reductions. We are aiming to

			increase our usage of electricity from renewable energy sources, which comes with additional costs.
Physical climate scenarios RCP 4.5	Company-wide		Our Climate Transition Plan (CTP) which you find attached in C3.1 and also on our website clearly outlines our climate-related scenario analysis. For the acute risks under consideration, modelling for 2050 for the RCP 4.5 and RCP 8.5 scenarios shows a reduction in the risk of flooding and an increase in the risk of tropical storms. As we examine future time horizons, it is also worth noting that many risks already exist today, and we do not expect any extreme changes in the level of impact. We therefore carried out a more in-depth analysis in 2022 and, based on exposure to risk and strategic importance, identified about 100 plants, which we are now analysing in greater depth. For this purpose, further risks were included in the modelling and made available to the plants. The plants verified the findings and are now developing location-specific adaptation measures for critical risks, including necessary investment plans. We aim to roll out this analysis process to more locations. Looking at the time horizons to 2030 and 2050, the risk severity of the above-mentioned scenarios increases with the projected absolute greenhouse gas concentration in the atmosphere. Here, too, we see that, especially in the southern hemisphere, heat and the associated health risks pose a danger to our employees and thus to our production operations. We forecast only marginal increases in risk severity for most climate risks. More seriously, however, we expect changes due to droughts and dry conditions: according to forecasts, some locations previously at low risk of drought will become high-risk locations between 2030 and 2050.
Physical climate scenarios RCP 2.6	Company-wide		Our Climate Transition Plan (CTP) which you find attached in C3.1 and also on our website clearly outlines our climate-related scenario analysis. There are significant geographical variations in climate risks. The impact of extreme weather scenarios, such as floods or droughts, can lead to damage to our production sites, interrupt the supply to our customers, or have adverse effects on the supply of upstream products to our operating units. In 2022, for example, the prolonged dry period in Western Europe caused low

			water levels, which made delivering raw materials by ship difficult. At the same time, flooding in large parts of Australia led to interruptions in production and supply. We respond to weather scenarios like these in various ways, including by using water-saving production techniques and by optimising our wastewater management. In this context, river flooding is currently a major concern for our business. We face a similar picture for the period up to 2030. For the majority of the risks, the intensity increases as the concentration of CO2 in the atmosphere rises, but this is not the case for rainfall stress. In addition to heat and drought, this remains the most significant chronic risk across all scenarios.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

1. How do physical risks impact our business? (e.g.. IEA NZE 2050)

2. How are our Sustainability Commitments 2030 aligned with our business targets? (e.g. RCP 8.5)

3. How will the market demand change and what can we contribute in order to meet those demands?

4. How are M&A decisions affected and to what extent are climate-related criteria part of it? (e.g. RCP 8.5)

Results of the climate-related scenario analysis with respect to the focal questions

1. In the assessment of exposure to physical risks, all production plants have been evaluated. We determined the most relevant sites according to criteria such as high exposure to physical climate risks, relevance from EU-Taxonomy perspective or high value. We performed for those sites a more detailed risk assessment at plant level based on a climate scenario analysis considering different emission trajectories and timeframes to understand the exposure to potential impact of climate events. The severity of the physical risk is accounted as well as the financial and strategic considerations. As described in more detail in Risk3 in C2.3a, we estimate costs of up to €700 m until 2030. Now, the plants started to develop site and risk specific adaptation

plans. In doing so, we aim to reduce the unmanaged risk within the next five years.

2. Our Sustainability Commitments 2030 as well as our Climate Transition Plan (CTP) are clearly aligned with our business targets. With the help of scenario analysis, we are able to monitor long-term effects and implement measures to mitigate risks and adapt to climate change. Under our Sustainability Commitments 2030, we have the following targets: Reduction of our Scope 1 CO2 emissions to 400 kg per tonne of cementitious material, reduction of our total CO2 footprint according to the SBTi 1.5°C pathway, capturing 10 million tonnes of CO2 cumulatively through our CCUS projects, reduction of sulphur and nitrogen oxide emissions (SOx and NOx) by 40% compared with 2008 and achievement of 50% of our revenue from sustainable products and solutions by 2030.

3. The market environment was characterised by varying local economic development with difficult global trade conditions as a result of the Russia-Ukraine war and by a rapidly growing population as well as increasing internal migration to cities and urban areas. A key indicator is the rising per capita consumption of cement, which is still significantly lower in the Sub-Saharan countries than in more developed countries. In the overall market, we expect that the specifications will change to cope with the increasing likelihood of extreme weather events and natural disasters as a result of climate change. In the mid to long term, we expect an increased demand for sustainable products, and we are reviewing our entire product portfolio accordingly.

4. In the acquisition of new sites and companies, considering climate risks as well as different climate change scenarios and their potential impact is part of our standard due diligence. Scenario analysis are the basis for our strategic future activities. So in order to both implement our circular economy strategy and to expedite our CO2 roadmap, we acquired the Mick George Group and the SER Group, both active in the recycling of construction and demolition waste. Our M&A decisions are clearly linked to climate-related criteria and so was the acquisition of the Mick George Group and the SER Group as a result.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	We drive the decarbonisation of our sector and provide low-carbon products. By reducing our Scope 1 CO2 emissions to 400 kg per tonne of cementitious material, our Scope 2 emissions by 65% per tonne of cementitious material and our Scope 3 emissions by 25% in absolute terms – all by

		2030 – we reduce our total CO2 footprint according to the SBTi 1.5°C pathway. We succeeded in reducing our specific net CO_2 emissions by a further 2% in the 2022 financial year and, in line with our CO2 reduction roadmap, progress will accelerate over the coming year. The share of revenue generated with sustainable products serving sustainable construction has increased to 34% in 2022. We are offering a comprehensive portfolio of sustainable concrete under the brand name EcoCrete®, which offer up to 66% CO_2 reduction per m3 of concrete in comparison with the industry reference. Time horizon: We consider the time horizon covered to be short- to medium-term, because we have a low carbon transition plan in place which identifies on a plant-by-plant level which emission reduction levers may be used and to what extent until 2030. We define short-term as a time horizon of 0 to 5 years and medium-term until 2030. As part of the low carbon transition plan, we have already invested in emission reduction initiatives in our operations and will continue to do so until 2030. Substantial strategic decision: Climate-related risks and opportunities have impacted our strategy regarding our products insofar that a low carbon transition plan considers local conditions for each plant and then outlines the emission reduction levers that will be used there. We are also making greater use of waste materials and by-products from other industries as valuable raw materials and fuels. We aim to increase the proportion of alternative fuels in the fuel mix to 45% by 2030, thereby reducing both CO2 emissions and our dependence on natural resources and fossil fuels. The consistent and ongoing implementation of measures to increase efficiency, reduce costs, and improve margins in production, logistics, and distribution is an integral part of our Group strategy. The opportunity exists for all projects to produce higher than anticipated results and margin improvements that exceed previous expectations.
Supply chain and/or value chain	Yes	Climate-related risks and opportunities have influenced our strategy concerning the supply chain as we have experienced disruptions to our supply chain due to extreme weather events in the past. The impact of extreme weather scenarios, such as floods or droughts, can lead to damage to our production sites, interrupt the supply to our customers, or have adverse effects on the supply of

		upstream products to our operating units. We respond to weather scenarios in various ways by using water-saving production techniques and by optimising our wastewater management. In this context, river flooding is currently a major concern for our business. Time horizon: As we examine future time horizons, it is worth noting that many risks already exist today, so we would consider the time horizon covered here to be short-term. We already experienced disruptions in our supply chain due to climate-related risks such as e.g. extreme weather events. Short-term for us means 0 to 5 years and refers to our regular financial and business planning time horizon. We include such issues in our short-term strategy and work on optimising negative impacts from interruptions of the supply chain. Substantial strategic decision: In order to minimise the above described negative impacts from interruptions of the supply chain. In 2022 for example, we carried out an in-depth analysis and, based on exposure to risk and strategic importance, identified about 100 plants, which we are now analysing in greater depth. For this purpose, further risks were included in the modelling and made available to the plants. The plants verified the findings and are now developing location-specific adaptation measures for critical risks, including necessary investment plans. We aim to roll out this analysis process to more locations. The topic of responsible procurement is the responsibility of the Group Procurement department, which reports to the Chief Financial Officer. An internal working group, which is made up of occupational safety, compliance, and ESG experts as well as procurement staff, meets regularly to further develop existing approaches to responsible procurement, ensure that they are firmly anchored in the organisation, and respond to changing requirements. These activities are brought together in the Responsible Procurement initiative.
Investment in R&D	Yes	Climate-related risks and opportunities have influenced our R&D strategy. The cement industry can make a decisive contribution in the transition to a low-emission and climate-resilient global economy. In the medium term, we see opportunities in a growing demand for durable building materials produced using resource-efficient processes for the construction of resilient infrastructure. With the

		increasing likelihood of extreme weather events and natural disasters, the importance of robust concrete infrastructure capable of withstanding and protecting against the impacts of such events in the regions affected is growing The main technological risk is the substitution of existing products with lower-emission ones that will be available in sufficient volumes in the future and are currently being tested on the market. Time horizon: We consider to be short- to medium-term because we have been investing into rather short-term R&D projects, such as low-carbon products like the EcoCrete® as well as medium-term technologies for instance Carbon Capture. We define short-term as a time horizon of 0 to 5 years and medium-term until 2030. Substantial strategic decision: Our strategic position on climate protection and circularity is validation of our many years of research. Our R&D is to develop innovative products, new product formulations, and process improvements in order to lower energy consumption, conserve resources, strengthen the circular economy, and thereby reduce both CO2 emissions and costs. R&D activities consist of areas of focus: – Development of products with improved carbon footprints: We are developing composite cements and concretes with less clinker and cement. Reducing the proportion of clinker in cement is the most important lever when it comes to minimising energy consumption and CO2 emissions during production. – Circular economy for concrete: We are working on innovative recycling technologies that allow waste concrete to be fully reused in fresh concrete. – We are developing projects for carbon capture, utilisation, and storage (CCUS), which are essential tools to help our sector achieve net zero. – Innovative concrete systems: The main priority is the development and improvement of binders and concrete with optimised properties and innovative functionalities. In 2022, we focused on further developing 3D concrete printing technology.
Operations	Yes	Operational risks particularly include risks related to the cost development and availability of energy and raw materials. We also take into account regulatory risks associated with environmental constraints, as well as production, quality, and IT risks. Operational risks have increased in

		comparison with the previous year. For an energy-intensive company such as Heidelberg Materials, price trends in raw materials and energy markets represent a risk. There is a risk that the costs for individual energy sources and raw materials will increase, and thus total expenses will be higher in the future than planned. The Russia-Ukraine war had a significant impact on raw material prices in the 2022 financial year. We minimise the price risks for energy and raw materials by bundling and structuring procurement processes across the Group and securing mining concessions over the long term. We also make increased use of alternative fuels and raw materials as well as renewable energies in order to minimise price risks, while reducing CO2 emissions. Time horizon: We consider the time horizon covered to be short- to medium-term, because we have a low carbon transition plan in place which identifies on a plant-by-plant level which emission reduction levers may be used and to what extent until 2030. As part of the low carbon transition plan, we have already invested in emission reduction initiatives in our operations and will continue to do so until 2030. Substantial strategic decision: Climate-related risks and opportunities have impacted our strategy regarding our products insofar that a low carbon transition plan considers local conditions for each plant and then outlines the emission reduction levers that will be used there. It defines the specific measures for each plant, such as implementation of alternative fuels or improving plant efficiency e.g., through modernisation. The defined measures serve to reach our target of specific net CO2 emissions reduction to below 400 kg per tonne of cementitious material by 2030. With this global strategy e.g., regarding alternative fuels, many operations have been impacted by climate-related risks and opportunities, with large investments having taken place. The impact is likely to increase with plants not being able to be competitive anymore if they emit too much CO2.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Indirect costs Capital expenditures Acquisitions and divestments	Our Climate Transition Plan (CTP) which you find attached in C3.1 and also on our website clearly outlines our approach here. Climate-related risks and opportunities have influenced multiple elements of our financial planning. Revenue: Sustainable products and solutions are a revenue stream for us. We see Heidelberg Materials as strongly positioned to play a key role in the transition to a low-carbon and climate-resilient economy. In the medium-term, we see an opportunity in the increased demand for durable and sustainable building materials for the construction of robust infrastructure protected against the physical effects of climate change. The increasing urbanisation trend and growing world population will also increase the demand for cement and concrete. Heidelberg Materials' target is to achieve net zero emissions by 2050 at the latest. In addition, we aim to offer a product portfolio that fulfils all requirements of sustainability. We see this as an important prerequisite and at the same time as a great opportunity to increase the use of mineral-based building materials. By 2030, half of the Group revenue is to be generated with sustainable products and solutions. We expect an increased demand for sustainable products and are reviewing our entire product portfolio accordingly. We also consider it our responsibility to actively convince customers of the quality of CO2-reduced products. Capex: Risk related to cap and trade schemes have impacted our Capex, especially in the EU where we are subject to the EU Emission Trading Scheme. The EU-funded LEILAC (Low Emissions Intensity Lime And Cement) project, in which Heidelberg Materials is one of the strategic partners, aims to demonstrate the technical and economic feasibility of process technology designed to capture CO2 in its purest form when it is released as the raw material is heated. After the construction of a 60-metre-high demonstration calciner at our cement plant in Lixhe, Belgium, and the successful completion of process trials, it was decided to transfer the LEILAC technology to industrial scale. Following a very successful first phase of the LEILAC project in Lixhe, Heidelberg Materials will work together with Australian technology company Calix and a European consortium to build a facility four times as large at our plant in Hanover. The world's first large-scale facility for carbon capture in the cement industry has been under construction at our Brevik cement plant in Norway since 2021. The facility will use amine technology to capture 400,000 tonnes or 50% of the plant's emissions annually, starting 2024. According to the planned schedule, the CO2 emissions captured will be transported to an underground storage site below the North Sea. As part of the project, the carbon

		capture plant is being integrated into the current cement plant without disrupting the ongoing cement production. The project is progressing well. This has been made possible by clear government support, the social acceptance of CCS technology in Norway, and successful cooperation with the respective authorities. M&A: We also take into account climate-related issues such as specific CO2 emissions when considering an acquisition. We especially focus on the potential to improve the acquisition target's CO2 performance. Indirect costs: Cap and trade schemes have already impacted our financial planning regarding indirect costs. The reform of the Emissions Trading System was adopted in December 2022. The Carbon Border Adjustment Mechanism (CBAM) will be implemented from 2026 and, in parallel with the reduction in free allocations for European plants, will introduce gradually increasing CO2 import fees for cement and clinker. With the announced measures within the EU ETS, a significant curtailment in the allocation of CO2 emission rights is to be expected within the fourth trading period. Prices for emission rights have risen since September 2022. At the beginning of 2023, the CO_2 price reached the mark of around €100. A further price increase in the fourth trading period could lead to additional costs for covering the required emission rights, accompanied by a decrease in the freely allocated allowances. So far, Heidelberg Materials has a sufficient number of emission rights across the Group for the next two years. The time horizon of this planning is short- (0 to 5 years) to medium-term (until 2030), as we integrate projects like the modernisation/ construction of kilns completed in 2020, as well as medium-term projects like the investments in Carbon Capture until 2030.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with both our climate transition plan and a sustainable finance taxonomy	At both the company and activity level

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Objective under which alignment is being reported

Climate change mitigation

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

366,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

23.3

Percentage share of selected financial metric planned to align in 2025 (%)

25

Percentage share of selected financial metric planned to align in 2030 (%)

50

Describe the methodology used to identify spending/revenue that is aligned

Our spendings/revenues are clearly aligned with both a sustainable finance taxonomy and our Climate Transition Plan (CTP).

Total CapEx pursuant to the Taxonomy Regulation amounts to €1,570.1 million. Of this, €952.5 million (60.7%) is attributable to taxonomy-eligible CapEx for the cement business line and €33.1 million (2.1%) to the recycled aggregates operating line. The taxonomy aligned share of CapEx is €360.8 million (23.0%) for the cement business line and €5.1 million (0.3%) for the recycled aggregates operating line. These taxonomy-aligned CapEx include €365.9 million from additions to property, plant and equipment as well as €0.0 million from additions to intangible assets as well as right-of-use assets.

The key figure for sustainable revenue pursuant to the Taxonomy Regulation is calculated on the basis of revenue related to the taxonomy-aligned economic activities (numerator) divided by total revenue. Revenue is defined as the revenue shown in the consolidated income statement that relates to revenue from contracts with customers pursuant to IFRS 15. The total revenue pursuant to the Taxonomy Regulation amounts to €21,095.1 million, of which €11,005.8 million (52.2%) is attributable to taxonomy-eligible revenue for the cement business line and €57.2 million (0.3%) to the recycled aggregates operating line. The taxonomy-aligned share of revenue is €156.7 million (0.7%) for the cement business line and €11.1 million (0.1%) for the recycled aggregates operating line.

The achievement of our 2030 and 2050 targets depends on the realisation of several projects and initiatives that are outlined at the country and plant level. This entrepreneurial activity is accompanied by a consistent allocation of capital. With net investments of €1.1 billion per year, including €100 to €150 million in CCUS, we have reached the required level of investment to operate our production sites efficiently and to meet market requirements. A detailed overview of the yearly expenses on research and development, Capex and Opex is incorporated on a yearly basis in the annual report on pages 115ff.

C3.5b

(C3.5b) Quantify the percentage share of your spending/revenue that was associated with eligible and aligned activities under the sustainable finance taxonomy in the reporting year.

Economic activity

Manufacture of cement

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover
CAPEX
OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

156,700,000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

0.7

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

0.7

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

360,800,000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

23

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

23

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

44,600,000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

2.8

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

2.8

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Transitional activity

Calculation methodology and supporting information

Revenue: The key figure for sustainable revenue pursuant to the Taxonomy Regulation is calculated on the basis of revenue
related to the taxonomy-aligned economic activities (numerator) divided by total revenue (denominator). Revenue is defined as the revenue shown in the consolidated income statement that relates to revenue from contracts with customers pursuant to IFRS 15.

CapEx: CapEx comprises all additions of tangible and intangible assets, including leases but excluding goodwill and
revaluations. The CapEx thus results from the additions to intangible assets and from property, plant and equipment including right-of-use assets. Besides additions from ordinary business operations, additions from business combinations) are also included in the total CapEx

OpEx: The following non-capitalised expenses are considered operating expenditure:
– Research and development: Expenditure on the development of basic technologies, process innovations, and the optimisation of products and solutions according to the wishes of our customers in the technical competence centers.
– Lease expenditure for short-term leases and low-value assets: Expenditure that meets the definition of IFRS 16 Leases but are not recognised as a right-of-use asset or lease liability because they relate to a short-term lease (<12 months) or a low-value asset.
– Repair and maintenance/building renovation measures: Expenditure on repair materials, spare and wear parts, and repair services from external providers and employees.
– All other direct expenditure relating to the daily maintenance of property, plant and equipment necessary to ensure the continuous and effective functioning of
these assets.
More information can be found in our Annual Report starting at page 114.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

The technical screening criteria for taxonomy alignment with the act on climate change mitigation were reviewed by an interdisciplinary working group and with the involvement of further experts, especially with regard to the interpretation of the "DNSH" criteria. The requirements of the climate change adaptation act were not pursued further, as we are currently unable to achieve taxonomy-aligned revenue, capital expenditure and operating expenditure in accordance with the regulation. To review the criteria determining whether a substantial contribution to climate change mitigation (substantial contribution criteria) is made in line with Annex I of the Climate Delegated Act, internal

reporting systems and data were used to verify compliance with the respective limit values (i.e. 722 kgCO2 / t clinker or 469 kg CO2 / t cement) at plant level. The analysis differentiates between the various types of plants (integrated plants, clinker plants, grinding plants) on the basis of the reporting definitions set out by the GCCA industry association.

Pursuant to the Taxonomy Regulation, as outlined above, only the cement business line and the recycled aggregates operating line are taxonomy-eligible in the context of the climate change mitigation environmental objective. In order to continuously increase the share of taxonomy-aligned economic activities, investments in carbon capture, utilisation, and storage and technical equipment are important factors.

In 2022, Heidelberg Materials set ambitious targets for 2030 based on detailed activities and plans (CO_2 roadmap). Large-scale projects in particular require a long planning and implementation phase, which is why the extension of the planning period to more than five years is objectively justified and in line with the internal CO2 roadmap. By 2030, Heidelberg Materials plans to invest a total of €3,250.0 million in the 3.7 Manufacture of cement economic activity and €280.0 million in OpEx for the expansion of our taxonomy-aligned activities so that they fulfil the technical screening criteria (substantial contribution criteria and DNSH criteria).

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

For the somewhat more qualitative DNSH criteria, the individual (legal) requirements and their applicability to Heidelberg Materials were reviewed and potential approaches for proving the alignment of the individual plants were devised. For example, a location-based assessment for climate change adaptation was developed, covering various climate scenarios and time horizons. If risks are identified, the plants will be expected to implement appropriate adaptation measures (for more information, see our Annual and Sustainability Report, p. 349ff). At the same time, for criteria such as “protection and restoration of biodiversity and ecosystems” or “sustainable use and protection of water and marine resources,” use is made of existing processes.

We regularly assess the proximity of our operational sites to protected areas and, if necessary, develop biodiversity management plans. For the “sustainable use and protection of water and marine resources” criterion, we have extended our existing approach of creating water management plans in accordance with the requirements of Appendix B of Annex I of the climate delegated acts. For the manufacture of cement and the “pollution prevention and control” criterion, we use, among other things, our long-established processes for monitoring air pollutants to verify compliance with the EU Best Available Techniques conclusion under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for the production of cement, lime and magnesium oxide.

We have also examined the additional requirements for the products we manufacture,

such as those relating to placing hazardous substances on the market in line with Appendix C of the Annex I of the Climate delegated act. We come to the conclusion that these criteria are fulfilled. With respect to circular economy, there are no requirements within the Taxonomy Regulation for 3.7 Manufacture of cement and 5.9 Material recovery from non-hazardous waste.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

In order to comply with the minimum safeguards, we have closely coordinated with the Group Legal and Compliance department and compared our existing measures on human rights, anti-corruption, fair competition, and taxation with the requirements of the EU Taxonomy Regulation. As we have been implementing compliance processes in line with the UN Guiding Principles on Business and Human Rights in these areas for many years and are continuously reviewing and expanding them, we have come to the conclusion that the minimum safeguards are being met. One current example of our continuous optimisation efforts, is our work in the field of human rights to further expand our analysis of significant risks and their impact on potentially affected parties. Particularly with respect to our supply chains, we have supplemented our existing risk management with suitable processes (in the context of the requirements of the German Supply Chain Due Diligence Act (LkSG), among other things).

Economic activity

Material recovery from non-hazardous waste

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover
CAPEX
OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

11.1

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

0.1

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

0.1

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

5.1

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0.3

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0.3

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

1

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0.1

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0.1

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Transitional activity

Calculation methodology and supporting information

Revenue: The key figure for sustainable revenue pursuant to the Taxonomy Regulation is calculated on the basis of revenue related to the taxonomy-aligned economic activities (numerator) divided by total revenue (denominator). Revenue is defined as the revenue shown in the consolidated income statement that relates to revenue from contracts with customers pursuant to IFRS 15.

CapEx: CapEx comprises all additions of tangible and intangible assets, including leases but excluding goodwill and revaluations. The CapEx thus results from the additions to intangible assets and from property, plant and equipment including right-of-use assets. Besides additions from ordinary business operations , additions from business combinations) are also included in the total CapEx

OpEx: The following non-capitalised expenses are considered operating expenditure:
– Research and development: Expenditure on the development of basic technologies, process innovations, and the optimisation of products and solutions according to the wishes of our customers in the technical competence centers.
– Lease expenditure for short-term leases and low-value assets: Expenditure that meets the definition of IFRS 16 Leases but are not recognised as a right-of-use asset or lease liability because they relate to a short-term lease (<12 months) or a low-value asset.
– Repair and maintenance/building renovation measures: Expenditure on repair materials, spare and wear parts, and repair services from external providers and employees.
– All other direct expenditure relating to the daily maintenance of property, plant and equipment necessary to ensure the continuous and effective functioning of these assets.

More information can be found in our Annual Report starting at page 114.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

The technical screening criteria for taxonomy alignment with the act on climate change mitigation in accordance with the activity “material recovery from non-hazardous waste” were reviewed by an interdisciplinary working group and with the involvement of further experts, especially with regard to the interpretation of the "DNSH" criteria. The requirements of the climate change adaptation act were not pursued further, as we are currently unable to achieve taxonomy-aligned revenue, capital expenditure and operating expenditure in accordance with the regulation. To review the criteria determining whether a substantial contribution to climate change mitigation (substantial contribution criteria) is made, internal reporting systems and data were used to verify whether the plants are meeting the prescribed material recovery rate of more than 50% in terms of weight.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

For the somewhat more qualitative DNSH criteria, the individual (legal) requirements and their applicability to Heidelberg Materials were reviewed and potential approaches for proving the alignment of the individual plants were devised. For example, a location-based assessment for climate change adaptation was developed, covering various climate scenarios and time horizons. If risks are identified, the plants will be expected to implement appropriate adaptation measures (for more information, see our TCFD report). At the same time, for the criterion protection and restoration of biodiversity and ecosystems use is made of existing processes. We assess whether for the operations an Environmental Impact Assessment (EIA) or screening has been completed in accordance with Directive 2011/92/EU. Moreover, we regularly assess the proximity of our operational sites to protected areas and, if necessary, develop biodiversity management plans. We come to the conclusion that these criteria are fulfilled.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

In order to comply with the minimum safeguards, we have closely coordinated with the Group Legal and Compliance department and compared our existing measures on human rights, anti-corruption, fair competition, and taxation with the requirements of the EU Taxonomy Regulation. As we have been implementing compliance processes in line with the UN Guiding Principles on Business and Human Rights in these areas for many years and are continuously reviewing and expanding them, we have come to the conclusion that the minimum safeguards are being met. One current example of our continuous optimisation efforts is our work in the field of human rights to further expand our analysis of significant risks and their impact on potentially affected parties. Particularly with respect to our supply chains, we have supplemented our existing risk management with suitable processes (in the context of the requirements of the German Supply Chain Due Diligence Act (LkSG), among other things).

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

The information provided on the EU Taxonomy has been audited with "limited assurance" as part of our non-financial statement by our financial auditor PwC. See p. 342 - 344 of our Annual & Sustainability Report for the assurance statement.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target
Intensity target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

Well-below 2°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 1: Purchased goods and services

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

8,164,937

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

8,164,937

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

8,164,937

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

92

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

38

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

25

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

6,123,702.75

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

8,666,869

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

8,666,869

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

8,666,869

Does this target cover any land-related emissions?

Yes, it covers land-related CO2 emissions/removals associated with bioenergy and non-land related emissions (e.g. non-FLAG SBT with bioenergy)

% of target achieved relative to base year [auto-calculated]

-24.5896324736

Target status in reporting year

New

Please explain target coverage and identify any exclusions

In line with the SBTi Cement guideline, Heidelberg Materials set an absolute target for purchased clinker and cement, which is part of category 1 (Purchased goods and services). Other materials that are also included in this category and reported in the Annual & Sustainability Report are excluded from this target setting.

Plan for achieving target, and progress made to the end of the reporting year

Scope 3 is also integral part of the Climate Transition Plan (CTP) which you find attached in C3.1 and also on our corporate website.

Heidelberg Materials has strengthened its collaboration with suppliers to gain transparency on their emission reductions and motivate them to reduce their emissions and provide a near and long term view in terms of emission reduction. However due to an increase of coverage on purchased good and services the total emissions of this category have increased.

List the emissions reduction initiatives which contributed most to achieving this target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2 accounting method

Scope 3 category(ies)

Intensity metric

Other, please specify

Metric tonnes CO2/ ton of cementitious material (net)

Base year

2020

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

0.576

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.576

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

30.5

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

0.40032

% change anticipated in absolute Scope 1+2 emissions

33

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

0.551

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.551

Does this target cover any land-related emissions?

Yes, it covers land-related CO2 emissions/removals associated with bioenergy and non-land related emissions (e.g. non-FLAG SBT with bioenergy)

% of target achieved relative to base year [auto-calculated]

14.2304189435

Target status in reporting year

New

Please explain target coverage and identify any exclusions

Under the Scope 1 target, Heidelberg Materials commit to reduce its direct emissions to 400 kg/t of cementitious materials (net) by 2030. This includes all integrated plants and grinding plants across the Group. It refers to all company operations where clinker, cement and other cementitious materials are produced. Heidelberg Materials set as reporting boundaries its financial consolidation, therefore Joint Ventures not consolidated, are not part of the Scope 1 reporting and targets.

Plan for achieving target, and progress made to the end of the reporting year

Heidelberg Materials has set in its Climate Transition Plan (CTP) the actions to be implemented to achieve CO2 reductions towards 2030 target. The CTP is attached in C3.1 and can be also found also on our corporate website.

Within this transition plan our company has established a detailed plan at country and plant level, to reduce the CO2 emissions by increasing alternative fuels and biomass; incorporate more SCM (Secondary Cementitious Materials), improve the efficiency of our plants; implement carbon capture technologies among others. One clear example is our Mitchel plant in Indiana USA. In 2022 this plant was renovated to the most updated technologies to optimise its efficiency, this will allow to reduce almost 30% of CO2 mainly by operating with gas. In addition, looking at our 2030 commitment, a carbon capture project was established in Mitchel, which aims to capture 95% of the emissions of the plant. This supports Heidelberg Materials strategy to reduce greenhouse gases emissions. In 2022, the group emissions were 551 kg CO2/t cementitious material (net), already 14% from the base year.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Int 2

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Intensity metric

Other, please specify

Metric tonnes CO2/ ton of cementitious material

Base year

2020

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.044

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.044

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

65

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

0.0154

% change anticipated in absolute Scope 1+2 emissions

33

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.0407

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.0407

Does this target cover any land-related emissions?

Yes, it covers land-related CO2 emissions/removals associated with bioenergy and non-land related emissions (e.g. non-FLAG SBT with bioenergy)

% of target achieved relative to base year [auto-calculated]

11.5384615385

Target status in reporting year

New

Please explain target coverage and identify any exclusions

Our Scope 2 target refers to the electricity used in our operations. And it is aligned to our financial consolidation boundaries. As for now there is still a hybrid approach in some of the countries in which the information from the supplier is not easily available

some of the countries are still calculated as location based, therefore we keep the target as location base

Plan for achieving target, and progress made to the end of the reporting year

Scope 2 is also an integral part of our Climate Transition Plan (CTP). The CTP is attached in C3.1 and can be also found also on our corporate website.

To reduce indirect emissions, Heidelberg Materials looks at several measures: ensure an efficient usage of the electricity, reduce the external (3rd party) consumption by using the wasted heat from clinker operations, implement on site projects for the company own consumption, and work with our suppliers to provide green electricity to our plants.

List the emissions reduction initiatives which contributed most to achieving this target

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Target reference number

Int 3

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Target ambition

1.5°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Intensity metric

Metric tons CO2e per metric ton of cement

Base year

2020

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

0.576

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.44

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.62

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2050

Targeted reduction from base year (%)

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

% change anticipated in absolute Scope 1+2 emissions

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

0.551

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.0407

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.5917

Does this target cover any land-related emissions?

Yes, it covers land-related CO2 emissions/removals associated with bioenergy and non-land related emissions (e.g. non-FLAG SBT with bioenergy)

% of target achieved relative to base year [auto-calculated]

Target status in reporting year

New

Please explain target coverage and identify any exclusions

Under the Scope 1 and 2 target, Heidelberg Materials commit to reach net zero by 2050. This includes all integrated plants and grinding plants across the Group. It refers to all company operations where clinker, cement and other cementitious materials are produced. Heidelberg Materials set as reporting boundaries its financial consolidation, therefore Joint Ventures not consolidated, are not part of the Scope 1 or 2 reporting and targets.

Plan for achieving target, and progress made to the end of the reporting year

Heidelberg Materials has set in its Climate Transition Plan (CTP) the actions to be implemented to achieve CO2 reductions with the ambition to be net zero by 2050. The CTP is attached in C3.1 and can be also found also on our corporate website.

Within this transition plan our company has established a detailed plan at country and plant level, to reduce the CO2 emissions by increasing alternative fuels and biomass; incorporate more SCM (Secondary Cementitious Materials), improve the efficiency of our plants; implement carbon capture technologies among others. Looking at the long term ambition, we have focus first on implemented all necessary actions to reach our 2030 target, and ensure the years beyond keep the steady reduction on CO2.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production
Net-zero target(s)
Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2022

Target coverage

Company-wide

Target type: energy carrier

Heat

Target type: activity

Consumption

Target type: energy source

Low-carbon energy source(s)

Base year

2020

Consumption or production of selected energy carrier in base year (MWh)

82,453,533

% share of low-carbon or renewable energy in base year

25.7

Target year

2030

% share of low-carbon or renewable energy in target year

45

% share of low-carbon or renewable energy in reporting year

28.7

% of target achieved relative to base year [auto-calculated]

15.5440414508

Target status in reporting year

New

Is this target part of an emissions target?

Yes. Heat for Heidelberg Materials comes from the fuels that are used in the production process. We use alternative fuels and aim to increase the share vs fossil fuels in the production of clinker 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 reducing our CO2 emissions, because the biomass that accounts for around 41.9% of the alternative fuel mix is classified as climate neutral. Our Alternative Fuel Master Plan project was launched in mid-2018 and is followed up and updated on a bi-annual basis and aims to increase the proportion of alternative fuels across the Group, helping us to meet our commitment to reduce CO2 emissions by 2030.

Is this target part of an overarching initiative?

Science Based Targets initiative

Please explain target coverage and identify any exclusions

It covers the operations of all our integrated plants.

Plan for achieving target, and progress made to the end of the reporting year

This is an underlying target to achieve reductions in Scope 1. It is aligned with Heidelberg Materials Climate Transition Plan.

List the actions which contributed most to achieving this target

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2020

Target coverage
Company-wide

Target type: absolute or intensity
Intensity

Target type: category & Metric (target numerator if reporting an intensity target)
Other, please specify
Other, please specify
NOx g/t clinker

Target denominator (intensity targets only)
Other, please specify
gram per tonne of clinker

Base year
2008

Figure or percentage in base year
1,585

Target year
2030

Figure or percentage in target year
951

Figure or percentage in reporting year
1,249

% of target achieved relative to base year [auto-calculated]
52.9968454259

Target status in reporting year
New

Is this target part of an emissions target?

This target is not related to CO2 emissions. This is a target set to reduce NOx emissions that are generated due to clinker production.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

This target refers to all Heidelberg Materials operating clinker plants.

Plan for achieving target, and progress made to the end of the reporting year

To ensure the target is achieved, the expert technical department engage in a yearly basis to country plants and review their NOx emissions and assess what other measures or changes can be established to improve the flue gas purification of our kilns .

List the actions which contributed most to achieving this target

Target reference number

Oth 2

Year target was set

2022

Target coverage

Business division

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Fossil fuel reduction target

Percentage of fossil fuels in the fuel mix

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

74.3

Target year

2030

Figure or percentage in target year

55

Figure or percentage in reporting year

71.3

% of target achieved relative to base year [auto-calculated]

15.5440414508

Target status in reporting year

New

Is this target part of an emissions target?

This target is an enabler to achieve CO2 reduction in the production of clinker and cement. It is linked to our target to increase alternative fuels usage in our production activities.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

The target refers to all the cement business division within Heidelberg Materials, it includes all clinker plants where fuels are used for its operations.

Plan for achieving target, and progress made to the end of the reporting year

As part of the CO2 reduction strategy and the CO2 roadmap that has been drafted at country at plant level, the usage of alternative fuels (incl. biomass) as well as the reduction of fossil fuels in the fuels portfolio. is an active measure that is tracked on a monthly basis. Countries are constantly scouting the market to identify other sources of fuels that are not fossil, either alternative or biogenic.

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Int1

Target year for achieving net zero

2050

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Please explain target coverage and identify any exclusions

Heidelberg Materials aims to achieve net zero emissions on Group level by 2050 at the latest, ensuring that all emissions are reduce according to the standard. Since Scope 1 remains around 70% of total CO2 emissions, most of the efforts in short and long term is to ensure the direct emissions are reduced according to the Net Zero standards. To achieve this, tried-and-tested techniques and measures, such as maximising the use of alternative fuels, optimising the product mix, and improving the efficiency of our plants which are key conventional levers to achieve emissions reduction improvement will be extended by the large-scale use and application of new technologies such as the carbon capture, utilisation, and storage (CCUS).

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

Neutralisation of remaining emissions will be possible due to the natural carbonation of concrete, which in its life spam will absorb CO2 from the atmosphere. In addition, due to the high utilisation of biomass and the existence of Carbon Capture installations, Heidelberg Materials will benefit from the Bioenergy with Carbon Captured and Storage (BECCS). 9 CCUS projects have been announced and the first one will be operational in 2024.

Planned actions to mitigate emissions beyond your value chain (optional)

This target is part of our Climate Transition Plan (CTP) which you find attached in C3.1 and also on our corporate website. We will consider natural carbonation and BECCS.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	57	
To be implemented*	135	3,470,000

Implementation commenced*	41	1,670,000
Implemented*	31	1,655,000
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy consumption

Other, please specify

This measure refers to the adaptation of plants to be able to process higher amounts of alternative fuels, it also includes measures related to decarbonised raw materials.

Estimated annual CO2e savings (metric tonnes CO2e)

635,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

240,000,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Alignment with Carbon Transition Plan (CTP) ensured. The CTP is attached in C3.1 and can be also found also on our corporate website.

The investment refers to the 39% of related money spend in the reporting year. For Heidelberg Materials the measures and initiatives are projects that last several years, therefore by reporting the money spent on the reporting year we aim to support a better understanding of the needs and requirements of the industry.

Due to the volatile energy market the prices there have not been monetary savings that can be reported yet.

Initiative category & Initiative type

Low-carbon energy consumption
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

50,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

Alignment with Climate Transition Plan (CTP) ensured. The CTP is attached in C3.1 and can be also found also on our corporate website.

This type of projects has an Opex cost. Therefore, the is no initial Capex required, neither payback period. However, these projects represent 3% of the activities performed in 2022.

Initiative category & Initiative type

Other, please specify
Other, please specify
Reduction of CO2 at product level

Estimated annual CO2e savings (metric tonnes CO2e)

830,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

100,000,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

On this initiative we include all related measures to improve clinker incorporation factor. It refers to structural changes required in the plants, additional equipment for processing other cementitious materials, additives, etc. It represents 52% of the required spend on the reporting year. Due to the volatile energy market prices, there have not been monetary savings that can be reported yet.

Initiative category & Initiative type

Other, please specify

Other, please specify

Additional projects with impact on CO2 outside the scopes above

Estimated annual CO2e savings (metric tonnes CO2e)

90,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

20,800,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Due to the volatile energy market prices, there have not been monetary savings that can be reported yet.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for low-carbon product R&D	We invest substantially in R&D towards innovative low-carbon production technologies and products, and will advance a portfolio of sustainable products in every Group country. Already at this point, the development of low-carbon products such as the EcoPlus® Range plays a crucial role in our R&D efforts. In this product range being able to replace up to 70% of Portland Cement (CEMI) in a concrete mix with Hanson Regen (Ground Granulated Blast furnace Slag or 'GGBS'), we have developed a product that has a much lower level of embodied CO2 than if ordinary cement was used at our UK subsidiary.
Internal price on carbon	We have introduced a dynamic internal carbon price, used for the main Capex projects for the next strategic planning exercise (2020-2024) as well as in the financial assessment informing our due diligence e.g., new installations or capacity increases in the cement business line, as this is our most energy- and CO2-intensive business line. For instance, when choosing the type of fuel, the cost of alternative fuels is discounted because of the biomass content that is considered to be carbon neutral. This increases the business case for the choice of alternative fuel installations and therefore drives investments in those, which leads to emission reductions.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Green Business Council for Concrete, GCCA transition pathway for Cement

Type of product(s) or service(s)

Buildings construction and renovation

Other, please specify

Cement, RMC

Description of product(s) or service(s)

Sustainable building materials with the lowest possible carbon footprint are playing an increasingly important role for us and our customers. In line with our Sustainability Commitments 2030, we are making substantial investments in researching and developing innovative low-carbon production technologies and products. In dialogue with our customers, the responsible staff in the Group countries explore the need for new sustainable products for their respective markets. The development of these products is often supported by the Global Research & Development department. The topic of sustainable products is assigned to the Group department ESG in the Sustainability Office. The use of by-products from other industrial sectors for the production of clinker and cement and the recycling of demolition concrete allow us to manufacture concrete in a more resource-efficient way and thus lower CO2 emissions. A significant part of our research and development work is aimed at developing new cement and concrete formulations in order to minimise energy consumption and CO2 emissions, and thereby also reduce our environmental impact & costs. Our German subsidiary Heidelberg Materials Beton, e.g., offers a comprehensive portfolio of sustainable concrete under the brand name EcoCrete®, which, depending on the application, offer up to 66% CO2 reduction per m3 of concrete in comparison with the industry reference. This reduction is achieved purely technically and without compensatory measures.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

Based on GCCA CO2 accounting methodology, cement is considered sustainable with 30% emission reduction compared to a CEMI based on 2019/2020 industry average. Concrete is considered sustainable with less than 5.5kgCO2/m³/MPa

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Cradle-to-gate

Functional unit used

Functional units are defined as follows:
Cement / cementitious: 1 metric tonne of the respective product
Concrete: 1 m³ * compressive strength -> m³*MPa

Reference product/service or baseline scenario used

Improvement scenarios are considered following the logic of the GBCC and the GCCA transition pathway for Cement.
Reference cement CEM I with clinker factor = 0.95 and based on GCCA association emission data -> CO2 (Scope 1) of CEM I, reference = 788.15 kgCO2/tonne -> Sustainable cement threshold = 552 kgCO2/tonne

Concrete: Reference C25/30 concrete mix design using 300 kg of the GCCA reference CEM I -> CO2 (Scope 1) of reference C25/30 concrete = 7.88 kgCO2/(m³*MPa).

Life cycle stage(s) covered for the reference product/service or baseline scenario

Cradle-to-gate

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

16,348

Explain your calculation of avoided emissions, including any assumptions

A standard Portland cement as a reference product, this has a clinker content of 95%, which considering the emissions of clinker 780 kg/tonne of clinker shows that a typical Portland cement will contain ~741 kg CO2 /tonne of cement. Low carbon products should achieve a reduction of minimum 30% vs the base product (Portland cement), therefore the clinker content in this cement types should be as minimum 65%, which applied to the current clinker emission factor result on 507 kg CO2 /t of cement, bringing 234 kg CO2/tonne of cement as avoided emissions for this type of products. The emissions avoided with Sustainable Concrete products refer to the accumulated CO2 savings (Scope 1) of all measured Sustainable Concrete products when compared to the reference CEM I based concrete with emissions of 7.88 kgCO2/(m³*MPa).

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

34

C-CE4.9

(C-CE4.9) Disclose your organization's best available techniques as a percentage of Portland cement clinker production capacity.

	Total production capacity coverage (%)
4+ cyclone preheating	90
Pre-calciner	75

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

Yes, a divestment

Name of organization(s) acquired, divested from, or merged with

Heidelberg Materials North America's (Lehigh Hanson until 1 January 2023) were divested. This includes business activities in cement, aggregates, ready-mixed concrete, and asphalt in the U.S. West region (California, Arizona, Oregon, and Nevada), except for the Permanente cement plant and quarry. The sale includes two cement production plants with related distribution terminals, 17 active aggregates sites, and several downstream operations.

Details of structural change(s), including completion dates

Although the transaction was announced in 2021, the formal divestment from production figures was only performed in 2022.

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the impact does not meet our significance threshold	To be considered as significant change, the impact at group level should exceed 5%	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
67,986,511

Comment
The emissions are as per reported in 2020 Sustainability Report.

Scope 2 (location-based)

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
5,093,192

Comment
The emissions are presented as reported in 2020 Sustainability Report.

Scope 2 (market-based)

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
5,231,956

Comment
The emissions are presented as reported in 2020 Sustainability Report.

Scope 3 category 1: Purchased goods and services

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
8,871,138

Comment

The emissions are presented as reported in 2020 Sustainability Report. Includes clinker, cement, gypsum, limestone, etc.

Scope 3 category 2: Capital goods

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

As capital goods is not one of the material categories as outlined in the Cement Sector Scope 3 GHG Accounting and Reporting Guidance issued by the WBCSD Cement Sustainability Initiative (now GCCA), we have not evaluated it. We have focused on the four mandatory categories.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

3,521,129

Comment

Estimated values as reported in 2020 Sustainability Report.

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

1,100,926

Comment

Total transportation (up-/downstream) considered under one category in the 2020 Sustainability Report.

Scope 3 category 5: Waste generated in operations

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
204,894

Comment
The volumes are collected from all cement operations and the multiplied by the Defra factors.

Scope 3 category 6: Business travel

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
0

Comment
As business travel is not one of the material categories as outlined in the Cement Sector Scope 3 GHG Accounting and Reporting Guidance issued by the WBCSD Cement Sustainability Initiative (now GCCA), we have not evaluated it. We have focused on the four mandatory categories.

Scope 3 category 7: Employee commuting

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
104,040

Comment
This corresponds to the calculation via Quantis tool.

Scope 3 category 8: Upstream leased assets

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

As Upstream leased assets are not one of the material categories as outlined in the Cement Sector Scope 3 GHG Accounting and Reporting Guidance issued by the WBCSD Cement Sustainability Initiative (now GCCA), we have not evaluated it. We have focused on the four mandatory categories.

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

7,777,367

Comment

Total transportation (up-/downstream) considered under one category in the 2020 Sustainability Report.

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

108,212

Comment

This figure is calculated based on the material that is sold to 3rd parties for further processing in concrete. As average emissions we use Heidelberg Materials reference.

Scope 3 category 11: Use of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

In the usage of our products there is no carbon associated, on the contrary, due to the properties of clinker, our products absorb carbon from the air during its lifetime.

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

As end-of-life treatment of sold products are not one of the material categories as outlined in the Cement Sector Scope 3 GHG Accounting and Reporting Guidance issued by the WBCSD Cement Sustainability Initiative (now GCCA), we have not evaluated it. We have focused on the four mandatory categories.

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

As downstream leased assets are not one of the material categories as outlined in the Cement Sector Scope 3 GHG Accounting and Reporting Guidance issued by the WBCSD Cement Sustainability Initiative (now GCCA), we have not evaluated it. We have focused on the four mandatory categories.

Scope 3 category 14: Franchises

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

As franchises is not one of the material categories as outlined in the Cement Sector Scope 3 GHG Accounting and Reporting Guidance issued by the WBCSD Cement

Sustainability Initiative (now GCCA), we have not evaluated it. We have focused on the four mandatory categories.

Scope 3 category 15: Investments

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
0

Comment
As investments is not one of the material categories as outlined in the Cement Sector Scope 3 GHG Accounting and Reporting Guidance issued by the WBCSD Cement Sustainability Initiative (now GCCA), we have not evaluated it. We have focused on the four mandatory categories

Scope 3: Other (upstream)

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
0

Comment
No other relevant upstream emissions identified.

Scope 3: Other (downstream)

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
0

Comment
No other relevant downstream emissions identified.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance
WBCSD: The Cement CO2 and Energy Protocol
Other, please specify
Internal developed methodology for categories not fully available in current guidelines

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

65,400,262

Comment

The value corresponds to the GCCA methodology gross figures including CO2 from on site power generation. This Scope 1 emissions have been validated by a 3rd party under limited assurance as it can be seen on page 334 of the Annual Report.

Completely aligned with our Climate Transition Plan (CTP). The CTP can be found attached in C3.1 and also on our corporate website.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

The data differs in countries with deregulated markets such as European, Asian and North American markets. In regulated markets the location-based and market-based figures are the same. This applies to some African countries.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

4,522,408

Scope 2, market-based (if applicable)

5,410,870

Comment

The location based emissions correspond to the CO2 Cement Protocol.

Emissions on market based have slightly increase vs baseline because of some suppliers were forced to change the fuels used for generation of electricity

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

9,449,591

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

5

Please explain

Based on our production figures and the materials purchased for production activities, such as: limestone, gypsum, GBFS, clinker and cement we apply the standard emission factor as per Ecoinvent 3.5 database. In very limited cases we have the information from

the suppliers, which has been used to replace the standard factor. The total emissions are slightly different from the Annual Report and we discover some inconsistencies, the data will be restated in 2023. In 2023 we increased the scope of materials that belong to purchased goods, these emissions were not accounted in the baseline, therefore there is an increase of emissions also because the increase of coverage.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

Capital goods has not been considered as relevant for the production activities of Heidelberg Materials, as it was categorised as such by the WBSCD in the CO2 Protocol for Cement operations. However, we are increasing our coverage of Scope 3 and we expect to report more robust data in the following years.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

3,358,777

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Based on the total consumption of fuels in the operations of Heidelberg Materials, we applied the standard factors as per Defra factors database valid for the reporting year.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2,533,333

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Transportation data has been from all plants of Heidelberg Materials to fill their regional transportation. (b) Our company Heidelberg Materials Trading has provided the data of overseas transportation. (c) We have used GCCA and International Maritime Organization (IMO) emission factors. (d) calculating the emissions based on transportation method and tonne/km or tonne/mile calculated from (a) and (b). Two thirds are transportation controlled by Heidelberg Materials, while one third is not controlled by us, which is why we have calculated one third of emissions using data obtained from suppliers and customers.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

132,246

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Based on the total waste in the operations of Heidelberg Materials, we applied the standard factors as per Defra factors database valid for the reporting year.

Business travel

Evaluation status

Not relevant, explanation provided

Please explain

Business travel has not been considered as relevant for the production activities of Heidelberg Materials, as it was categorised as such by the WBSCD in the CO2 Protocol for Cement operations. However, we are increasing our coverage of Scope 3 and we expect to report more robust data in the following years.

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

103,591

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Employee commuting has not been considered as relevant for the production activities of Heidelberg Materials, as it was categorised as such by the WBSCD in the CO2 Protocol for Cement operations. However, we followed the guidance of the Quantis tool to account for this category.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

This category has not been considered as relevant for the production activities of Heidelberg Materials, as it was categorised as such by the WBSCD in the CO2 Protocol for Cement operations. However, we are increasing our coverage of Scope 3 and we expect to report more robust data in the following years.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

5,066,667

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Transportation data has been from all plants of Heidelberg Materials to fill their regional transportation. (b) Our company Heidelberg Materials trading has provided the data of overseas transportation. (c) We have used GCCA and International Maritime Organization (IMO) emission factors. (d) calculating the emissions based on transportation method and tonne.km or tonne. mile calculated from (a) and (b).

Processing of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

106,282

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category has been calculated based on the total products sold to 3rd parties for further production in concrete. In the absence of supplier data, we have used Heidelberg Materials emissions as reference.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

The use of our products does not imply additional emissions during the lifetime of the product. On the contrary due to the presence of clinker and its properties, our products will absorb CO2 during their lifetime.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

This category has not been considered as relevant for the production activities of Heidelberg Materials, as it was categorised as such by the WBSCD in the CO2 Protocol for Cement operations. However, we are increasing our coverage of Scope 3 and we expect to report more robust data in the following years.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

This category has not been considered as relevant for the production activities of Heidelberg Materials, as it was categorised as such by the WBSCD in the CO2 Protocol for Cement operations. However, we are increasing our coverage of Scope 3 and we expect to report more robust data in the following years.

Franchises

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

0

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Heidelberg Materials does not operate as a franchise business. Therefore, the are no emissions associated to it.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

This category has not been considered as relevant for the production activities of Heidelberg Materials, as it was categorised as such by the WBSCD in the CO2 Protocol for Cement operations. However, we are increasing our coverage of Scope 3 and we expect to report more robust data in the following years.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

There are no additional emissions outside the Categories of Scope 3 that have been identified.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

There are no additional emissions outside the Categories of Scope 3 that have been identified.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	3,346,506	The figure corresponds to the biogenic fuels and alternative fuels with biogenic content that are utilised in Heidelberg Materials plants.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.003315

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

69,922,670

Metric denominator

unit total revenue

Metric denominator: Unit total

21,095,000,000

Scope 2 figure used

Location-based

% change from previous year

16.35

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities

Please explain

Due to successfully implement technical measures in the optimisation of Heidelberg Materials plants, our overall emissions have been reduced. In addition in 2022, the % of alternative fuels increased by 0.7 percentage points from 27.8% to 28.5%; while the clinker incorporation factor reduced by 1.3%.

Intensity figure

591.7

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

69,922,670

Metric denominator

metric ton of product

Metric denominator: Unit total

111,013,467

Scope 2 figure used

Location-based

% change from previous year

2.5

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption
Other emissions reduction activities

Please explain

The intensity figure reflects Scope 1 and Scope 2 for cement and clinker production. Due to successfully implement technical measures in the optimisation of Heidelberg Materials plants, our overall emissions have been reduced. In addition in 2022, the % of alternative fuels increased by 0.7 percentage points from 27.8% to 28.5%; while the clinker incorporation factor reduced by 1.3%.

C-CE6.11

(C-CE6.11) State your organization's Scope 1 and Scope 2 emissions intensities related to cement production activities.

	Gross Scope 1 emissions intensity, metric tons CO2e per metric ton	Net Scope 1 emissions intensity, metric tons CO2e per metric ton	Scope 2, location-based emissions intensity, metric tons CO2e per metric ton
Clinker	0.817	0.768	0
Cement equivalent	0.599	0.564	0.042
Cementitious products	0.586	0.551	0.041
Low-CO2 materials	0.454	0.415	0.41

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

No

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Asia, Australasia	19,410,829
Africa and Middle East	9,578,639
Western Europe	14,790,190
Other, please specify North Europe, Eastern Europe and Central Asia	13,857,888
Other, please specify North America and Canada	7,762,715

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Cement production	65,400,262
Aggregates extraction	508,070

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions,	Net Scope 1 emissions ,	Comment

	metric tons CO2e	metric tons CO2e	
Cement production activities	65,400,262	61,205,767	For the calculation of CO2 we follow the WBCSD CO2 Cement Protocol (GCCA).
Metals and mining production activities	508,070		Emissions related to the extraction of materials for the cement business are already included in the Scope 1 of Cement activities. The emissions reported in this line refers to other aggregates extraction.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Africa and Middle East	658,040	697,207
Asia, Australasia	1,676,481	1,773,894
Western Europe	651,076	677,674
Other, please specify Northern Europe, Eastern Europe and Central Asia	962,483	1,683,420
Other, please specify North America and Canada	574,329	578,675

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Cement	4,522,408	5,410,870
Aggregates	279,040	297,122

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Yes

C7.7a

(C7.7a) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Subsidiary name
Hanson UK

Primary activity
Cement

Select the unique identifier(s) you are able to provide for this subsidiary
No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)
1,685,079

Scope 2, location-based emissions (metric tons CO2e)
75,885

Scope 2, market-based emissions (metric tons CO2e)
3,983

Comment
Figures correspond to the GCCA CO2 Protocol methodology in line with the Group reporting.

Subsidiary name

Italcementi

Primary activity

Cement

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

3,344,460

Scope 2, location-based emissions (metric tons CO2e)

180,717

Scope 2, market-based emissions (metric tons CO2e)

204,513

Comment

Figures correspond to the GCCA CO2 Protocol methodology in line with the Group reporting.

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based,	Scope 2, market-based (if	Comment

	metric tons CO2e	applicable), metric tons CO2e	
Cement production activities	4,522,408	5,410,870	The calculation corresponds to and hybrid method using as available CO2 emissions from suppliers and in the case of missing data, IEA emission factor
Metals and mining production activities	279,039	297,122	Limestone extraction and quarry emissions for cement is already included in Scope 2 Cement production activities. The emissions presented refer only to other aggregates extraction

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	321,054	Decreased	0.4	Although the target is to increase the usage of renewable energy. Last year, the Russia-Ukraine war and the overall energy situation in Europe have the consequence that the renewable energy decreased instead of increasing, because many plants in Europe shifted to coal as a temporary measure.
Other emissions reduction activities	1,605,000	Decreased	2	This refers to the initiatives mainly implemented in 2022
Divestment	796,914	Decreased	1	The divestment of the West Region in USA was fully performed in 2022, therefore the impact in our current

				performance took place on the 2022 reporting year.
Acquisitions	0	No change	0	No change
Mergers	0	No change	0	No change
Change in output	0	No change	0	No change
Change in methodology	0	No change	0	No change
Change in boundary	0	No change	0	No change
Change in physical operating conditions	0	No change	0	No change
Unidentified	0	No change	0	No change
Other	976,413	Decreased	1	This represents the additional measures that have been implemented in the past that keep supporting the reduction of the CO2 in Heidelberg Materials operations.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 5% but less than or equal to 10%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year

Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	9,989,858	73,990,741	83,980,599
Consumption of purchased or acquired electricity		2,605,530	11,212,961	11,212,961
Consumption of self-generated non-fuel renewable energy		1,144,599		1,144,599
Total energy consumption		13,739,987	85,203,702	96,338,159

C-CE8.2a

(C-CE8.2a) Report your organization's energy consumption totals (excluding feedstocks) for cement production activities in MWh.

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)	LHV (lower heating value)	72,463,675
Consumption of purchased or acquired electricity		11,212,961
Total energy consumption		83,676,636

C-MM8.2a

(C-MM8.2a) Report your organization's energy consumption totals (excluding feedstocks) for metals and mining production activities in MWh.

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)	LHV (lower heating value)	0
Consumption of purchased or acquired electricity		0
Consumption of self-generated non-fuel renewable energy		0
Total energy consumption		0

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization

9,989,858

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

The biogenic fuels are continuously monitored to ensure that the reporting of the biogenic fraction is accurately considered. In Heidelberg Materials we encourage the usage of sustainable biomass.

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

All biomass used is considered sustainable.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Heidelberg Materials does not use hydrogen in its processes.

Coal

Heating value

LHV

Total fuel MWh consumed by the organization

31,828,740

MWh fuel consumed for self-generation of electricity

436,199

MWh fuel consumed for self-generation of heat

0

Comment

The volumes correspond to the clinker and cement productions as well as the self-production of energy.

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

479,717

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

479,717

Comment

Includes shale oil and waste oils

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

10,047,418

MWh fuel consumed for self-generation of electricity

644,132

MWh fuel consumed for self-generation of heat

0

Comment

These figures correspond to natural gas.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

11,837,093

MWh fuel consumed for self-generation of electricity

64,268

MWh fuel consumed for self-generation of heat

0

Comment

For fuel consumed by the organisation, it includes: (ultra) heavy fuel, diesel, other fossil fuels, tyres, RDF including plastics, solvents.

In the case of self-power generation it includes diesel.

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

83,980,599

MWh fuel consumed for self-generation of electricity

1,144,599

MWh fuel consumed for self-generation of heat

0

Comment

The figures include fossil and biomass sources.

C-CE8.2c

(C-CE8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel for cement production activities.

Sustainable biomass

Heating value

LHV

Total MWh fuel consumed for cement production activities

9,989,858

MWh fuel consumed at the kiln

9,989,858

MWh fuel consumed for the generation of heat that is not used in the kiln

0

MWh fuel consumed for the self-generation of electricity

0

Comment

The biogenic fuels are continuously monitored to ensure that the reporting of the biogenic fraction is accurately considered. In Heidelberg Materials, we encourage the usage of sustainable biomass.

Other biomass

Heating value

LHV

Total MWh fuel consumed for cement production activities

0

MWh fuel consumed at the kiln

0

MWh fuel consumed for the generation of heat that is not used in the kiln

0

MWh fuel consumed for the self-generation of electricity

0

Comment

No other source of biomass used.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

LHV

Total MWh fuel consumed for cement production activities

0

MWh fuel consumed at the kiln

0

MWh fuel consumed for the generation of heat that is not used in the kiln

0

MWh fuel consumed for the self-generation of electricity

0

Comment

Heidelberg Materials does not use hydrogen in its processes.

Coal

Heating value

LHV

Total MWh fuel consumed for cement production activities

31,828,740

MWh fuel consumed at the kiln

31,328,096

MWh fuel consumed for the generation of heat that is not used in the kiln

64,445

MWh fuel consumed for the self-generation of electricity

436,199

Comment

The total of fuel consumed for Cement activities includes all the breakdown into kiln, non kiln and self-electricity generation.

Oil

Heating value

LHV

Total MWh fuel consumed for cement production activities

479,717

MWh fuel consumed at the kiln

479,717

MWh fuel consumed for the generation of heat that is not used in the kiln

0

MWh fuel consumed for the self-generation of electricity

0

Comment

Oil is only used at the kiln.

Gas

Heating value

LHV

Total MWh fuel consumed for cement production activities

10,047,418

MWh fuel consumed at the kiln

8,718,785

MWh fuel consumed for the generation of heat that is not used in the kiln

684,502

MWh fuel consumed for the self-generation of electricity

644,132

Comment

The total of gas consumed for Cement activities includes all the breakdown into kiln, non kiln and self-electricity generation.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

LHV

Total MWh fuel consumed for cement production activities

26,990,229

MWh fuel consumed at the kiln

26,331,553

MWh fuel consumed for the generation of heat that is not used in the kiln

594,908

MWh fuel consumed for the self-generation of electricity

64,268

Comment

For fuel consumed by the organisation, it includes: (ultra) heavy fuel, diesel, other fossil fuels, tyres, RDF including plastics, solvents.

In the case of self-power generation it includes diesel.

Total fuel

Heating value

HHV

Total MWh fuel consumed for cement production activities

82,453,533

MWh fuel consumed at the kiln

79,912,769

MWh fuel consumed for the generation of heat that is not used in the kiln

1,396,164

MWh fuel consumed for the self-generation of electricity

1,144,599

Comment

The figures include fossil and biomass sources.

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	489,477	421,789	421,789	421,789
Heat	0	0	0	0

Steam	0	0	0	0
Cooling	0	0	0	0

C-CE8.2d

(C-CE8.2d) Provide details on the electricity and heat your organization has generated and consumed for cement production activities.

	Total gross generation (MWh) inside the cement sector boundary	Generation that is consumed (MWh) inside the cement sector boundary
Electricity	487,477	266,140
Heat	0	0
Steam	0	0

C-MM8.2d

(C-MM8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for metals and mining production activities.

	Total gross generation (MWh) inside metals and mining sector boundary	Generation that is consumed (MWh) inside metals and mining sector boundary
Electricity	0	0
Heat	0	0
Steam	0	0
Cooling	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption

Belgium

Sourcing method

Project-specific contract with an electricity supplier

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

418,792

Tracking instrument used

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Belgium

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

This value corresponds only to the operation in Belgium where the value of the energy provider is close to zero.

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Other, please specify

Asia, Australia

Consumption of purchased electricity (MWh)

2,478,660

Consumption of self-generated electricity (MWh)

272,197

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

2,750,857

Country/area

Other, please specify

Africa and Middle East

Consumption of purchased electricity (MWh)

1,570,363

Consumption of self-generated electricity (MWh)

1,532

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,571,895

Country/area

Other, please specify

Western Europe

Consumption of purchased electricity (MWh)

2,998,129

Consumption of self-generated electricity (MWh)

998

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

2,999,127

Country/area

Other, please specify

North Europe, Eastern Europe and Central Asia

Consumption of purchased electricity (MWh)

2,545,953

Consumption of self-generated electricity (MWh)
0

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

2,545,953

Country/area
Other, please specify
North America

Consumption of purchased electricity (MWh)
1,620,562

Consumption of self-generated electricity (MWh)
0

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,620,562

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Energy usage

Metric value
287.68

Metric numerator

Terajoules

Metric denominator (intensity metric only)

No intensity metric

% change from previous year

1

Direction of change

Decreased

Please explain

Heidelberg Materials AG consolidated view - incl. all country affiliates with full financial and management control. Total Kiln Fuel Consumption and Drying of raw materials and fuels in terajoules (TJ) per year.

C-MM9.3a

(C-MM9.3a) Provide details on the commodities relevant to the mining production activities of your organization.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	The aim of research and development (R&D) at Heidelberg Materials is to develop innovative products, new product formulations, and process improvements in order to lower energy consumption, conserve resources, strengthen the circular economy, and thereby reduce both CO2 emissions and costs. Focus is the development of cements and concrete with improved carbon footprints: We are developing composite cements and concretes with less clinker and cement. Reducing the proportion of clinker in cement is the most important lever when it comes to minimising energy consumption and CO2 emissions during production and helps to preserve natural raw materials. We have made further progress in the development of cements containing less clinker, thereby reducing CO2 emissions. In several countries, the proportion of blast furnace slag, fly ash, and limestone in cement has been increased, thus reducing the clinker content. We are also evaluating the use

		of alternative cement components, such as natural pozzolans or calcined clays, for various locations. Clinker ratio– the proportion of clinker in cement – was around 72% in the financial year 2022. By 2030, we aim to generate half of our revenue from sustainable products, for which we expect increased demand. More details about our sustainable products and solutions can be found in the Non-financial statement chapter of the 2022 Annual Report. Our strategic position on climate protection and circularity is validation of our many years of research and the attention we have given to exploring possible uses for recycled concrete. Another focus is on the recarbonation of cement in recycled fractions. The aim of this process called “enforced recarbonation” is to store the same amount of CO2 in this material as was previously released during the cement production process. The results of our R&D efforts are encouraging, demonstrating a CO2 uptake potential close to the amount of process greenhouse gases emitted during clinker production. This can contribute immensely to the decarbonisation of the industry, and it gives us the opportunity to access new markets with recarbonated products.

C-CE9.6a

(C-CE9.6a) Provide details of your organization’s low-carbon investments for cement production activities over the last three years.

Technology area

Alternative low-CO2 cements/binders

Stage of development in the reporting year

Applied research and development

Average % of total R&D investment over the last 3 years

10

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

123,400,000,000

Average % of total R&D investment planned over the next 5 years

10

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Our low-carbon investments for cement production activities are completely aligned with our Climate Transition Plan (CTP). The CTP can be found attached in C3.1 and also on our corporate website.

The R&D performed on non-Ordinary Portland clinker based alternative low-CO2 cements/binders is a cornerstone of Heidelberg Material's decarbonisation journey and will support achieving our approved SBTi 1.5°C target. Our R&D on alternative low-CO2 cements/binders is indeed a key pillar of implementing and achieving targets as set forth in our CO2 roadmap where we have committed to reducing our Scope 1 emission to 400 kg CO2/t of cementitious material (net) by 2030. This is the most ambitious near-term target set in the cement sector.

Technology area

Carbon capture, utilization, and storage (CCUS)

Stage of development in the reporting year

Full/commercial-scale demonstration

Average % of total R&D investment over the last 3 years

5

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

123,400,000,000

Average % of total R&D investment planned over the next 5 years

47

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Our Climate Transition Plan (CTP) clearly outlines our CCUS activities. The CTP can be found attached in C3.1 and also on our corporate website.

With the continuous expansion of our CCUS activities, we expect to reduce costs and increase revenue. Firstly, capturing and storing CO_2 removes the need to purchase emission allowances. The financial effect will increase as we emit less CO_2 and as the price of carbon allowances rises. Secondly, we expect a significant revenue effect in the medium term due to higher sales prices for sustainable products. We anticipate that these two effects will exceed the expected annual investment costs of expanding our CCUS projects.

Technology area

Low clinker cement

Stage of development in the reporting year

Pilot demonstration

Average % of total R&D investment over the last 3 years

60

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

123,400,000,000

Average % of total R&D investment planned over the next 5 years

60

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Our low-carbon investments for cement production activities are completely aligned with our Climate Transition Plan (CTP). The CTP can be found attached in C3.1 and also on our corporate website.

The production of clinker is the main source of CO2 emissions in cement production. This is why the development and implementation low-clinker cements constitutes a very important lever to cut CO2 emissions.

R&D at Heidelberg Materials explores a broad portfolio of approaches on low clinker cements including the development of multi-component cements and cements with elevated amounts of limestone, and pozzolana. Heidelberg Materials also develops process and product know-how on calcined clays. If calcined, many clay types can be transformed into reactive secondary cementitious materials (SCMs) which can replace significant amounts of the clinker used for cement production. R&D also addresses the beneficiation of alternative cementitious materials, such as steel slags, to enable their use as SCM.

R&D efforts to reduce the clinker content are also made at the level of concrete production, i.e. in dedicated research on low clinker concrete. Low clinker cements are an essential pillar of Heidelberg Material's CO2 roadmap which will lead to achieving our recently approved SBTi 1.5°C target and our 2030 Scope 1 emission target of 400 kgCO2/t cementitious material (net). This near-term CO2 emission reduction target is the most ambitious one in the cement sector.

Technology area

Other, please specify

Recycling and recarbonation of concrete

Stage of development in the reporting year

Pilot demonstration

Average % of total R&D investment over the last 3 years

20

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

123,400,000,000

Average % of total R&D investment planned over the next 5 years

20

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Our low-carbon investments for cement production activities are completely aligned with our Climate Transition Plan (CTP). The CTP can be found attached in C3.1 and also on our corporate website.

We also perform significant R&D on recycling and recarbonation of concrete. R&D on recycling of concrete supports the transition to a circular economy by means of enabling the reuse of all recycled concrete fractions: While recycled sand and aggregates are reused in fresh concrete, special recycling techniques permit to also extract the fine fraction mainly consisting of the recycled hardened cement paste. These recycled concrete fines can be used as a raw material component in clinker production and as SCM in cement production. The use of the fines in clinker production reduces CO2 emissions related to the calcination of the raw material, while the use as SCM reduces the CO2 footprint of the cement.

Heidelberg Materials has engaged into the recycling business and is scaling up its R&D findings at the level of pilot demonstrations. Our research on recarbonation of concrete enables further reduction of the process emissions. Enhanced CO2 uptake (enforced recarbonation) is achieved by exposing the recycled concrete fines to CO2 under well controlled conditions.

Hence, R&D on recycling and recarbonation of concrete significantly contributes to realising Heidelberg Materials's CO2 roadmap which will lead to achieving our approved SBTi 1.5°C target and our 2030 Scope 1 emission target of 400 kgCO2/t cementitious material (net).

Technology area

Fuel switching

Stage of development in the reporting year

Large scale commercial deployment

Average % of total R&D investment over the last 3 years

0

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

0

Average % of total R&D investment planned over the next 5 years

0

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Fuel switching know-how and technologies were developed by Heidelberg Materials in the past and are state-of-the art in our cement production process.

Our low-carbon investments for cement production activities are completely aligned with our Climate Transition Plan (CTP). The CTP can be found attached in C3.1 and also on our corporate website.

Technology area

Control systems

Stage of development in the reporting year

Large scale commercial deployment

Average % of total R&D investment over the last 3 years

0

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

0

Average % of total R&D investment planned over the next 5 years

0

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Know-how and technologies on control systems were developed by Heidelberg Materials in the past and are state-of-the art in our cement production process.

Our low-carbon investments for cement production activities are completely aligned with our Climate Transition Plan (CTP). The CTP can be found attached in C3.1 and also on our corporate website.

Technology area

Waste heat recovery

Stage of development in the reporting year

Large scale commercial deployment

Average % of total R&D investment over the last 3 years

0

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

0

Average % of total R&D investment planned over the next 5 years

0

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Know-how and technologies on waste heat recovery were developed by Heidelberg Materials in the past and are state-of-the art in our cement production process.

Our low-carbon investments for cement production activities are completely aligned with our Climate Transition Plan (CTP). The CTP can be found attached in C3.1 and also on our corporate website.

Technology area

High temperature heating

Stage of development in the reporting year

Large scale commercial deployment

Average % of total R&D investment over the last 3 years

0

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

0

Average % of total R&D investment planned over the next 5 years

0

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Know-how and technologies on high temperature heating were developed by Heidelberg Materials in the past and are state-of-the art in our cement production process.

Our low-carbon investments for cement production activities are completely aligned with our Climate Transition Plan (CTP). The CTP can be found attached in C3.1 and also on our corporate website.

C-MM9.6a

(C-MM9.6a) Provide details of your organization's investments in low-carbon R&D for metals and mining production activities over the last three years.

Technology area

Other, please specify

Concrete Recycling

Stage of development in the reporting year

Pilot demonstration

Average % of total R&D investment over the last 3 years

5

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

123,400,000,000

Average % of total R&D investment planned over the next 5 years

5

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Our research on concrete recycling focuses on closing the material loop and reducing our CO2 emissions.

A typical recycling process of waste concrete consists of first removing unwanted impurities such as plastic or wood, followed by crushing and sieving, and – if necessary – washing of the material. The recycled coarse aggregates and sand can – if not contaminated – be entirely used in road construction. Coarse recycled aggregates can also be used in fresh concrete production. The use of recycled sand in fresh concrete is technically feasible, if the hardened cement paste has been removed. However, standards still prevent the use of recycled sand in most countries. Exceptions include the Netherlands and Switzerland.

Advanced recycling methods such as in the focus of our R&D also permit to separate the hardened concrete paste from the remainder of the recycled material. The fine material, typically less than 150 µm in diameter, can be used in the raw material mix in clinker production or according to the European non-harmonised standard EN 197-6 – similar as limestone filler - as a secondary cementitious material in cement production, such as demonstrated in our pilot in Germany.

Both applications of the recycled concrete fines, i.e. their use as part of the raw material mix and as SCM in cement support achieving our recently SBTi 1.5°C target and our 2030 Scope 1 emission target of 400 kgCO2/t cementitious material (net).

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place

Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

HeidelbergMaterials_CDP Verification 2022_signed.pdf

HM_Annual_and_Sustainability_Report_2022.pdf

Page/ section reference

Heidelberg Materials CDP Verification PwC, all pages

HM Annual and Sustainability report 2022, p. 334

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

HeidelbergMaterials_CDP Verification 2022_signed.pdf

HM_Annual_and_Sustainability_Report_2022.pdf

Page/ section reference

Heidelberg Materials CDP Verification PwC, all pages

HM Annual and Sustainability report 2022, p. 334

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Scope 3: Upstream transportation and distribution

Scope 3: Downstream transportation and distribution

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

HeidelbergMaterials_CDP Verification 2022_signed.pdf

HM_Annual_and_Sustainability_Report_2022.pdf

Page/section reference

Heidelberg Materials CDP Verification PwC, all pages

HM Annual and Sustainability report 2022, p. 334

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

HM_Annual_and_Sustainability_Report_2022.pdf

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	ISAE3000, limited assurance	All percentages of conventional and alternative fuels are verified. Furthermore, the heat generated with those fuels (in TJ/year) is verified and broken down by fuel. 1, 2

[1]HeidelbergMaterials_CDP Verification 2022_signed.pdf

[2]HM_Annual_and_Sustainability_Report_2022.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

BC carbon tax

EU ETS

Sweden carbon tax

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

100

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

21,186,781

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

22,003,977

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

The reported data corresponds to all consolidated entities under the Scope of the EU ETS trading scheme.

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

BC carbon tax

Period start date

January 1, 2022

Period end date

December 31, 2022

% of total Scope 1 emissions covered by tax

31.4

Total cost of tax paid

232,729

Comment

This tax refers mainly to the fuels that are taxed.

Sweden carbon tax

Period start date

January 1, 2022

Period end date

December 31, 2022

% of total Scope 1 emissions covered by tax

3

Total cost of tax paid

353

Comment

Carbon tax refers to activities outside the EU ETS. Therefore the % of coverage of Scope 1 is limited. The amount stated is the tax directly paid to tax authorities and it is linked to the usage of diesel by our yellow machines per example.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

The different regulatory systems that apply to Heidelberg Materials entities have as a main purpose to incentivise companies to reduce the greenhouse gas emissions.
Therefore, CO2 reduction ambition, and our transition plan, support us to comply with the different trading systems across the Group. To ensure that Heidelberg Materials reduces its CO2 footprint and at the same time complies with the requirements of the regulatory systems, our company focuses in 3 main areas:

1. Process efficiency incl. the usage of Alternative fuels and biomass,
2. Reduce the % on clinker into our cement mixes, by increasing the usage of alternative materials
3. Carbon Capture, Utilisation, and Storage (CCUS)

By applying these measures, we ensure that our efforts to reduce CO2 in regulated markets have a positive financial impact. The actions fall into the scope of our CO2 Roadmap that includes a long term plan from now until 2030. The clear results of our actions can be tracked in our CO2 KPIs: CO2 /t cementitious, alternative fuels %, biomass %, clinker incorporation, as well as our Carbon Capture pipeline projects. The successful implementation of our carbon

reduction measures are presented in the annual report as the specific emissions of CO2 /t cementitious materials in which we can see a reduction of our emissions from 565 in 2021 to 551 in 2022 kg CO2 / t cementitious materials, another clear result of our actiosn is the an increase of alternative fuel from 26.4 % in 2021 to 28.7%; which directly shows the reduction of usage of fossil fuels.

Risks associated to volatile prices of allowances are analysed and monitored by the CO2 experts. Once identified, the Group CO2 Strategy Manager collaborates with Group Insurance & Corporate Risk to mitigate any potential adverse impact on the Group. At country level, issues relating to ETS, or carbon tax are also part of the Quarterly Management Meetings, where country General Managers deliberate on all relevant business issues with their respective Area Board Member, ensuring that we are compliant with the regulatory environment and the financial risk are mitigated.

The management of CO2 allowances is a collaborating between the Group and country CO2 Managers. By a continuous monitoring of production and CO2 performance they ensure that every year, the allowances needed are available, across the Group ensuring compliance with the systems we are subject to.

In addition, we use a dynamic internal carbon price to inform Capex decisions: The internal carbon price for all countries is used for the main Capex projects to ensure the potential financial impact of our investment are analysed. For example, when choosing the type of fuel, the CO2 cost could be associated with alternative fuels (with biomass) and discounted. This highlights the advantages of projects with a high reduction of CO2.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme

Objective(s) for implementing this internal carbon price

Drive low-carbon investment

Scope(s) covered

Scope 1

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

As the price of CO2 is very volatile, we follow several investment and analyst forecasts, in which we can see an increase of more than 70% by 2030 reaching an increase of almost 200% by 2050.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

85

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

85

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Product and R&D
Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

The establishment of an internal carbon price has helped our company to clearly present the benefits of a project that aims to reduce CO2. The carbon prices allow us to assess the financial results of a project due to CO2 reduction, and this helps the Managing Board to sponsor and prioritise Capex projects with high reduction of CO2 and good financial impact.

The Carbon Capture project in Brevik is a clear example of how Heidelberg Materials has pushed ahead one of the most important measures to reduce CO2 in the cement production. In Brevik we aim to store 400,000 tonnes of CO2 per year, which will allow the company to reduce considerably the CO2 impact in Norway and it will also allow us to use efficiently the benefits of the saved CO2, to keep investing in these new technologies

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change
Provide training, support, and best practices on how to set science-based targets
Climate change performance is featured in supplier awards scheme

% of suppliers by number

1.77

% total procurement spend (direct and indirect)

46

% of supplier-related Scope 3 emissions as reported in C6.5

15.5

Rationale for the coverage of your engagement

Engaging with suppliers on ESG standards is an integral aspect of our supplier management and sourcing strategy. We cooperate with suppliers by e.g., co-innovating on Carbon-Capture, Utilization and Storage projects or by co-developing renewable energy projects and incentivise them to increase their focus on emission-reduction, environmental aspects, human rights and good governance by e.g., including compliance with ESG-criteria in sourcing and supplier selection decisions. Out of our total 120.000 individual suppliers we focus on suppliers which represent ca. 98% of our annual spend for an initial risk/impact screening. This screening resulted in the reporting period in high-risk/high-impact suppliers representing ca. 46% of our annual spend and 1.77% of suppliers in numbers as well as 15.5% of our annual Scope-3 emissions.

A key priority for us is to engage with these high risk/impact suppliers on carbon emission reduction activities by e.g. running annual virtual supplier days, including emission-reduction and sustainability standards in regular supplier meetings, providing suppliers with free-of-charge online sustainability trainings and including the results of CO2-risk-assessments in supplier-profiles of our global sourcing system so procurement

teams can use them for sourcing decisions. Suppliers that do not yet professionally measure their carbon emissions are actively encouraged to get support from accredited CDP climate consultancy and SBT solutions provider to better understand their CO2 footprint and identify & address CO2 emission hotspots.

If needed, suppliers go through a more detailed qualification process that can include additional sustainability details also with the help of external sustainability partners. A good score as a result of these assessments can help suppliers to position them better in tenders and auctions. We communicate this approach very clearly on our global internet page in order to incentivise suppliers to continuously increase their focus on emission reduction.

https://www.heidelbergmaterials.com/en/responsible-procurement-at-heidelberg-materials-global-virtual-supplier-day-2023

Impact of engagement, including measures of success

The impact of our engagement is measured via an externally supervised risk-assessment that includes a fully dedicated sub-section on CO2-emissions. The results of participating high-risk/high-impact suppliers are rated with a green, amber or red flag. We continuously strive to increase the number of suppliers that have or are planning to establish clear SBTi-based CO2-targets and show dedicated commitment by having e.g., appointed a management responsible for measuring and reducing their carbon footprint. This assessment result is included in the supplier-profiles of our global sourcing system so procurement teams can use them for sourcing decisions.

Success of these activities is measured by the percentage of high-risk/high-impact suppliers with a green CO-emission flag. By running dedicated information and engagement campaigns with supplier days, email briefings and numerous individual supplier meetings we achieved a rate of 11% high-risk/high-impact suppliers with a green CO2-assessment for the reporting period. This value is planned to be increased to 15%-20% for the next reporting period.

Furthermore, we motivate suppliers to reduce their CO2-footprint by offering CO2-free or -reduced products and services by proactively communicating our -SBTi-approved-target to reduce supplier-related Scope 3 emissions by 25% until 2030 globally compared to 2020 levels and our membership with the First Mover Coalition, having pledged to have 30% of newly purchased heavy-duty trucks and 100% of newly purchased medium duty trucks to be 0-emission by 2030. This will have a significant impact on the supplier awards scheme in the next years. Success on this engagement is measured by the reduction of Scope 3 emissions year-over-year until 2030.

Comment

Please note that although the "% of suppliers by number" is only 1.77 % they account for at least 46% of total annual spend. We work with 120,000 suppliers and business partners all around the world, 90% of our procurement volume is invested locally - either in the areas immediately surrounding our plants or within the respective country, this

helps to support local communities. These 1.7% of suppliers represent a significant amount of spend.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change
Provide training, support, and best practices on how to make credible renewable energy usage claims
Provide training, support, and best practices on how to set science-based targets
Climate change performance is featured in supplier awards scheme

% of suppliers by number

0.2

% total procurement spend (direct and indirect)

8

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

We address our critical suppliers and encourage them to work towards setting science-based targets on CO2-reduction. We actively engage with them to share best practices. This is done not only by inviting them to register on the platform of our sustainability partner IntegrityNext, but also to attend our global virtual supplier day, where we communicate our current activities on CO2-reduction and share best practices of our suppliers. The latest supplier day took place on the 6th of June 2023 - the focus was on CO2 reduction activities. The Virtual Supplier Day was attended by more than 150 participants (business partners of Heidelberg Materials and Heidelberg Materials Trading).

More details are here: https://www.heidelbergmaterials.com/en/responsible-procurement-at-heidelberg-materials-global-virtual-supplier-day-2023 https://www.linkedin.com/posts/heidelbergmaterials_we-are-never-just-our-own-ecosystem-but-activity-7071853526171152384-2Yz2?utm_source=share&utm_medium=member_desktop

Impact of engagement, including measures of success

In the scope of the Carbon footprint form of IntegrityNext, we ask our suppliers if they measure their carbon footprint and have emissions targets to reduce GHG emissions. If supplier has not yet started measuring their CO2 footprint, we encourage them to take advantage of the partner offering that is called ClimatePartner - that can support to measure Scope 1, 2, 3 carbon emissions and ensure compliance with the GHG protocol. As a result of our responsible procurement initiative, already one third of the targeted critical suppliers achieved a green status in the IntegrityNext carbon emission

questionnaire. Given the fact that we only started the initiative in 2022, we consider this level of engagement a success.

Comment

Please note that although the "% of suppliers by number" is only 0.2 % they account for at least 8% of total annual spend and are considered critical suppliers. Heidelberg Materials defines critical suppliers as global suppliers that are crucial for our core business and/or those suppliers that could impact performance of our supply chains and operations. "% of suppliers by number" might seem low, however this is due to the fact that we work with 120,000 suppliers and business partners all around the world, 90% of our procurement volume is invested locally - either in the areas immediately surrounding our plants or within the respective country, this helps to support local communities.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Climate change performance is featured in supplier awards scheme

% of suppliers by number

30

% total procurement spend (direct and indirect)

100

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

As a member of the First mover coalition, Heidelberg Materials has pledged to have 30% of newly purchased heavy-duty trucks and 100% of newly purchased medium duty trucks to be zero-emission by 2030. This will have a significant impact on the supplier awards scheme in the next years: https://www.heidelbergmaterials.com/en/pr-18-05-2022

Impact of engagement, including measures of success

We actively engage with the First Movers Coalition and make a concrete impact towards our joint goals of accelerating new technologies on the way to net-zero. Lowering carbon emissions is our key priority – both through our own ambitious innovation projects, and through pioneering initiatives together with partners. As a producer of heavy building materials, the transport of our products has a substantial impact on our carbon footprint. In this respect, the work of the First Movers Coalition complements our commitments to significantly reduce CO2 emissions

Comment

"% of suppliers by number" refers to 30% of heavy-duty trucks to be zero-emissions by 2030.

"% total procurement spend (direct and indirect) " refers to 100 % of newly purchased medium duty trucks to be zero-emission by 2030.

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Run a campaign to encourage innovation to reduce climate impacts on products and services

Invest jointly with suppliers in R&D of relevant low-carbon technologies

% of suppliers by number

% total procurement spend (direct and indirect)

28.7

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

Many by-products from other industries serve as valuable raw materials for Heidelberg Materials. 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 CO2 emissions. We want to increase the proportion of alternative fuels in our fuel mix to 45% by 2030. In 2022, the figure was 28.7%. The waste-based biomass used, which accounted for around 13% of the fuel mix in 2022, takes a special contribution here, as it is considered climate-neutral under European legislation. We intend to increase this figure to 20% by 2030.

Impact of engagement, including measures of success

By using proven techniques and measures, such as maximising the use of alternative fuels, optimising the product mix, and improving the efficiency of our plants, we want to achieve a continuous reduction in our CO2 emissions and become an industry-wide front runner in decarbonisation, combined with cost leadership. We want to increase the proportion of alternative fuels in our fuel mix to 45% by 2030. In 2022, the figure was 28.7% which proves that we are on track for reaching this ambitious target.

Another good example is our joint research and successful test of Climate neutral fuels mix in Ribblesdale- https://www.heidelbergmaterials.com/en/pr-01-10-2021

A cement kiln at the Ribblesdale plant of Heidelberg Materials' subsidiary Hanson UK has successfully been operated using a net zero fuel mix as part of a world-first demonstration using hydrogen technology. Led by the British Mineral Products Association (MPA), and funded by the British Department for Business, Energy and

Industrial Strategy (BEIS), Hanson UK successfully implemented a mix of 100% climate-neutral fuels including hydrogen for commercial scale cement manufacture for the very first time. Project results will be shared with cement producers and other energy-intensive industries both in the UK and globally as best practice examples, with the aim of spreading and maximising the environmental benefits of the technology.

Comment

% total procurement spend (direct and indirect) refers to 28.7% of alternative fuels proportion in our fuel mix in 2022. Alternative fuel rate was successfully increased from 3% since 1990, target: 45%.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

In Heidelberg Materials we set sustainability at the core of our activities. Therefore, we continuously share with all customers the latest developments in our low carbon products, and we promote its usage to contribute with the reduction of their CO2 footprint in buildings, construction projects and overall emission reduction. We believe that engaging with all our customers is a must, therefore our country efforts address to our full country portfolio. In terms of Scope 3 we aim to provide and promote low carbon products to ensure that our customers reduce their emissions, that's why we focus on the largest share of our customers and we will narrow down this approach according to the needs and expectations that are communicated by them to us

We have different approaches to our customers tailoring the market in which we are present. As a global company with presence across more than 50 countries we focus on each local market via our sales teams, who are in continuous contact with our customers to understand their needs and expectations. For example, in 2022 Germany launched the brand EcoCrete®, which offers up to 66% CO2 reduction per m^3 of concrete, several customers have raised the interest in this material that will help to reduce the CO2 footprint of the projects. Some showcases will take place in several locations in Hamburg, Bad Kreuznach, among others, in which our products will be used for residential construction.

We aim to provide enough information to our customers so that they make informed decisions, especially when it comes to the CO2 footprint. Another example is in UK, where the quotations in our Hanson branch includes now the CO2 impact per product requested, so the customer can clearly see the difference in environmental impact between one product vs another. We aim to contribute to our customers CO2 reduction by encouraging the usage of low carbon products.

Impact of engagement, including measures of success

We measure the impact of our engagement by the increase of the share of our sustainable revenue in relation with the achievement of the sustainable revenue target. The sustainable revenue target is that 50% of the revenue should come from sustainable products by 2030 and 34% of the revenue in 2022 was coming from sustainable products, the current measure has been 68% successful. It is important to mention that we have seen an important improvement with our customers interest on sustainable products, because in 2021 the share of the revenue was 31 %, while in 2020 was only 28%, which show us a great improvement and success of Heidelberg Materials actions.

Besides this, we also consider a great success measure to be recognised locally by institutions or governmental bodies as innovative company, per example in May 2022 Heidelberg Materials was awarded with the German Innovation Award for Climate and Environment (IKU) in the category "Process Innovations for Climate Protection" for its innovative ReConcrete-360° concept. In ReConcrete-360°, demolished concrete is crushed using novel processes and selectively separated into its components: in addition to sand and gravel, hardened cement paste is also obtained in this way. This can be reused as a valuable, low-carbon raw material in clinker and cement production, where it can replace natural limestone - keeping with the principles of the circular economy. In addition, the hardened cement paste can absorb CO2, bind it permanently and thus act as a carbon sink.

Type of engagement & Details of engagement

Education/information sharing

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

74

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

Under this engagement activity we refer to 2 main global actions: customer experience system and the sustainability academy.

The engagement with customers is in a first step market driven. We focus initially on markets in which there is a high incentive to use low carbon products, and in countries which have regulatory requirements in terms of sustainability. So, in the first stage we are onboarding customers that are located in Europe as they would benefit more from the interactions in sustainability. This could lead to a better communication and synergies.

In 2022, Heidelberg Materials launched the sustainability academy in which we invite our customers to take part on a series of workshops, roundtables, meetups or webinars to support customers and other stakeholders to integrate sustainability into their practices. Heidelberg Materials sustainability academy is in operations in Israel, Australia, Malaysia, Thailand, Canada, Bulgaria, Czech Republic, Norway, Poland, France, Germany, Italy and the UK. Our customer experience system allows us to get closer to our customers and understand in detail their needs and expectations.

In 2022, we introduced a "sustainability maturity tracker." This brings us one step forward to our customers and provides a more tailored support in their sustainability development, from sharing information about the relevance of climate change and the relevance to engage, to form partnerships with our customers and to find new solutions that help to reduce our customers CO2 footprint.

Impact of engagement, including measures of success

This engagement allows us to provide a closer support to our customers to develop their strategy to reduce the environmental impact and CO2 footprint. We measure the success by the participation of our customers in this activities (coverage). On the customer experience system per example we have a response rate of 78% while the sustainability academy in the UK Let's Talk Sustainability broadcast in March reached over 700 attendees and it was followed by a Social Value webinar in September, with over 235 attendees.

Type of engagement & Details of engagement

Education/information sharing

Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number

78

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

The roll out of these initiatives follows a country approach; those countries that are more incline to develop and engage in sustainable actions, go first, as we see the interest in using low carbon products.

As sustainability is at the core of our strategy, on a first stage we try to cover as more as our customer portfolio, we promote these actions with all our customers, and depending on the degree of engagement, interest, and sustainability needs, we engage in a further collaboration to develop stronger relationships and provide solutions that fit their needs in performance and sustainability.

With the implementation of the Sustainability Maturity Tracker (SMT) we can now distinguish between the level of interest and needs from our customers for more sustainable products, so we can tailor the collaboration, and suggest the next steps depending on the level of development on sustainable topics, that could range from, sharing information, to raise awareness on sustainability, CO2 tracking, etc., until the development of new products.

Impact of engagement, including measures of success

This engagement allows us to better understand where our customers are in their sustainability journey and to track how they mature over time.

2022 was a successful year for us in terms of our sustainability commitments, as we made significant progress in CO2 reduction and in furthering our circularity goals. We established strong, new partnerships and continued educating customers, positioning ourselves as experts and aiming to become a top-of-mind sustainable construction brand. We are confident that by further developing our customer-centricity, we will keep achieving our business goals in line with group strategy and world trends.

One of the most significant developments in 2022 was the launch of our Sustainability Maturity Tracker (SMT) which we rolled out to all countries participating in our program. The Tracker is a powerful tool that helps us assess where our customers stand on their sustainability journey, enabling us to develop strategies to expand our sustainable portfolio footprint and educate the market. This information allows us to provide customers with more personalised and tailored solutions, addressing their unique requirements in the most effective way possible. The SMT helps us channel our efforts towards specific groups of customers that may be ready to partner with us on various initiatives and those who are ready to start a conversation around sustainability. Early efforts to educate these less mature customers is a worthy investment — it positions us as experts, makes us a top-of-mind sustainable brand and secures a revenue stream as they grow larger.2022 is remarkable in terms of creative efforts to communicate with our customers on sustainability topics — webinars, events and even dedicated software apps confirm our image of a company paving the way forward.

We will continue to prioritise sustainability in everything we do and monitor changes in customer attitudes and adoption over time to ensure we remain at the forefront of this critical topic.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization’s purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

The principles of our globally applicable Supplier Code of Conduct form the basis for all contractual relationships. They set out essential requirements for working in the areas of human rights, working conditions, labour, environmental standards and business ethics that suppliers have to meet. Supplier compliance with these standards enables us to build trustworthy and long-term relations. The Supplier Code of Conduct was revised in 2021 to accommodate the requirements of the Germany's new Supply Chain Due Diligence Act (LkSG). The latest version of the document was published in January 2022 and available here https://www.heidelbergmaterials.com/en/responsible-procurement.

Our Climate Transition Plan (CTP) clearly indicates our engagements along the value chain with both our suppliers and customers. The CTP can be found attached in C3.1 and also on our corporate website.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

72

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
First-party verification
Grievance mechanism/Whistleblowing hotline
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers
Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate
Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

Climate Policy 2023 (available from July 28th 2023 in our corporate website)

Climate Policy 2021 (currently being updated with Sustainability Commitments 2030)
https://www.heidelbergmaterials.com/sites/default/files/assets/document/34/4f/heidelbergcement-climate-policy-2021-en.pdf

Environmental Policy 2023 (available from July 28th 2023 on our corporate website)

Climate Advocacy and Association Review 2022
https://www.heidelbergmaterials.com/sites/default/files/2022-12/Climate%20Advocacy%20and%20Association%20Review%202022.pdf

Code of Business Conduct:
https://www.heidelbergmaterials.com/sites/default/files/assets/document/db/5d/hc-code-of-conduct-2020-en.pdf

HM Climate Transition Plan (CTP): The CTP can be found attached and also on our corporate website.
https://www.heidelbergmaterials.com/sites/default/files/2023-07/07-2023_Heidelberg_Materials_Climate_Transition_Plan.pdf

07-2023_Heidelberg Materials Climate Transition Plan.pdf
hc-code-of-conduct-2020-en.pdf
heidelbergcement_climate_advocacy_and_association_review_2021.pdf
heidelbergcement-climate-policy-2021-en.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Our external policy engagement is fully aligned with our Climate Policy and our Climate Transition Plan (CTP) demonstrating an ambitious effort towards achieving a 1.5°C

world. The CTP can be found attached and also on our corporate website.

Heidelberg Materials climate policy and commitments are fully aligned with the goals of the Paris agreement and based on our company's climate roadmap and targets, which are the most ambitious in our industry worldwide and validated by the Science Based Targets initiative (SBTi) under its new 1.5°C framework.

We advocate for policy frameworks that help us to implement and achieve our climate roadmap and targets. Our commitment to the Paris agreement and our Group climate policy are applicable company-wide and guide all our advocacy activities in the markets we operate in. This includes our direct political engagements as well as broader stakeholder outreach with associations, international and societal organisations, communities, and sectoral business partners.

When speaking on behalf of Heidelberg Materials, representatives must liaise with Senior Management on political engagements and align their messages with the prior defined and approved Group positions.
Information provided during political engagements must be fact-based, accurate and constructive. Our positions on specific policy files are regularly reviewed and updated to ensure that latest developments in technology and policies are being considered. All official policy positions must be approved by the Group management. For engagement with our associations, Heidelberg Materials also strengthened its association management with a global coordination function to provide continuous oversight over industry association advocacy, confirm their alignment with our positions and help ensure our commitment to responsible and constructive advocacy is shared by the associations of which we are a member. A regular exchange with company representatives in trade associations has been established to ensure the associations' lobbying is in line with the goals of the Paris Agreement. The alignment of trade associations with goals of the Paris Agreement is quarterly reviewed with the Chief Sustainability Officer (CSO) and the board member responsible for associations.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Emission Trading Scheme(s), e.g. EU ETS Review

Our political engagements concerning industry transformation and climate protection focus on the aspects of carbon pricing and cross-border leakage protection, energy transition, CCUS, circular economy, sustainable construction, green procurement, biodiversity and sustainable finance. These aspects determine our ability to fulfil our commitment to our sustainability targets and to become a net-zero company by 2050.

Category of policy, law, or regulation that may impact the climate

Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate

Emissions trading schemes

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Heidelberg Materials supports the establishment of carbon pricing schemes globally and across all regions. We make sure that this is a main policy ask by all our cement and cross-sectoral business associations. We also advocate for these systems in bilateral engagements. Throughout 2022, we have been supporting the EU ETS review from the early start of discussions.

A higher CO2 price is needed to incentivise investments into carbon abatement technologies. Overall, we advocate that:
1. Price signals need to be reliable and allow carbon-neutral production to become a business case. Speculation in the market and high price volatility needs to be avoided.
2. Cost-effective carbon pricing systems should consider sectoral starting points and abatement costs to ensure emissions will fall below predetermined emissions targets.
3. A global framework is the best option to ensure a global level playing field. In absence of a global carbon price, national or regional carbon pricing schemes can also be effective.
In addition, these instruments must be accompanied by demand side measures to ensure the update of low-emission and carbon-neutral products.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Our Climate Transition Plan (CTP) clearly outlines our political engagements at a global, regional, and local level in order to support the transformation of our industry. The CTP can be found attached and also on our corporate website.

We advocate for comprehensive carbon pricing systems coupled with a level playing

field to enhance effective responses to climate change. We assure global governance and alignment of our advocacy work and our activities in associations through our interdisciplinary task forces that include experts from Group staff functions and operations. CO2 reduction initiatives are an integral part of our CTP. It is underpinned by robust roadmaps that consider the long-term plan and a yearly improvement in each of the reduction levers: alternative fuels, biomass, process efficiency, clinker incorporation factor, etc.

Regional ETS need to be coupled with policies that ensure a level playing field with products from third countries that do not have the same CO2 costs.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Carbon Border Adjustment Mechanism

Category of policy, law, or regulation that may impact the climate

Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate

Carbon taxes

Policy, law, or regulation geographic coverage

Regional

Country/area/region the policy, law, or regulation applies to

Europe

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

We support the establishment of Carbon -Border Adjustment Mechanism (CBAM) in regions with CO2 pricing in order to ensure that there is no carbon leakage and to drive climate measures in other regions. The EU proposal for a carbon-border adjustment mechanism is an example. We have been actively advocating for cement and all precursors to be included in the establishment of a European CBAM, which has been agreed at the end of 2022. We are supporting similar systems in other jurisdictions as well.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Our Climate Transition Plan (CTP) clearly outlines our political engagements at a global, regional, and local level in order to support the transformation of our industry. The CTP can be found attached and also on our corporate website.

We advocate for comprehensive carbon pricing systems coupled with a level playing field to enhance effective responses to climate change. We assure global governance and alignment of our advocacy work and our activities in associations through our interdisciplinary task forces that include experts from Group staff functions and operations. CO2 reduction initiatives are an integral part of our CTP. It is underpinned by robust roadmaps that consider the long-term plan and a yearly improvement in each of the reduction levers: alternative fuels, biomass, process efficiency, clinker incorporation factor, etc.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Funding Schemes (e.g. U.S. Inflation Reduction Act / EU Innovation Fund

Category of policy, law, or regulation that may impact the climate

Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate

Subsidies on infrastructure

Other, please specify

Subsidies on Carbon Capture, Utilisation, and Storage projects

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

We have a clear technology roadmap and corresponding investment plan. Many of our decarbonisation technologies are Capex and Opex extensive requiring support until reaching market maturity. Funding schemes are an important policy asks to realise our climate roadmap. We engage at regional and local level with administrations on support schemes, such as the U.S. Inflation Reduction Act or EU Recovery and Inflation Reduction Acts.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Our Climate Transition Plan (CTP) clearly outlines our political engagements at a global, regional, and local level in order to support the transformation of our industry. The CTP can be found attached and also on our corporate website.

We advocate for comprehensive carbon pricing systems coupled with a level playing field to enhance effective responses to climate change. We assure global governance and alignment of our advocacy work and our activities in associations through our interdisciplinary task forces that include experts from Group staff functions and operations. CO2 reduction initiatives are an integral part of our CTP. It is underpinned by robust roadmaps that consider the long-term plan and a yearly improvement in each of the reduction levers: alternative fuels, biomass, process efficiency, clinker incorporation factor, etc.

Funding schemes are an important support measure to realise early mover lighthouse projects, which are capital intensive. We engage at regional and local level with administrations on support schemes, such as the U.S. Inflation Reduction Act or EU Recovery and Inflation Reduction Acts.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Renewable Energy Directive

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Renewable energy generation
Verification and audits

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Policies must be developed that ensure access to sufficient renewable as well as low-carbon energy. Decarbonisation technologies require an increased use of electricity

which should come from green sources. Policy measures and targets must address generation capacity as well as appropriate grid networks, interconnection as well as energy storage. Access to a sufficient amount of renewables is a key policy asks which we advocate at all relevant discussions. In 2022, we have mapped our future green electricity needs in selected countries to showcase the capacity required. We have actively supported related regulation in several of our regions including the U.S. and Europe (REDIII).

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Our Climate Transition Plan (CTP) clearly outlines our political engagements at a global, regional, and local level in order to support the transformation of our industry. The CTP can be found attached and also on our corporate website.

We advocate for comprehensive carbon pricing systems coupled with a level playing field to enhance effective responses to climate change. We assure global governance and alignment of our advocacy work and our activities in associations through our interdisciplinary task forces that include experts from Group staff functions and operations. Renewable energy activities are an integral part of our CTP.

While decarbonising our production, our electricity demand is expected to increase. Renewable energy sources and energy storage will be important to match that demand

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Construction and Building Codes

Category of policy, law, or regulation that may impact the climate

Climate change adaptation

Focus area of policy, law, or regulation that may impact the climate

Construction and housing

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

We engage with standardisation and building organisations at regional, national and local level to ensure sustainability requirements are taken properly into account. We also chair the Concrete Sustainability Council (CSC), which works on these legislations in many jurisdictions globally. Already today, Heidelberg Materials can offer low-carbon building materials with reduced carbon footprint of up to 70% or a high content of recycled materials.

To become more than a niche and rather a specialty product, stimulating demand measures will need to be put in place to ensure the uptake of more sustainable construction materials
- Collaboration is necessary to overcome sector-specific limitations to create and make use of synergies, e.g., to get access to concrete demolition waste.
- Furthermore, users need to be made aware of circular products and their possible applications
- Revised product and construction norms as well as building codes are needed. – Implementing fiscal incentives for users or adapt green public procurement schemes considering the full life cycle, recyclability, and performance of products besides the price.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Low-carbon products are an integral part of our Climate Transition Plan (CTP). The CTP can be found attached and also on our corporate website.

Sustainable building materials with the lowest possible carbon footprint are playing an increasingly important role for us and our customers. In line with our Sustainability Commitments 2030, we are making substantial investments in researching and developing innovative low-carbon production technologies and products. In dialogue with our customers, the responsible staff in the Group countries explore the need for new sustainable products for their respective markets. We accept our responsibility to continuously reduce the carbon footprint of our production processes so that we will be able to provide net-zerocarbon-neutral concrete to all our customers latest by 2050.

An update of building materials standards and norms is important to align these with technological progress and low-carbon materials entering the market.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Raw Material Strategy (e.g. official preparations in Germany, Sweden etc)

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Circular economy
Low-carbon innovation and R&D

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

We have actively proposed a comprehensive Raw Material Strategy in several countries we operate in. We are also showcasing our increasing recycling activities to policymakers, to provide a best practice example. In 2022, we had several important acquisitions in this regard incl. in the U.S., Germany and UK.

We need a raw material policy that ensures that aggregates, incl. sand, gravel and stones, are widely available while respecting all relevant climate and environment legislation. At the same time, Policy drivers must be implemented that ensure an increase in construction waste recycling rates, thereby reducing the use of primary resources. For recycling, we advocate for higher value application to be prioritised (such as concrete recycling).

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Recycling activities are an integral part of our Climate Transition Plan (CTP). The CTP can be found attached and also on our corporate website.

We invest new technologies for the mitigation of process carbon emissions from clinker production, such as Carbon Capture, Utilisation and Storage. Our R&D efforts to develop innovative low-carbon production technologies and products receive highest

priority. This also comprises the enhanced use of recycled concrete throughout the whole production value chain to conserve natural resources, minimising the wastage of valuable construction materials and support our goal of providing net-zero concrete to all of our customers by 2050 at the latest.

Increased circular economy measures reduce the need for primary materials. Heidelberg Materials also develops and scales forces carbonation, where recycled concrete paste is used as permanent storage for captured CO2.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Waste framework directives and Alternative fuel legislation

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Alternative fuels
Circular economy

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Heidelberg Materials actively advocates for co-processing to be widely acknowledged in legislation concerning waste-management. We advocate a ban on landfilling in many of our jurisdictions. Access to AF is also a main opportunity to reduce emissions in cement production in emerging countries. We have thus advocated for better waste management at the COP27 conference in Egypt in November 2022.

The transformation process will require the rapid phase out of fossil fuels while, at the same time, climate mitigation technologies, require additional use of renewable and alternative energy capacity.

Co-processing must be recognised as a sustainable alternative to produce cement allowing the effective substitution of fossil fuels and primary raw materials with non-recyclable residual and biomass waste. Policies should also adopt a coherent biomass and alternative fuel strategy to ensure sustainability criteria are respected while increasing access to waste-based resources. Landfilling should be banned or heavily taxed.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Co-processing activities are an integral part of our Climate Transition Plan (CTP). The CTP can be found attached and also on our corporate website.

We invest new technologies for the mitigation of process carbon emissions from clinker production, such as Carbon Capture, Utilisation and Storage. Our R&D efforts to develop innovative low-carbon production technologies and products receive highest priority. This also comprises the enhanced use of recycled concrete throughout the whole production value chain to conserve natural resources, minimising the wastage of valuable construction materials and support our goal of providing net-zero concrete to all of our customers by 2050 at the latest.

Alternative fuels are a main lever in the cement production to phase out fossil fuels. The residues from the combustion process are then also used to replace the CO2-intensive clinker.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Construction Products Regulation

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Circular economy
Extended Producer Responsibility (EPR)
Low-carbon innovation and R&D

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

Europe

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Heidelberg Materials supports a revision of the Construction Products Regulation with the purpose to facilitate standardisation processes for new low-carbon cement and concrete products. We also support to extend the current CPR with an additional chapter on sustainability characteristics incl. recyclability and durability. Finally, we are supportive of the establishment of Digital Product Passport, in line with information provided through the Environmental Product Declarations. Heidelberg Materials has participated in public consultations on the CPR Review and engaged in bilateral meetings as well as a public hearing in the European Parliament.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Low-carbon products are an integral part of our Climate Transition Plan (CTP). The CTP can be found attached and also on our corporate website.

Sustainable building materials with the lowest possible carbon footprint are playing an increasingly important role for us and our customers. In line with our Sustainability Commitments 2030, we are making substantial investments in researching and developing innovative low-carbon production technologies and products. In dialogue with our customers, the responsible staff in the Group countries explore the need for new sustainable products for their respective markets. We accept our responsibility to continuously reduce the carbon footprint of our production processes so that we will be able to provide net-zerocarbon-neutral concrete to all our customers latest by 2050.

An update of building materials standards and norms is important to align these with technological progress and low-carbon materials entering the market.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Green procurement schemes (such as the U.S. buy clean programmes)

Category of policy, law, or regulation that may impact the climate

Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate

Subsidies on products or services

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

Europe

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Heidelberg Materials is engaging with its global and regional Associations to advocate for procurement policies that include sustainability criteria. We are also member of several working groups on green lead markets and definitions for low-carbon products, incl. from the German Economic Ministry supported by UNIDO and the IDDI Initiative. Heidelberg Materials is part of the U.S.-led First Mover Coalition that aims for private buyers´commitments for low-carbon products. Finally, we have engaged with the Lead It initiative on a procurement report on green steel and cement.

Already today, we have low-carbon products available, through the use of supplementary cementitious materials, with considerably reduced CO2 footprint. Through our Brevik CCS project starting operation in by 2024, we will be able to provide net-zero carbon cement and concrete. A large part of concrete is procured for public infrastructure and housing projects. We thus support green procurement products and sustainability criteria in public tenders.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Our Climate Transition Plan (CTP) clearly outlines our political engagements at a global, regional and local level in order to support the transformation of our industry. The CTP can be found attached and also on our corporate website.

We advocate for comprehensive carbon pricing systems coupled with a level playing field to enhance effective responses to climate change. We assure global governance and alignment of our advocacy work and our activities in associations through our interdisciplinary task forces that include experts from Group staff functions and operations. CO2 reduction initiatives are an integral part of our CTP. It is underpinned by robust roadmaps that consider the long-term plan and a yearly improvement in each of the reduction levers: alternative fuels, biomass, process efficiency, clinker incorporation factor, etc.

A large part of concrete (as well as cement and aggregates) is procured for public infrastructure and housing projects. We thus support green procurement products and sustainability criteria in public tenders.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

CCUS (such as Net Zero Industry Act)

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Emissions – CO2

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

Europe

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Carbon Capture, Utilisation, and Storage (CCUS) is a major climate mitigation technology for industries with unavoidable process emissions including cement production. We advocate for enabling polices that allow for cross-border transport and storage of CO2.

We have published plans for 9 major CCUS projects. Heidelberg Materials participates in relevant events and panels on the role of CCUS in emission reduction for cement production. These included conferences at COP27, the Global Energy Action Forum as well as additional conferences in the US and Europe. We also engage in discussions concerning national funding programs for CCUS projects.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

CCUS is an integral part of our Climate Transition Plan. With the continuous expansion of our CCUS activities, we expect to reduce costs and increase revenue. Firstly, capturing and storing CO_2 removes the need to purchase emission allowances. The financial effect will increase as we emit less CO_2 and as the price of carbon allowances rises. Secondly, we expect a significant revenue effect in the medium term due to higher sales prices for sustainable products. We anticipate that these two effects will exceed

the expected annual investment costs of expanding our CCUS projects.

Carbon Capture, Utilisation, and Storage (CCUS) is a necessary climate mitigation technology for industries with unavoidable process emissions in order to reach a net zero status. Cement is considered one of the relevant use cases. This has been confirmed by all major decarbonisation scenarios and reports such as the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

CEMBUREAU: The European Cement Association

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Cembureau fully supports the goals of Paris Agreement.

In 2020, Cembureau published its Carbon Neutrality Roadmap 2050 that outlines the European's cement industry's ambition to reach net zero emissions along the cement and concrete value chain by 2050. As Heidelberg Materials we are committed to be net-zero across our product portfolio by 2050 at the latest. Cembureau welcomes carbon pricing and the European Emission Trading Scheme, including the support it provides through funding. Cembureau also supports the introduction of a Carbon Border Adjustment Mechanism (CBAM) to equalise carbon costs between cement producers in the EU and importers to the EU. Heidelberg Materials' representatives are very active in Cembureau's governing bodies & working groups. Heidelberg Materials is chair or co-chair in several working groups and task forces. In this function, representatives are actively steering the internal discussions for developing Cembureau's position on EU environmental and climate policy. Heidelberg Materials is furthermore represented in the Steering Committee and the Board of Cembureau, which is tasked with defining the strategic orientation of the association. Heidelberg Materials will hold the position of the Cembureau Vice President in 2023. Cembureau is also an affiliate of the GCCA and thus supports the GCCA 2050 Net Zero Global Industry Roadmap.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Global Cement and Concrete Association (GCCA)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

In 2021, the Global Cement and Concrete Association (GCCA) published the GCCA 2050 Cement and Concrete Industry Roadmap for Net Zero Concrete. With this roadmap GCCA member companies commit to producing carbon neutral concrete by 2050.

In 2022, the GCCA launched the Net Zero Accelerator Program to help national cement and concrete industries lay down the foundation to decarbonise in line with the GCCA's 2050 Net Zero Global Industry Roadmap.
GCCA supports the use of market-based carbon pricing to incentivise decarbonisation at lowest cost.

Our representatives are involved in all aspects of the initiative's work. Heidelberg Materials' representatives are chairs and/or members of the following Working Groups: Health & Safety, Policy & Thought Leadership, Communication & Outreach, Net Zero Delivery, Innovation, ESG. As a company we are also represented in the GCCA Steering Committee and Board. Heidelberg Materials is also one of the founding members of GCCA. The GCCA advocates on a global level for the decarbonisation of the cement & concrete sector.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Cement Association Canada (CAC)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Endorsed by the Cement Association of Canada (CAC), The Canadian Cement and Concrete Industry's 2050 Action Plan for Net Zero Concrete, published in May 2023, is closely aligned with the Global Cement and Concrete Association's (GCCA) Roadmap for Net Zero Concrete, published in October 2021. Heidelberg Materials is represented in the Board of CAC and has representatives in most association committees. In some committees Heidelberg Materials' representatives are either chair or co-chair. CAC represents the Canadian cement sector towards the Canadian government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Verein Deutscher Zementwerke e.V. (VDZ), the German cement industry association

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

VDZ is member of Cembureau, the European Cement Association and thus support the Cembureau 2050 Roadmap that targets carbon neutrality of the European Cement sector by 2050. VDZ published its 2050 carbon neutrality roadmap in 2020 how the German cement sector can achieve net zero emissions by 2050. The VDZ calls for a comprehensive policy package along the entire cement and concrete value chain to provide the right incentives and to create an environment in which business activities can be geared to the needs of climate protection. It includes the creation of a level playing field where low carbon products can compete on an equal footing with less cost-intensive conventional technologies and where carbon leakage is also effectively prevented. Heidelberg Materials is active in all committees of VDZ and is represented in the Board with several representatives. Additionally, the current president of VDZ is a Heidelberg Materials employee. The VDZ represents the German cement sector towards the German government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

France Cement (former SFIC)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

France Ciment is member of Cembureau, the European Cement Association and thus support the Cembureau 2050 Roadmap that targets carbon neutrality of the European Cement sector by 2050. France Ciment has published a decarbonisation roadmap in 2021, as part of the work carried out with the National Council of Industry (CNI). A review of this exercise was conducted two years later. The French cement industry plans to reduce its emissions by 24% in 2030, then by 80% in 2050, compared to 2015 (consistent with the SNBC scenario specific to the sector). To achieve this goal, the sector will rely on levers such as reducing the clinker content of cements produced, replacing fossil fuels with alternative fuels, or capturing, using and storing carbon.

France Ciment has five prioritiy areas: Low-carbon cements, CCS/CCU, Biodiversity, Circular Economy & Energy. France Ciment recognises that CCS/CCU Technologies are key to achieving Europe carbon neutrality goals.

Heidelberg Materials is well represented in France Ciment. Our General Manager France is the president of France Ciment.
France Cement represents the interests towards the public authorities and the social partners of the cement industry.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

SPC - Poland

Is your organization's position on climate change policy consistent with theirs?

Mixed

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

SPC is member of Cembureau, the European Cement Association and thus supports the Cembureau Roadmap that set out a pathway to carbon neutrality of the European Cement Sector by 2050. SPC represents the Polish cement sector towards the Polish government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Oficemen - Spain

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Oficemen is member of Cembureau, the European Cement Association and thus supports the Cembureau Roadmap that set out a pathway to carbon neutrality of the European Cement Sector by 2050. Oficemen published a 2050 Carbon Neutrality Roadmap. Oficemen represents the Spanish cement sector towards the Spanish government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Czech Cement Association (SPRC)

Is your organization's position on climate change policy consistent with theirs?

Mixed

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

SPRC is member of Cembureau, the European Cement Association and thus supports the Cembureau Roadmap that set out a pathway to carbon neutrality of the European Cement Sector by 2050. Heidelberg Materials' General Manager Czech Republic is Chairman of the Czech Cement Association. SPRC represents the Czech cement sector towards the Czech government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Romanian Association of Cement Industry and Other Mineral Products (CIROM)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

CIROM is member of Cembureau, the European Cement Association and thus supports the Cembureau Roadmap that set out a pathway to carbon neutrality of the European Cement Sector by 2050. CIROM recognises that climate change is the greatest threat of our era, and that the health and well-being of future generations depend on the actions that will be taken in the coming years. The cement industry in Romania supports through its own approaches the European emission reduction objectives: 30% in the production process by 2030 and net zero by 2050. CIROM represents the Romanian cement sector torwards the Romanian government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Magyar Cement-, Beton- és Mészipari Szövetség (CeMBeton) - Hungary

Is your organization's position on climate change policy consistent with theirs?

Mixed

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

CeMBeton is member of Cembureau, the European Cement Association and thus supports the Cembureau Roadmap that set out a pathway to carbon neutrality of the European Cement Sector by 2050. CeMBeton works with stakeholders in the fields of regulation, environmental protection and vocational training by expressing the industry's policies, strategies and opinions and representing its interests both in Hungary and

abroad. Heidelberg Materials' General Manager Hungary is Chairman of CeMBeton. CeMBeton engages with regulators on national and EU level as well and supports this activity with its professional positions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Mineral Products Association MPA - UK

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

MPA is member of Cembureau, the European Cement Association and thus supports the Cembureau Roadmap that set out a pathway to carbon neutrality of the European Cement Sector by 2050.The UK concrete and cement industry has launched a roadmap to become net negative by 2050, removing more carbon dioxide from the atmosphere than it emits each year, thus becoming the first foundation industry to develop a roadmap to go beyond net zero by 2050. Heidelberg Materials is well represented in MPA. In 2022, Heidelberg Materials' General Manager handed over the MPA Chairmanship. MPA represents the UK cement sector towards the UK government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Cement Concrete & Aggregates Australia (CCAA)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The Australian Cement & Concrete industry has declared its ambition to deliver net zero carbon cement and concrete to Australian society by 2050. They recognise the challenges of climate change and adaptation. They are committed to work across the value chain to support a circular economy and whole-life-carbon to achieve a sustainable built environment. Heidelberg Materials' General Manager Australia is Chairman of the CCAA Council. CCAA represents the Australian cement and concrete sector towards the Australian government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Cement Manufacturers Association CMA - India

Is your organization's position on climate change policy consistent with theirs?

Mixed

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

CMA Member Companies are striving for continual CO2 reduction in Cement manufacturing process. CMA is also developing a Net Zero Roadmap for the Indian Cement Sector, in line with the GCCA 2050 Net Zero Global Industry Roadmap, which outlines the present status of the industry, the challenges, the policy and technological support that may be required in context to augment and fast pace its goals to contribute to India's ambitious Net Zero Carbon Target. CMA represents the Indian cement sector towards the Indian government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Asosiasi Semen Indonesia

Is your organization's position on climate change policy consistent with theirs?

Inconsistent

Has your organization attempted to influence their position in the reporting year?

Yes, we attempted to influence them but they did not change their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Heidelberg Materials position on climate differs from the position of Asosiasi Semen Indonesia. Asosiasi Semen Indonesia represents the Indonesian cement sector towards the Indonesian government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Thai Cement Manufacturers Association (TCMA)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

TCMA is an affiliate of the GCCA and thus supports the GCCA 2050 Net Zero Global Industry Roadmap. In 2022, TCMA published its own Thai Cement 2050 Roadmap that is aligned with the GCCA Roadmap. TCMA represents the Thai Cement sector towards the Thai government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Association Professionelles Cimentier - Morocco

Is your organization's position on climate change policy consistent with theirs?

Mixed

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The Association Professionelles Cimentier has started developing a net zero roadmap for the Moroccian Cement Industry in line with the GCCA 2050 Net Zero Global Industry Roadmap. The Association is also an affiliate of the GCCA and thus supports the GCCA 2050 Net Zero Global Industry Roadmap. The Association Professionelles Cimentier Morocco represents the Moroccan cement sector towards the Moroccan government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

The Cement Division, which is part of the Chamber of Building Materials Industries (CBMI), part of the Federation of Egyptian Industries

Is your organization's position on climate change policy consistent with theirs?

Mixed

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The Association Professionelles Cimentier has started developing a net zero roadmap for the Moroccian Cement Industry in line with the GCCA 2050 Net Zero Global Industry Roadmap. CBMI represents the Egypt cement sector towards the Egypt government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Chamber of Cement Manufacturers Ghana (COCMAG) - Ghana

Is your organization's position on climate change policy consistent with theirs?

Inconsistent

Has your organization attempted to influence their position in the reporting year?

Yes, we attempted to influence them but they did not change their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Heidelberg Materials position on climate differs from the position of the Chamber of Cement Manufactures Ghana. COCMAG represents the Ghanaian cement sector towards the Ghanaian government.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

Trust or foundation

State the organization or individual to which you provided funding

Stiftung KlimaWirtschaft

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

50,000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

The KlimaWirtschaft Foundation is a relevant driver in the German transformation towards climate neutrality. Its funding companies support that climate protection should be a successful business model.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization or individual

Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding

Econsense

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

20,000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

econsense is the sustainability network of the German economy. They aim to actively shape the change towards a more sustainable economy together with its member companies.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

07-2023_Heidelberg Materials Climate Transition Plan.pdf

HM_Annual_and_Sustainability_Report_2022.pdf

Page/Section reference

HM Climate Transition Pan (CTP): all pages
Annual Report: 34-37,105-108, 334ff

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

In February 2023, the Science Based Targets initiative (SBTi) validated Heidelberg Materials' 2030 CO2 reduction targets according to its new 1.5°C framework. The commitments towards the SBTi1) are consistent with Heidelberg Materials' own previously communicated target to reduce specific net CO2 emissions to 400 kg per tonne of cementitious material by 2030. The SBTi reviews and validates companies' emission reduction targets based on scientific climate findings. Its 1.5°C framework for the cement industry is the first guidance for setting science-based targets in line with the Paris Agreement's goal of limiting global temperature rise to 1.5°C above pre-industrial levels.

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Mission Possible Partnership Race to Zero Campaign UN Global Compact Other, please specify LeadIT	Race to Zero Campaign: Heidelberg Materials has signed the Business Ambition for 1.5°C Commitment, and thus joined the global Race to Zero campaign. Mission Possible Partnership: Heidelberg Materials CEO is member of the MPPP Board. UN Global Compact: Heidelberg Materials is a member of the UNGC.

		LeadIT: As Heidelberg Materials we support LeadIT with our expertise for their research and participate in their events, also with C-Level.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	The extraction of natural raw materials for building material production can have a significant impact on local biodiversity. Heidelberg Materials understands this, which is why we have been promoting practices for many decades to protect biodiversity, both during and after extraction. These practices serve to reduce, neutralise or even over-compensate the impacts of our activities. The impact of operations on biodiversity is a material topic for Heidelberg Materials and is overseen by the Managing Board. Our Chief Sustainability Officer (CSO) is responsible for the strategic management and implementation of all our biodiversity activities and has the overall target of biodiversity protection. In our Group department ESG, our Vice President ESG together with a dedicated Senior Biodiversity Manager are jointly working with all our countries worldwide in order to both ensure a constant and consistent implementation of biodiversity-related activities and an integration of key priorities in our biodiversity agenda. A crucial part of our Sustainability Commitments 2030 “Building a Nature Positive Future”, Heidelberg Materials is contributing to a nature positive world through our holistic biodiversity programme. 100% of active quarries contribute to the global goal of nature positive, with 15% space for nature. Our biodiversity agenda comprises the biodiversity management in our quarries, habitat protection and creation, and raising the awareness across wider society of the importance of nature. Our investment decisions, also consider environmental impacts, when developing a new quarry or the expanding an existing one, the company first conducts an extensive approval process in line

		with the corresponding laws and regulations, while our internal guidelines ensure that minimising biodiversity impact is a key consideration.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to Net Positive Gain Adoption of the mitigation hierarchy approach Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species	CBD – Global Biodiversity Framework SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

No

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Law & policy Livelihood, economic & other incentives

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators	The relevant content can be found on pp. 49-51,108-110, 336 1

	Influence on public policy and lobbying Biodiversity strategy	
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators Influence on public policy and lobbying	The relevant content can be found on pp. 49-51,108-110, 336 [1]
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators Biodiversity strategy	All pages [2]
Other, please specify Website Quarry Life Award	Impacts on biodiversity	Our “Quarry Life Award” targets innovative approaches to study and boost biodiversity at quarry sites and aims to raise awareness about mining ecology. https://www.heidelbergmaterials.com/en/quarry-life-award

[1] HM_Annual_and_Sustainability_Report_2022.pdf

[2] Biodiversity_Policy_2022_en.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Sustainability Officer (CSO)/Member of the Managing Board	Board/Executive board

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Heidelberg Materials is one of the world's largest integrated manufacturers of building materials and solutions and operates on 5 continents. Our core products are cement, aggregates (sand, gravel, and crushed rock), ready-mixed concrete, and asphalt. The key business processes include extraction of raw materials and production of building materials, as well as their sales and distribution to the customers. We are happy to complete this Supply Chain Module for the first time this year in order to share additional information with our customers. We see this a valuable contribution for reaching out to our customers and to exchange on them.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	21,100,000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

All information about our specific emissions it is available in the Annual Report. https://www.heidelbergmaterials.com/en/reports-and-presentations

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	We operate 134 cement plants (plus 19 as part of joint ventures), over 600 quarries and aggregates pits, and around 1,430 ready-mixed concrete production sites worldwide. We have around 3,000 locations in over 50 countries (plus over 350 production sites belonging to joint ventures). We have around customers which, so the customer base is quite large and tracking the emissions on each and every customer level is quite ambitious. But we are on the right track. ESG is an integral part of our customer activities. Our goal is to continuously communicate with our customers to determine what's valuable to them. As we learn of what's of value, we will align the entire organisation to act, develop and implement in order to be the supplier of choice for our customers. The conversations are perpetual with the ultimate goal of improving all aspects of our customer offering for the ultimate benefit of Heidelberg Materials and its customers. The voice of the customer is captured through a survey which is managed by an external agency. In 2022, there were sent 6374 surveys, 4989 responses were received (which corresponds to a 78% response rate) and 1185 follow-up calls were conducted. In 2022, the Sustainability Maturity Tracker was added as a mandatory question asked to all respondents. This helps us to a) better understand the customers and their level of experience on the sustainability topics now, to b) track how individual customers mature over time and how the maturity shifts per area and overall and to c) provide framework for utilizing insights on the road to achieving our ambitious CO2 targets.

	A framework is currently being developed to categorize customers based on their maturity levels, allowing for tailored approaches through the Sustainability Academy or separate activities – educational, commercial, strategic. We aim to contribute to our customers CO2 reduction by encouraging the usage of low carbon products. In 2022, Heidelberg Materials launched the sustainability academy in which we invite our customers to take part on a series of workshops, roundtables, meetups or webinars to support customers and other stakeholders to integrate sustainability into their practices.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

We are planning to allocate emissions to our customers in a stepwise approach.

Our digital HConnect product suite in particular, which has over 30,000 monthly users, offers excellent opportunities in this regard. In the future, we aim to develop HConnect into a digital sales channel, through which we will offer our customers not only building materials but also digital solutions from our partners – such as Giatec's app-supported sensor technology and AI-based formulation optimisation for the concrete sector. The purpose of these solutions will be to help our customers to increase their efficiency and reduce carbon emissions. We expect an increased demand for sustainable products and are reviewing our entire product portfolio accordingly. We also consider it our responsibility to actively convince customers of the quality of CO2-reduced products. Further databases and IT solutions are planned in order to both collect and manage customer emission data accordingly.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms