C0. Introduction

C0.1

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

Profile:

Çimsa is a Turkey based cement company established in 1972 as one of the affiliates of Sabancı Group. Today it operates in 5 different cities in Turkey namely, Mersin, Eskişehir, Kayseri, Niğde and Afyonkarahisar with 5 integrated facilities and 1 grinding plant in Ankara. In 2020, Cimsa Sabancı Cement BV (CSC BV) was established in partnership with Çimsa (40%) and Sabancı Holding (60%) within the scope of the goal of becoming an international player. Today, as one of the leading actors in global cement industry, Çimsa and CSC BV host 12 integrated plants, grinding stations and terminals, and 2515 employees including contractors.

Çimsa's product range is built on 5 different categories: grey, white and calcium aluminate cement, special products and ready mixed concrete. Çimsa exports white cement and special products to over 65 countries mainly in the Middle East, Europe, North Africa and the United States.

Çimsa's vast production and sales capacity has enabled it to achieve a sustainable growth supported by its long-standing experience in global and local markets, know-how, and R&D approach. Today Çimsa is one the world's three leading brands in white cement segment. Proving that success, it is an international actor with its terminals spread over various geographies in Hamburg (Germany), Trieste (Italy), Seville and Alicante (Spain), Famagusta (TRNC), as well as its wide export network.

In its 47th year of operation, Çimsa took significant steps in building a sustainable future. Çimsa's aim of global leadership has become one step closer with the agreement to acquire the Buñol Factory in Spain under CSC BV partnership. Following the testing and enhancement studies, Çimsa Americas started selling its products in the final quarter of 2019. Concurrently, the Joint Cultural Management One Team-One Voice project also has been carried out.

Strategy:

Çimsa carries out its strategy, which was formed in 2021 as "We create sustainable stakeholder value through low-carbon economy-supporting products for the development of sustainable living spaces. **We shape today for tomorrow.**" at the top of environmental, social and governance components of sustainability. The environmental strategy which covers climate change action is "**Contributing to the transition to a low carbon economy through strong R&D, innovation and technological transformation competencies."**

The climate crisis and the transition to a low carbon economy are at the top of our sustainability agenda. In order to achieve our zero-carbon target in the emissions-intensive building materials sector in which we operate, we are moving forward with innovation and technological transformation projects using our R&D infrastructure. We plan to reach our carbon neutral target through the technological transformations we undertake on an operational basis, and the use of low emission raw materials and fuels as well as through carbon capture, utilization and storage technologies.

The prioritization analysis covering our internal and external stakeholders was carried in 2021 and our first group of material issues are;

· Occupational Health and Safety

· Alternative Fuel and Raw Materials

· Energy Management

· Climate Change and Reduction of GHG

For an effective management application, six main focus areas defined as Management of the Climate Crisis, Human and Society Oriented Positive Impact, Sustainable Business Models, Human Resources, Governance and Digitalization,Technology,Innovation.

The company follows a capital management model in which 6 capitals are defined and each project has been evaluated depending on;
1. Financial
2. Manufactured
3. Intellectual
4. Human
5. Social and relational
6. Natural

Risk assessment is based on those capitals and for each and every risk, the company defines the capital type. Natural capital covers climate & energy, environment & emission, water, waste, biodiversity & ecosystem development, recycle & circular economy. If the financial effect of the natural capital risk is above the company benchmark, it is discussed by the Sustainability Management Committee to decide on the required action plan and next steps to be taken. The committee also monitors the risk assessment in terms of climate change.

In 2021, total Scope 1,2 and 3 emissions are verified as follows:

Scope 1: 6,09 M tCO2e

Scope 2: 0,34 M tCO2e

Scope 3: 0,36 M tCO2e

The intensity figure for the reporting year is 0,774 tCO2e/ton cementitious and we have already decreased intensity for total white and grey clinker by %2,4.

New targets are set as in line with Sabanci Holding's Net Zero Target for 2030 decrease the emission intensity %22 compared to 2020 emission intensity, 2050 its %100 emission reduction in all scope 1, 2 and 3.

The list of measures carried out to achieve this goal in line with GCCA of the WBCSD is as follows;
- Follow production processes with energy efficiency measurements,
- Improve process efficiency,
- Increase the cement content ratio,
- Use alternative energy resources.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2021	December 31 2021	No	<Not Applicable>

C0.3

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

Turkey

C0.4

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

TRY

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.

Operational 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
Concrete production

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	TRCIMSA91F9 TRSCMSA32211

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(s)	Please explain
Board-level committee	i) Position in the corporate structure and the level of responsibility: Climate-related issues are managed at the highest governance level namely the Board of Directors. The BoD has 1 member who is responsible from sustainability and is informed via the reports forwarded by the Executive Committee. The BoD which is led by Board Chair is responsible for Çimsa's vision, strategy, assessment of high and very high risks and finalization of financial decisions. Our sustainability strategy is defined as creating sustainable stakeholder value with our products that supports low-carbon economy for the development of sustainable living spaces. While shaping today for tomorrow, we give a central importance to the management of climate related issues. BoD request sustainability related presentation in each meeting from Sustainability Manager to assess the compliance with the strategy and the roadmap. ii) Responsibilities are related to climate issues: We believe that sustainable living spaces are one of the core issues in sustainability. These spaces can be created by sustainable product ranges by prioritizing the development of low-carbon products. With this awareness, we expand our low carbon products via our R&D, innovation and technology-based projects. Also, we adopt a business strategy that includes a strong environmental aspect. Our environmental strategy enables us to position our company in line with the requirements of the climate change. In this context, we have committed to become carbon neutral in our greenhouse gases emissions by 2050. We aim to contribute to the circular economy at the highest level by implementing "net zero" approach across our entire value chain. iii) Example of a climate-related decision made: We defined our sustainability and climate change strategy in 2021. Also, as a participant of COP26 in 2021, our main shareholder Sabancı Group declared its carbon neutral policy and zero waste commitment which will be achieved by 2050. We also adhere to this declaration and defined our carbon neutral commitments in line with this declaration. In 2021, we integrated our business and sustainability strategies. The autonomous crane-fed waste feeding system which costs 52 million TL has been financially approved by BoD completed within Afyon Cement and increased the rate of alternative fuel in grey cement production to 12.37% in 2021 from 7.8%
Other, please specify (Executive Committee)	i)Position in the corporate structure and the level of responsibility: The executive committee is responsible to expand the vision of Board of Directors and manage the advised action plans for high and very high risks and their financial impacts and reports to Board of Directors. The Executive Committee (Excom) led by CEO and the members are; Vice President (VP)-Operations VP Human Resources and Sustainability VP- Sales &Marketing VP-Supply Chain VP-Finance and Financial Affairs ii) How the responsibilities are related to climate issues: Management of sustainability actions considered with climate crisis. In this regard EB leads the biodiversity action plan, oversees emission reductions via the use of alternative fuels and monitors compliance with the CO2 reduction targets in the scope of carbon neutrality. Since cement industry is carbon intensive and transition to low carbon needs high technical improvements and investments Net Zero transition plan is developed under control of Executive Board. iii) Example of a climate-related decision made: We located 2025 and 2030 as the milestones in our 2050 carbon neutral route, reviewed our ESG goals based on sustainability strategy approved by BoD, conducted studies on determining science-based targets which are in line with our carbon neutral goals, developed projects for zero waste, and adopted responsible investments policies focuses on carbon intensity, environmental and social impacts, and biodiversity in the leadership of our CEO.

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	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	Board of Directors: Board of Directors as the top-level unit deals with merging business and sustainability strategy of Çimsa including financial impacts of sustainability components like social and environmental issues. In the route of 2050, while progressing towards carbon neutrality, BoD and our CEO monitors the long-term implementation of Çimsa's vision, strategy, and projects. Both financial non-financial targets are closely monitored by the BoD and the CEO. In 2021 committee worked on strategy determination for ESG policies, climate change management processes, reach carbon neutrality, projects on zero waste, project implementation targeting professional equality, diversity and inclusion, configuration of digitalization systems and reviewing investments and budgets from a responsible perspective. Executive Committee: Climate Change policy & strategies, performance & targets are particularly managed by Executive Committee which is led by CEO and informed by Sustainability Management Committee. VP Human Resources and Sustainability is also a member of EC. In quarterly meetings, supporting projects as per climate change with inline its strategical areas to guide on growth & integration are reviewed. As a part of the integrated risk assessment adopted by Çimsa, the Sustainability Management Committee considers climate related issues with a holistic approach by taking into account the risks and opportunities (R&O) and risk management focused procedures. In this approach, the committee implements risk management process, defines alternative solutions for climate related risks and their budgets, and approves the required budget for defined high risk s. In order to fulfil these tasks, the committee works directly with Sustainability Directorate. The directorate meets every month and determines highest climate change risks and possible regulative changes in relation to these risks. Then it shares these risks with Corporate Risk Department and Sustainability Management Committee. At this point, the committee acts with an integrated risk assessment management approach and suitable R&D projects are put into effect to minimize the risk and its effects or even eliminate them. Since Çimsa positions management of climate change and its effect on the business operations as number one priority, the development R&D projects and their smooth implementation are given at high importance. The R&D projects that focused on low carbon production and technology and energy efficiency was budgeted as 3,4 million TL in 2021. In this regard, all technical data is presented at the company have third party verification.

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	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Çimsa is energy intensive company and low carbon transition requires energy and technology know-how. The criteria for board member related to climate change are; Critical and complex thinking Adapting and initiating change Open to new business applications Research skills	<Not Applicable>	<Not Applicable>

C1.2

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

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Other, please specify (Vice President - Operations)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities *Monitors the operations and takes action related to direct operation risks arose from technology used at the manufacturing plants. Mainly, the VP-Operations deals with identified risks at the plant and searches low-carbon technological alternatives together with the Plant Manager. The VP-Operations also assesses the in-question risks. Then shares the risk with the Corporate Risk Department. Since investments in cement sector have long technological life time, the company have decision to invest in low-carbon technologies because all the business is in transition period to low-carbon future in line with SDG 13.*	<Not Applicable>	Quarterly
Other, please specify (Executive Committee)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Other committee, please specify (Sustainability Management Committee)	<Not Applicable>	Managing climate-related risks and opportunities *With the support of 6 focus working groups under the Sustainability Management Committee, the Committee both manages and assesses climate-related risks and opportunities.*	<Not Applicable>	More frequently than quarterly
Other, please specify (Vice President - Human Resources and Sustainability)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Other, please specify (Vice President - Finance and Financial Affairs)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Climate-related issues are identified through the Sustainability Management Committee at Çimsa and the CEO has the highest level of responsibility in this structure. Sustainability Management Committee is led by the CEO. Under the guidance of the CEO, the Committee determines climate related risks and opportunities. While acting as the final decision maker for these risks and opportunities, the CEO who led the Excom reports to Board of Directors and BoD finalizes the budgets of action plans, and investments targeting the management high and very high risks.

Sustainability Management Committee consists of below mentioned members:

- Vice General Managers,
- Group managers
- Talent Management and Organizational Development Manager,
- R&D and Process Tech. Manager
- Waste Development Manager
- Environment and Waste Optimisation Leader Corporate Risk Manager,
- Sustainability Manager,
- Strategic Planning and Project Management Office Coordinator,
- Corporate Communications Manager,
- Financial Planning and Analysis Manager
- Environment Executive
- Sustainability Executive.

Under the Sustainability Management Committee, six “Sustainability Focus Working Groups” take place. The focus issues within the groups are determined as follows: the management of climate crisis, Positive impact focused on people and society, sustainable business models, our human resources, governance, digitalization, technology and innovation. The working groups meet at least once a month in order to identify and follow-up of long- and medium-term goals. The groups also consider the issues related to sustainability and evaluate them. Here this evaluation is shaped by the feedbacks taken from the stakeholders, corporate performance as well as the global current trends. Then based on the goal reaching level, the corporate strategy and business models are updated by revisions to ensure the progress. The groups follow the current trends in cement industry, search the discussions on national and international platforms and report the obtained outputs to the Sustainability Management Committee. Thus, robust decisions are made, clearer vision is created, proper policies are issued and necessary action plans are implemented by the help of this reporting process.

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	Incentives are provided to improve performance indicators, to accelerate the transition to a low carbon economy and to strengthen responsible production practices while achieving the climate-related targets.

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	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target Energy reduction target Behavior change related indicator Company performance against a climate-related sustainability index	The CEO is the main responsible actor for the performance displayed by Çimsa in relation to defined KPIs. There has been a direct financial incentive system based on the achieved C02 reduction and management of climate related issues for the CEO. In line with the defined roadmap of Çimsa, the incentive is assessed according to four pillars namely, emission reductions, use of substitutes, use of alternative fuels and ensuring energy efficiency. To elaborate on this point, incentivized KPIs basically focus on reducing the energy per ton of clinker, decreasing the use of fossil fuels, reducing the clinker/cement ratio, increasing the use of alternative raw materials that can serve as substitutes and reducing plastic and waste in all over the company. Since the SDG achievements are reported to the CEO, the risk management is also under the control of the CEO. “Risk Assessment Table” which is developed for the effective management of the risks is a unique document centered around the strategies and operational steps need to be taken. Here, high and very high risks are managed both by the Sustainability Management Committee and the CEO and this management is rewarded with financial incentives. The incentive is determined by the implementation of long- and short-term performance and financial and non-financial metrics.
Other, please specify (Vice President - Operations)	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	Vice President - Operations is a member of Executive Committee and Sustainability Management Committee. The assessment and management of the risks and opportunities related to operations fall under the responsibility of the VP-O including climate related ones The VP-O and facility managers define the required actions which should be taken for the reduction of emissions via the KPIs. In this regard, the defined main KPIs state three core reductions: reducing the energy per ton of clinker, the use of fossil fuels and clinker/cement ratio. By referring to these three points, yearly evaluations are conducted for the assessment of sustainability performance displayed by the VP-O. Here these points are analysed depending on two related criteria namely, net reduction in intensity of CO2 emission and energy efficiency. In this framework, sustainability objectives are categorized as short term and long term and the achieved progress that is in line with the foreseen timeline is objectively rewarded through financial incentives.
Environment/Sustainability manager	Monetary reward	Company performance against a climate-related sustainability index	Our Sustainability Directorate is established to strengthen our sustainable business model, to develop coherent strategies that will serve both for today and tomorrow and to disseminate the spirit of sustainability across the entire company and all operations. While acting as a bridge between the high-level management and employees at all-layers, our Directorate ensures the compliance with legislations and regulations regarding the emissions, interacts with facility managers, and monitors the implementation of KPIs. The performance of the Sustainability Manager is measured by economic, environmental including climate change, social and governance variables in the scope of sustainability, is categorized according to financial and non-financial parameters, and in this way is evaluated depending on the fulfilment of the short-term and long-term objectives. The performance of Sustainability Managers is measured by yearly evaluations and rewarded via financial incentives.
Facilities manager	Monetary reward	Emissions reduction target Energy reduction project Energy reduction target	Çimsa operates as a leading company in 5 different cities in Turkey namely Mersin, Eskişehir, Kayseri, Niğde and Afyonkarahisar with 5 integrated factories and 1 grinding facility in Ankara. Facility Managers are the contact persons in each plant. The managers are responsible from the energy efficiency, emission reduction and waste management. In this regard, they act in line with the defined KPIs and implement the required steps for maintaining the energy reduction per ton of clinker, increasing the use of alternative fuels, decreasing clinker/cement ratio and increasing the use of alternative raw materials. The performance of Facility Managers is measured by a bonus system structured with yearly evaluations and rewarded via financial incentives.
All employees	Monetary reward	Behavior change related indicator	Çimsa has a suggestion system created to reinforce the communication between the employees and management. This system promotes employee engagement and sense of belonging with an inclusive approach. While the employees express their opinions participation and sharing of ideas are encouraged. Thus, expressed innovative ideas on Climate Change Management are gathered under the system called “What If?. With “What If?” project, relevant experts evaluate the presented suggestions. Here, possible value that these ideas can create is considered a metric in the assessment. At the end of the assessment process, the ideas found to be applicable are rewarded with financial incentives.
All employees	Non-monetary reward	Behavior change related indicator	Çimsa’s suggestion system, “What If ? ” serves the fulfilment of Environmental KPIs while encouraging employee engagement and continuous improvement. In the system, suggestions are collected for an effective “Climate Change Management”, carefully evaluated and objectively categorized. In this process, the ideas that could have a potential to create positive value is rewarded with financial incentives such as cheques. In addition to this, non-monetary rewards are also employed in the form of specific certifications. “Certificate of Appreciation” is one of these certifications which aims at providing recognition to the rewarded idea owner.
Other, please specify (Environment and Waste Optimisation Leader)	Monetary reward	Emissions reduction target Energy reduction target	Waste Management Manager is responsible from the proper management and elimination of hazardous and contaminated materials arose from the production processes. While ensuring the implementation of disposal system in line with legislations and regulations, Environment and Waste Optimisatio Leader deals with projects that will serve the use of alternative fuels and reduction of CO2 emissions. The performance of the Manager is assessed in relation to KPIs and monetary reward is provided depending on the achievement level of the goals.
Other, please specify (Logistic Operational and System Development Manager)	Monetary reward	Supply chain engagement	By focusing on our supply chain, we put forth our risks and opportunities and prioritized the sustainability across our value chain. In this context, we have categorized the environmental impacts our suppliers from low to high. We demanded climate change related information from the supplier companies that are in the category of high environmental impact. Then, we financially rewarded the participation and engagement in this process and supported possible changes that would be materialized by these companies. In 2021 we also calculated and verified scope 3 emissions and defined our scope 3 emission reduction target. The reduction in supply chain emissions will be assessed and the achievement of the target will be rewarded.
Other, please specify (R&D and Process Tech. Manager)	Monetary reward	Energy reduction project Behavior change related indicator	Çimsa focus on R&D in terms of developing low carbon products and maintains its activities to reduce carbon emission intensity in the life cycle of its products. Çimsa’s R&D center is working on the development of new generation additive product projects in grey, white and calcium aluminate cement types. While developing sustainable low-emission products through the use of by-products, wastes and various sources from other sectors such as slag, bottom ash, fly ash as additives, research is also being conducted on alternative raw material sources. Within the framework of the EU taxonomy, ten different sustainable products, in which the clinker usage rates in cement were reduced and product content was enriched with cementitious materials were offered to our customers and since increasing the income from sustainable products is one of the main targets of Çimsa the actions support the target are monetarily rewarded.

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	3	Short-term risks and opportunities are considered in relation to anything that creates uncertainty including extreme weather conditions such as storms, droughts, and floods. This group also include regulations about climate change and we aim to create solutions for these topics within 1 to 3 years.
Medium-term	3	10	Our medium-term horizon plan, addresses actions that are scheduled to be taken up to 5 years. In this regard, we aim to decrease our greenhouse emissions by 2025 which we define as the first milestone in our journey to become carbon neutral. Our second milestone will be 2030 in our transition to low carbon economy. The risks and opportunities defined for the medium-term are mostly board strategy level and contains investment decisions to be in line with the low carbon economy transition.
Long-term	10	30	Our long-term horizon plan is defined as strategic planning and action taking period for our 2050 carbon neutrality goal. In this regard we make investment in R&D projects and following development of new technologies for asset management, carbon capture, using biomass waste and creating alternative energy sources. In addition to this, by the help of the technologies that will be embedded in our business operations, we also aim to effectively achieve our commitments regarding Paris Agreement.

C2.1b

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

i) Substantive financial definition: Significant financial impacts for 2021 are defined as losses above 37 million TL and 56,000 tons of production loss. At Çimsa, we define significant financial impact as all situations where the magnitude of the impact is greater than 1 % of net income.

We categorize financial impacts quantitatively as follows:

- Insignificant (0): No financially impact.
- Low (1): Financial impact of 0.3% and/or less of the budgeted turnover
- Medium(2): Financial impact between 0.3% and 0.7% of the budgeted turnover
- Medium-high(3): Financial impact between 0.7% and 1% of the budgeted turnover
- High(4): Financial impact of 1% and/or more of the budgeted turnover

In 2021, Çimsa's net income is 3,745 M TL. In this regard, our critical quantifiable indicator is 11 M TL.

ii) Çimsa's risk management framework: Çimsa's risk management framework objectively defines and manages risks while supporting the Company's strategic priorities, future financial health and flexibility. To give a general framework at Çimsa, as a part of risk management, the risks that Çimsa are exposed to are regularly tracked, the risk appetite is determined and the changes in risks over time are reported. While strategical plans are supported with quantitative risk and opportunity evaluation reports; a risk matrix in which risks are located according to their impact and likelihood is used for the constitution of the risk map. Çimsa has been applying an integrated risk management and categorizes all its risks based on the capital management model in the company to monitor and diversify the risks better. There are six capitals defined by Çimsa on which the Company implements risk assessment namely, financial capital, manufactured capital, intellectual capital, human capital, social and relational capital, and natural capital. There is a bottom-up and top-down approach in the management of risks. For the top-down management based on this data gathered through abovementioned process, the Board of Directors at Çimsa quarterly reviews the risks and shapes the guiding policies and decisions that will be made. As a part of the bottom-up approach, if a risk emerges all related departments have to define the solution for the emerged risk. All risks defined by the departments are reviewed by the department manager and submitted to the Enterprise Risk Management Department. The Enterprise Risk Management Department assesses the risk and transmit this information to the Sustainability Management Committee. Here, the Committee review the risk and advised action plan in terms of sustainability and categorizes the high-level risks and shares them with Executive Committee. The executive committee approve the action plans and share it with the BoD for the approval of budget.

iii) Situations that can create strategic impacts on the business are defined as major circumstances that may negatively influence our financial well-being and strategic goals. We categorized these incidents as follows:

We define risk strategy as a strong correlation of KRI (Key Risk Indicator) and strategic KPI's (KEY Performance Indicator) of the company

- Effect 50% of Çimsa clients
- Create loss of critical supplier and lead to not finding an alternative supplier
- Effect 50% of Çimsa employees
- Create internationally bad reputation on digital platforms
- The business operations shut down by official authorities

Based on the risk assessments conducted quantitatively and qualitatively, if one of more points listed above emerges, then it is considered a high risk that might have a strategical impact on our business. In the second stage, all related departments have to define the solution for the emerged risk with its possible costs to provide a clear picture of risk management.

According to the risk management procedure at Çimsa, all risks defined by the departments are reviewed by the department manager and submitted to the Enterprise Risk Management Department. Then the Enterprise Risk Management Department assesses the risk. If it is defined as high, it is submitted to the related committees. Climate-related risks are submitted to the Sustainability Management Committee.

For the effective management of climate related risks annual comprehensive insurances are applied, R&D investments are made, projects are developed to increase energy efficiency and budgets are allocated for financing these projects. In addition to this, we have taken initiatives on sustainability and emission reductions to constitute green financing based on ESG ratings.

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
1) How climate-related risks are identified at the company level: Çimsa's sustainability risks are defined by Sustainability Directorate. While defining the risks at Çimsa, 4 steps are taken into consideration: • A circumstance is analysed based on its short-, medium- and long-term effects on Çimsa's operations and across the value chain • Top risks are determined by their potential effect on Çimsa's operations and all stakeholders, the rate of emergence and the potential consequences that can emerge in relation to these risks. • Main sustainability and climate-related risks are propounded • Lastly, the propounded risk list is approved by the Enterprise Risk Department, Sustainability Management Committee and Executive Committee. In the process, also each department has the responsibility of defining its risks at the process and asset level and reports it to the department manager with possible solutions and costs. Then the department manager reviews the risk and informs the Enterprise Risk Management Department. 2) How climate related risks which could have major financial or strategic impact are assessed at the company level: Çimsa's risk management framework objectively defines and manages risks while supporting the Company's strategic priorities, future financial health and flexibility. As one of the members of Hacı Ömer Sabancı Holding A.Ş., our corporate risk management practices are carried out in line with the risk management practices and procedures adopted by our Group. As a part of our corporate risk management, the risks that Çimsa are exposed to are regularly tracked, the risk appetite is determined and the changes in risks over time are reported. The risks which the company could likely encounter are classified by their prioritizing level. Thus, critical risks are determined and monitored by the senior management of the Company and the Board of Directors. By following Sabancı Group's risk policies the risks that can directly impact the Company's financial status are taken into consideration in all plants. Here, the Enterprise Risk Management Department ensures the effective execution of corporate risk management regarding the determined risks. The department systematically measures, assesses and prioritizes the operational, financial, strategic and external risks which could have adverse effect on Çimsa's general strategy and goals. In the scope of defined critical risks, the Enterprise Risk Management Department reports the actions taken and their results. This report is submitted to the Sustainability Management Committee via the meetings held throughout the year. Risk management activities and their effectiveness are assessed by the committee and shared with the Executive Committee in order to be transmitted to the Board of Directors. The Sustainability Management Committee follows the harmony with the required regulations in order to mitigate the major financial impacts on business and assesses the level of achievements of corporate targets. The committee monitors the developments related to low-carbon products and current discussions in international conferences and in the global reports such as IPCC, Global Cement and Concrete Association (GCCA), TCFD and WBCS. The committee also contacts with NGOs and policymakers deal with the climate change. With this sustainability vision and awareness, it reviews the action plans targeting the climate related risks and makes financial decisions to budget the management of high and very high risks. There are six "Focus Working Groups" under the Sustainability Management Committee. Each group is centred around a specific scope namely, the management of the climate crisis, positive impact focused on people and society, sustainable business models, our human resources, governance, digitalization, technology and innovation. These groups look at the progress in the sustainability performances by taking into consideration the needs of the stakeholders. The outputs in these groups have a significant importance since the main focus area of the Sustainability Management Committee is the issues raised by the focus groups. Çimsa also uses ISO 9001&14001 management systems which refer to the ISO 31000 risk management standard. The company has been applying an integrated risk management and categorizes all its risks based on the capital management model in the company to monitor and diversify the risks better. There are six capitals defined by Çimsa on which the Company implements risk assessment namely, financial capital, manufactured capital, intellectual capital, human capital, social and relational capital, and natural capital. Natural capital covers environmental and air emissions management, climate, energy and water management, waste management, biodiversity, ecosystem development activities, recycling, and circular economy. In the risk assessment procedure, the financial impact of the risk and cost of risk management are identified as well. Thus, the potential size of the risk is determined based on the foreseen substantive impacts. Following this stage, the major risks are mapped and risk mitigation and management plans and actions are reviewed and presented to the Executive Committee to be forwarded to the Board of Directors. 3) Illustration of risk management method for a risk: The economic conditions brought by the pandemic at the national and international level created a tight financial transition period. After the policies of generous liquidity, the markets faced another problem: while the demand increased rapidly, the supply could not meet this demand and accordingly inflation tendency arose in the markets. As a reflection of this situation, rising costs have directly influenced the construction industry, housing market and infrastructure projects. On the other hand, new plant investments and capacity increases have continued in Turkey which resulted in the emergence of highly competitive conditions for manufacturers. In order to mitigate this risk, we benefited from our wide product range which gives us an agile capacity to overcome the emerged constrictions in any of the segments that we are in. Thus, with our flexible marketing approach and balanced portfolio management, we balanced possible shrinkage in domestic market with exports, stabilized our income portfolio and reduced vulnerability.

Value chain stage(s) covered
Direct operations

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
Annually

Time horizon(s) covered
Long-term

Description of process
Çimsa can be defined as an asset-intensive and long-term oriented company considering the requirements of cement industry. This situation brings with the management of technological risks too as a part of the risk management procedures in our direct operations. With this perspective, the identified risks on-site are shared with the Plant Manager in line with our general risk application. Then details and differences regarding the risk management of direct operations is evaluated with solution alternatives referring to alternative low-carbon investments. Considering that both the transition to low carbon and the life time of our investments are long-term, we shape our steps with future oriented perspective. In this sense, solution proposals are presented to the Chief Technical Officer. The Chief Technical Officer reviews and then shares them with the Enterprise Risk Management Department. The Enterprise Risk Management Department assesses the risk and transmit this information to the Sustainability Management Committee. Here, the Committee review the risk and advised action plan in terms of sustainability and categorizes the high-level risks and shares them with Executive Committee. The executive committee approve the action plans and share it with the BoD for the approval of budget. As an example of long-term investments, we can focus on WHR investments.

Value chain stage(s) covered
Upstream

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

Description of process
Our Logistics Operations & System Development Department and Supply Chain Department focuses on the management of upstream risks related to climate change in our value chain. Cement production is based on natural mines which we supply from different locations. We take an approach for supplying with low carbon raw materials with low carbon transportation alternatives. Transportation of these raw materials, fuels and alternative fuels from different locations may cause the emergence of the risks in supply chain. As a part of our sustainability strategy, we aim to reduce our supply chain emissions in all three continents where we conduct operations. In this regard our Logistics Operations & System Development Department reviews the supply chain risks in our value chain with an emission management lens. Then the determined risks and alternative solutions are shared with the Corporate Risk Management Department to be categorized. The Corporate Risk Management Department categorizes the risks and conveys the categorized risks to the Sustainability Management Committee. The Sustainability committee review the risk and advised action plan in terms of sustainability and categorizes the high-level risks and shares them with Executive Committee. The executive committee approve the action plans and share it with the BoD for the approval of budget. Illustration of a risk and its management: • Due to the continuing impacts of Covid-19, “sourcing overseas” occurred as a risk in our supply chain. To exemplify this situation, we use bauxite in our production processes and we supply this material from overseas. Since we could not get the required supply for bauxite, we found new local suppliers. Thus, we both contributed to the development national economy and also reduced our transportation emissions in our supply chain.

Value chain stage(s) covered
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

Description of process
Our Strategy Department, Sales & Marketing Department and R&D unit focus on the management of downstream risks related to climate change in our value chain. By being aware of the changing consumer expectations, we make investments in R&D for the development of low-carbon products. Risks about new products are identified by the Sales and Marketing Department. Those risks are reviewed by the Strategy Department and R&D in terms of cost and possibility of development of a product as a solution. Then the risks and alternative solutions are shared with the Enterprise Risk Management Department in line with the general risk management procedure to categorize the risks. The Sustainability Management Committee informed about the risks and transmits to the executive committee for the approval of action plans. The final budget approval of the action plan is under Board of Directors responsibility. Illustration of a risk and its management: We have increased our low carbon product developments because of the demand from our sales teams. Sales teams have KPI’s to increase the sales percent of low carbon products. Thus, FLUX is developed by our R&D and the Strategy Department, and sold to the market.

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 of the Risk: Over 100 % of Çimsa's worldwide clinker production will be affected by carbon pricing mechanisms. The financial effects, potential costs and risks of this situation has periodically been assessing. Strategy determination and forecast models has initiated by our Sustainability Directorate, the responsible executive managers and the board members. Major risk that can have an adverse effect on our cashflow are reported to our Enterprise Risk Management and Financial Planning Reporting & Finance Departments. Example of the Risk: The binding regulations that are brought to the agenda of the cement industry by the Kyoto Protocol and Paris Agreement have a significant importance for us. In Turkey Climate Policy is under development and World Bank and GIZ gave support for the development of ETS system. PMR (Partnership of Market Readiness) Project which is funded by World Bank is completed. The expected 3rd phase will be about the implementation readiness of ETS. The project with German environmental ministry and GIZ is also under development for allocation of emissions for local ETS system. As a part of the projects "GHG Monitoring Reporting Verification" regulation is in force since 2015. We have been publicly sharing our reports based on verified data since 2015 and uploading MRV results into the system of the Ministry of Environment and Urbanization. The current risk arises from EU Green Deal: The regulation requires carbon tax payment at the EU border for the exported products if it is not paid in the manufacturing country. Based on our emission data and the allowances the financial impact of the risk calculated as 8 million TL. As a part of net zero emission approach, we develop; - solutions with municipalities and other solution partners for improving waste separation and characterization to increase the use of alternative fuels - energy efficiency projects. Also invest in technological plant and work to decrease clinker ratio and transition to blended cement. We will subject to carbon pricing legislation by 2026 so we synchronize country specific measures with our operational processes.
Emerging regulation	Relevant, always included	Relevance of the Risk: Emerging carbon pricing policies directly affecting our sector and constitutes a risk for us since it will increase the manufacturing costs. To analyse and manage that risk, be well-prepared for the policy related uncertainties in our sector and develop the required policies for decarbonization, our Sustainability Directorate and Risk and Legal Compliance department follows the global trends, discussions and creates bonds with relevant actors, such as policymakers, stakeholders or associations. We also closely follow the EU Green Deal and CBAM at the borders of the EU in relation to it. In the current context in Turkey, we don't have obligation to pay carbon tax. This is why, this regulation poses a potential risk for us. Example of the Risk: To take the necessary actions we employ forecasting models to link the risk with emerging regulations related to carbon pricing policies. Since cement industry is the second energy intensive sector, we assess our risks with this awareness and expect that carbon price will be around 100 Euros/ton parallel to the EU ETS market. Also, the EU Green Deal Adjustment accelerated the application of ETS in Turkey and Çimsa might be exempted from CBAM in case ETS comes into force in Turkey. Also, expansion of the scope of CBAM for scope 2 and 3 emissions creates a regulation risk that might increase our costs due to the tax. The risk of application of ETS in locally may create 500 million TL and scope expansion of CBAM that will cover scope 2 and 3 emissions might have 36 million TL financial impact on our business and This risk evaluation is also presented in the CDP Report with the assumption of 100Euros/ton carbon price for the exported cement and this price will be updated according to the changes in CBAM carbon tax. Lastly, if we categorize a risk with major adverse financial risk, this risk is evaluated by our Enterprise Risk Management and Financial Planning Reporting & Finance Departments by benefitting from our risk map that shows the potential risks and losses.
Technology	Relevant, always included	Relevance of the Risk: Climate-related technology risks are highly binding for us since we are one of the actors in a technology intensive industry. Technology related risks are assessed by Çimsa Technology Centre and CTO to foresee the possible technological implementation failures at the plants and also determination of certain plants that certainly needs carbon capture installation to continue to operate. While managing these risks, we also aim to decrease our GHG emissions. To reach this goal we conduct energy saving projects and minimize energy consumption. Here, the need for alternative fuel supply with desired properties, and the continuity and availability of this supply pose other risks for us. Example of the Risk: We aim to deploy CCS (Carbon Capture and Storage) technologies to mitigate the burden of carbon pricing and the deployment process creates its own risks stemming from the adaptation process and the modernization requirements at some of the plants. The transition to new technology may lead to the full capacity work at the plants whereas the other activities might be suspended. However, the technology brings also a unique opportunity of achieving net zero emissions. Also, alternative fuel supply creates a challenge from the perspective of availability, permission, public acceptance and commonality as a practice. To manage our supply need for alternative fuel, we conduct R&D studies for alternative fuel development and enhancing fuel properties. To ensure the continuity of alternative fuel supply, cement industry collaborates with municipalities and water treatment facilities. We proceed in line with our low-carbon transition and support this collaboration which proposes an opportunity to create a win-win situation at waste management.
Legal	Relevant, always included	Relevance of the Risk: Legal risk arose in relation to climate is monitored and assessed by our Legal Compliance Department. Although it does not pose a high-level risk for us, CO2 emissions in our processes might create a legal risk in the form of law suit. We have 10 employees specialized in environmental law who assess these types of risks. They forward their ideas and assessment results to the Enterprise Risk Management Department. Then, the Enterprise Risk Management Department forwards the findings to the Sustainability Management Department. Example of the Risk: Climate change in Turkey is not defined in any law. Although the Paris Agreement was ratified by the Turkish Grand National Assembly in 2021, the only direct regulation affecting our industry currently is Greenhouse Gas Monitoring, Reporting and Verification, which has no sanctions. In this context, climate change-related legal risks are not categorized as a high-level risk that may affect our company activities. Nevertheless, although there is no legally binding potential financial burden and expected legal risk, any climate-related litigation is closely monitored and evaluated by us to be aware of the potential risks. In this sense, we monitor lawsuits that targeting companies due to their carbon emissions which adversely affecting the climate.
Market	Relevant, always included	Relevance of the Risk: Improvements in the product range, the reaction of the consumers to these newly developed products, changing demand and supply in relation to this situation, follow up of the consumer behaviour and the reflection of all these parameters on sales constitute the market related risks for us. The consumers demand may switch to low carbon products and we should be able position our productions in a way that can fulfil this switch to stabile our sales by managing that risk. Our Strategy, Sales and Marketing Departments evaluates and makes the initial assessment of these risks. If there is demand towards the development of the low-carbon product by customers, Risk Department financially evaluates this demand with its potential impacts. After its approval by Risk Department, the product is developed with the contributions of Alternative Fuel, Sustainability, Technical Support Line, Marketing and Sales departments. Example of the Risk: According to the stakeholder surveys we conducted, we determined the main risk as the increased demand for low-carbon products. It is categorized as a mid-level risk based on the survey results. Therefore, Çimsa has been heavily investing in low carbon product development. Our R&D department participates in international conferences, follows the current literature and focuses on the use of low-carbon products either by pioneering the market. We also have EPD certificates which bring a wider perspective on environmental aspects during product development. As a holder of this certificate, we demonstrate our sensitivity for environmental issues. Yet, most of our consumers prefer us due to our LCA results in EPD certificates. Also, based on the demand of our customers we increased our investments in low-CO2 cement production and we decreased 135.000 tCO2 emissionsby clinker optimization and decreasing170.000 tonnes clinker in our products.
Reputation	Relevant, always included	Relevance of the Risk: In Turkey, the regulations and legal system do not refer to climate change and legal framework do not pose any risk that may jeopardize company reputation. However, we consider public opinion regarding the impact of companies on the environment highly significant for our company reputation. Reputational risks may affect our business performance and give harm to our corporate inheritance. As one of the fastest-growing companies of Sabancı Group and one of the largest conglomerates of our country, Çimsa portrays a prestigious modern company in the Turkish cement industry targeting global leadership at white cement production. The corporate identity we inherit from the Sabancı Group has always been a support for us and while embracing this reputation with high respect, we also aim to protect and develop it. Example of the Risk: From business performance aspect, reputational risk may affect our sales and economic performance since the cement industry is stigmatized due to high GHG emission rates. In this sense, we carry out yearly stakeholder consultations. The negative feedbacks from external stakeholders are evaluated by the responsible departments and tried to be neutralized with respective measures. Here, our Sustainability Management Department, Enterprise Risk Management Department, Corporate Communication and Investor Relations Department are the assigned units for the management, monitoring and neutralization of reputational risks.
Acute physical	Relevant, always included	Relevance of the Risk: We define acute physical risks as major events that may have negative effects on our production plants. These negative effects can be seen in the form of costs, damages and losses which can affect our operations. In this sense, we consider extreme weather events one of our major acute physical risks. On this front, weather events such as cyclone, flood, fire and drought pose risks to our direct operations in our production sites and indirect operations (e.g., the supply of the raw materials and transportation of goods). These types of risk and the insurance process related to these risks are monitored by our Enterprise Risk Management Department including the knowledge of plant operations expertise. Also, our Investment and Asset Management Department regularly assesses the impacts of these weather events on our assets and conduct studies to mitigate this risk with proper asset management policies. Example of the Risk: To be prepared for the scenarios related to extreme weather events, we have insurance that can cover the possible damage at our production facilities. To be immune to extreme weather events, we also review our supply chain. To ensure smoothly functioning operations, we add local suppliers to our supply chain as alternative raw material providers. Thus, we overcome the potential interruptions in manufacturing. We also conduct studies to develop action plans for business continuity and supplier diversity. In line with our company strategy, we aim to prioritize the localization of suppliers and to decrease Scope 3 emissions. Lastly, along with the determination of the assets that will be affected by the weather events, we also plan the reviewal of the infrastructures. In this sense, the renewal of infrastructures may be an opportunity that can increase the efficiency and the immunity against the extreme weather events.
Chronic physical	Relevant, always included	Relevance of the Risk: According to the Assessment Reports of IPCC, the extreme precipitation, floods and droughts are expected with medium confidence in our geography and also water scarcity is defined as a high risk for Mediterranean basin. Considering the vital role of water in cement/concrete production and also its necessity in emission control systems, we consider water scarcity a chronic physical risk in our risk assessments. In this sense, we assess the impacts of extreme precipitation, floodings and droughts across our assets, and value chain. We employ scenarios to observe our fragility in case of a water shortage in each of our plants. Example of the Risk: As a part of our water management plan, we conduct R&D activities to consume low water and to decrease the water footprint in our processes. Thus, we strictly apply ISO 14046 - Water Management Standard in all our manufacturing facilities and follow the water consumption rates to reduce the water consumption levels. Water management and control of consumption rates are under the responsibility of the Sustainability Management Department as well as the production facilities.

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

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
According to the EU Green Deal regulation, if the Carbon Tax of the product exported to the EU is not paid locally (if there is no ETS mechanism in the country), the carbon tax on all exported products will be paid at the same price at the EU borders. In this regard, we identify Carbon Border Tax as one of our risks. Since cement industry is the third-largest consumer of energy and the second-largest industrial emitter, this situation will create an increase in our manufacturing costs. With the implementation of Local ETS or Carbon Border Tax, the increase in manufacturing costs might be projected on sales prices which could result in the emergence of competitive advantages for our neighbouring countries. At the same time, market price of the cement would have a determining power in this equation. In this scenario, since the market has a price range for cement, we may not be able to pass our costs through our customers. The magnitude of the cost might be higher than expected considering our production volume and process emissions in our clinker production. Clinker related emissions are irreducible and constitute 100% of our scope 1 emissions. Then, it would be impossible to manage this additional cost by a projection on the prices. The management of this competitive disadvantage may create additional burdens due to the carbon leakage stemming from the producers from which are not involved in emission trading. Currently, 12% of our operations are assessed as the operations that would be affected by the Carbon Border Tax because in 2021 %12 of our production sold in EU countries.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
1065125

Potential financial impact figure – maximum (currency)
500000000

Explanation of financial impact figure
We employ case scenarios to analyse the possible financial impact of carbon pricing on our business operations. We use the EU exported tonnes of cement used to structure our financial forecasts. In this regard, we employed three scenarios based on the price of carbon. According to the findings we obtained, our possible costs are calculated as follows: The minimum financial impact was calculated as 78 Euro/ton carbon price and covers only emissions from scope 1. The maximum impact was calculated as development of Local MRV in Turkey that covers scope 1 and 2 emissions. Average ton CO2 / ton clinker ratios of all our plants have been considered and the benchmark is defined as the average best 10 cement production facilities in Turkey. The carbon price accepted as 100 Euro/ton.

Cost of response to risk
8700000

Description of response and explanation of cost calculation
Çimsa has been engaged in collaborations with NGOs. While supporting sectoral reports for the development of applicable regulation, Çimsa also is in connection with the related ministries and CEMBUREAU. In order to be in line with the emerging regulations, Çimsa has focused on decreasing the Scope 1 emissions within the scope of PMR Project. In order to reduce the Scope 1 emissions, taken actions are as follows: • Lobbying with the related ministries and municipalities for SRF production, creating research funding and discussing ways to mitigate the effects of carbon leakages. • Market development for products like CAC due to its longer product life time. • Follow-up of the production processes with energy efficiency measurements, • Improving process efficiency • Researching Carbon Capture and Storage Technologies. • Making investments in R&D to enrich our low carbon products and to contribute to the use of alternative fuels Examples for managing these risks: In 2021, Horizon 2020-HyperCog project continued . The project aims to reduce environmental impacts such as natural resource consumption and to increase digitalization on production processes. The total cost of sustainability focuses R&D and Innovation investments in 2021 defined as the cost of response to risk.

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Acute physical	Heavy precipitation (rain, hail, snow/ice)

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
The cement industry is a natural resource (e.g., limestone) dependent sector. This is why, access for required natural resources has a crucial importance for the continuity of the business operations. In this sense, we define extreme weather events as one of the possible hindering factors in the accessibility of raw materials. To elaborate on this point, extreme weather events (cyclones, floods, droughts and etc.) may bring some difficulties in terms of raw material supply for our cement plants and may also create risks in terms of punctual delivery and transportation. With this perspective, we define raw material supply risk from the perspective of costs and delays. First, the shortage in raw materials could lead to suspension of production. Secondly, extreme weather events could lead to the determination of alternative shipment routes with new costs and also with possible delays stemming from detours. Thirdly, the unforeseeable seasonal weather conditions pose a risk for the construction sector, since our products would highly be affected by low-temperatures and heavy precipitation. In 2021, the continuing effects of Covid-19, its projections on our value chain and interruptions in the supply of bauxite which we use in the production of our low-carbon products were at the centre of our focus related to this risk.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
26215000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Extreme weather events could cause a cost around 5 to 10% of the logistics budget. The raw material (Bauxite) supply interruption could lead to 0,5% revenue loss depending on the decrease in sales volume. Based on the scenarios implemented, total possible cost stemming from the reduction in production capacity is calculated as 26.215.000 TL.

Cost of response to risk
8700000

Description of response and explanation of cost calculation
With the emerging possibility of raw material supply interruption, our Supply Chain and R&D teams developed an alternative raw material that contains aluminium. The results for FLUX are achieved for expected industrial production. The success of this research points to a decrease in the logistic costs and Scope 3 emissions caused by the transportation of raw materials. In relation to risks arose by the extreme weather events, we conduct logistics optimization studies to manage possible delays and costs. Also, to be immune to the projections of the climate-related risks on our sales, we closely monitor consumer expectations and focus on the production of low-carbon products while developing special products. For special products like low carbon, customer expectations may change and Cimsa focus to develop the product based on customer expectations with still keeping it as low carbon product. The total sustainability focused R&D / Innovation investment defined as the cost of response.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Market	Changing customer behavior

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
The increased level of awareness on climate change may cause a change in consumer preferences and affect the revenues that Çimsa obtained via its traditional cement production. Cement industry is an energy and carbon intensive one. In this regard, negative stigmatizations that disregard Life Cycle Assessments of cement may affect consumer behaviour which in return may reduce the sales volume. In relation to that behavioural change, a possible shift in consumer preferences may occur. This situation may lead consumers to prefer low-carbon products or alternative building materials. To mitigate the effects of that risk, Çimsa has been focusing on the production with lower CO2 emissions and thus we aim to increase the number of products with a clinker utilization rate below 80% in cement and create a new market for low carbon products.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
18725000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
According to our case scenario which considers a possible decrease in the demand of our traditional products, the potential negative financial impact has been estimated to be around 0,5% of our total revenue per annum. There is competitive disadvantage in the market which could be overcome by the production of low carbon products. On the other hand, low-carbon product market capacity has been defined as a potential financial risk impact. Besides, even though substitute products have specific usage areas, they are not applicable in other areas of construction.

Cost of response to risk
8700000

Description of response and explanation of cost calculation
To manage the risks related to the expectations of our clients and to be in line with the changing trends in consumer behaviour, our R&D department conducts studies to reduce our CO2 footprint. In 2021, we continued the investments in the development of low carbon products and completed the action plan regarding the risks associated with the production of low carbon cement. Since low carbon cement has lower emissions during the production phase than Portland cement, we aim to increase the production of CSA (Calcium sulfoaluminate) cements in the industry as a sustainable alternative. In this sense, total sustainability focused R&D / Innovation investment defined as the cost of response. With our 10 sustainable products, Çimsa get 280.5 million TL revenues. Also, we conduct studies to increase the use of alternative fuel and decrease the use of carbon intensive materials in our processes. We assess local and international market conditions, consumer preferences, the applicability of our solutions and the implementation of new technologies in our processes to optimize our risks related to our customer expectations.

Comment

Identifier
Risk 4

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Technology	Substitution of existing products and services with lower emissions options

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Emission reduction initiatives with the existing technologies has limited impacts in cement production. As Çimsa we work on to increase the use of alternative fuel, energy efficiency projects, technological plant investments, reduce clinker use and transition to blended cement, to decrease the clinker use through additives and decarbonize raw material for emission reduction. Based on Sabancı Holding's net-zero commitment, we act in line with the commitments our Group and in this regard, adhere to our own low carbon transition plan. According to our transition plan, we foresee 2 phases which are 2025, 2030. For the first phase we aimed to increase the use of alternative fuel by 35% in 2025 and %40 in 2030. The increased cost for alternative fuel is defined as a risk.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
54000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Fuel prices are getting higher and if we were continuing to use fossil fuel, we would pay 54.000.000 TL.

Cost of response to risk
52000000

Description of response and explanation of cost calculation
The autonomous crane-fed waste feeding system which costs 52 million TL has been financially approved by BoD completed within Afyon Cement and increased the rate of alternative fuel in grey cement production to 12.37% in 2021 from 7.8%.

Comment

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?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Use of recycling

Primary potential financial impact
Reduced indirect (operating) costs

Company-specific description
Use of alternative fuels are one of the ways to reduce GHG emissions in cement industry. The alternative fuel usage rate in cement plants in Turkey is still at a considerably low level. In order to increase the use of alternative fuels, low-carbon fuels, and biomass, Environment Legislation Sub-Committee, Greenhouse Gas and Climate Change Committee, Alternative Fuel/Alternative Raw Material Committee under TCMA (Turkish Cement Manufacturers Association) which Çimsa is in collaboration with, has been taking the necessary steps to negotiate with Metropolitan Municipalities and the Turkish Ministry of Environment and Urbanization. Also, we make investments to support the exploration of alternative fuels to substitute the energy sources we used in our operations. In addition to hazardous and non-hazardous industrial alternative fuels, we continue to work on co-incinerating SRF (Solid Recovery Fuel) to increase the alternative fuel usage rate. Currently, we obtain 12,4% of our energy from alternative fuels. We aim to reach 35 % usage rate in 2025 and %40 in 2030.By achieving emission reductions in our operations, we expect to create an opportunity to decrease operating costs.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
54000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
One of our main actions to reduce CO2 emissions is to provide a variety of alternative fuels with low emissions. As part of this goal, we completed the installation of waste derived fuel (ATY) and tire feeding systems at our Kayseri, Niğde, Afyon, Mersin and Eskişehir plants. While the rate of alternative fuel we used in grey cement production was 7.8% in 2020, it increased to 12.37% with the contribution of the investments completed in 2021. The saving of the project has been defined and the potential financial impact.

Cost to realize opportunity
52000000

Strategy to realize opportunity and explanation of cost calculation
The investment cost of the tire feeding systems has been defined as cost to realize opportunity.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Shift in consumer preferences

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
EPD (Environmental Product Declaration) Regulation is under development by the Ministry of Environment and Urbanization. When the regulation is put in force, Çimsa will be in an advantageous position since its products has already been certified by EPD. Our EPD certified products are as follows; CEM IV / B(P)32,5R (in 2012), ISIDAÇ 40 - Calcium Aluminate Cement (in 2015), Çimsa Super White - CEM I 52,5 R - White Portland Cement (in 2015) Çimsa also focus on the production with lower CO2 emissions and thus we aim to increase the number of products with a clinker utilization rate below 80% in cement and already developed 10 products.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
280500000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
EPD certified products sold with higher prices and their average weight on our revenue and total income from sustainable products defined as the potential financial impact.

Cost to realize opportunity
8700000

Strategy to realize opportunity and explanation of cost calculation
50% of our revenue is obtained through the EPD certified products. Especially in CAC and white cement, EPD certification is highly requested by our clients. Our EPD certified products are as follows; Super White (Blended Cement) White Portland Cement Grey CEMIV Blended Cement CAC (CAC 40, RECIPRO40, REFRO40, RESISTO40) To get the benefits of this opportunity, we completed EPD (Environmental Product Declaration) certification for some of our products. Cost of R&D and innovation investments has been defined to realize the opportunity.

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Other, please specify (Repairment of climate change effect)

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Extreme weather events and natural disasters are more frequently expected in the next decades. Acute events like cyclones and floods pose risks for the infrastructures and buildings. Along with all destruction costs, extreme weather events also have the capacity to create an opportunity for cement sector. We expect an increase in cement demand due to the possible need for repairment and reconstruction of the infrastructure. This situation enables us to obtain the opportunity of increasing our profits by our production capacity with our resilient construction materials.

Time horizon
Long-term

Likelihood
Very likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
37450000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Based on the scenario we employed, we assume 1% increase in our potential revenue. In 2021 the revenue of Çimsa was 3.745.000.000 TL.

Cost to realize opportunity
8700000

Strategy to realize opportunity and explanation of cost calculation

R&D innovation studies covering below has been defined as the cost of realize the opportunity. • R&D for the production of products immune to extreme weather conditions. • Collaborations with universities and research centres to explore more opportunities in terms of product development • Project implementations to test the products • Conducting marketing activities to promote produced resilient materials that can be used in infrastructure.

Comment

C3. Business Strategy

C3.1

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

Row 1

Transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a transition plan within two years

Publicly available transition plan

<Not Applicable>

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

<Not Applicable>

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

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

<Not Applicable>

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future

As a company traded in Istanbul Stock Market, we publicly report our climate change combating agenda through Annual Activity and Sustainability Report. In line with Net Zero Target of Sabanci Group - conglomerate owning CIMSA-, CIMSA intends to start SBTi commitment and align accordingly in a low-carbon transition plan. The transition plan which aligns with a 1.5C is under development and will be published within one year.

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

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	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

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
Transition scenarios: IEA B2DS	Company-wide	<Not Applicable>	By watching out the global developments and tendency in COP26 at achieving a consensus for staying well below 2 degrees and aiming 1.5 C degrees warming by 2100, ÇiMSA positions itself for developing decarbonization efforts going ahead of these targets. With Net Zero Target by 2050, ÇİMSA aims to adapting to a more ambitious transition scenario - namely IEA B2Ds Scenario- in comparison to the previously adopted IEA-GCCA Cement Low-Carbon Technology Roadmap aligned with IEA 2Ds Scenario. Having the company specific targets undergoing a crystallization, ÇİMSA defined its decarbonization milestones and required transition actions in line with IEA B2Ds. In 2021, CIMSA started SBTi processes in order to design its decarbonization pathway and as outcome of ongoing processes CIMSA is planning to declare its concrete pledges and the actions that will be taken accordingly.
Physical climate scenarios: RCP 2.6	Company-wide	<Not Applicable>	In accordance with the change from 2Ds to B2Ds scenario, ÇİMSA refers to RCP 2.6 scenario at projecting its peak emissions by 2020. ÇİMSA's 2030 milestone as well as 2050 Net Zero target portray more ambitious decline pattern than RCP 2.6 scenario in terms of decline in annual GHG emissions. ÇİMSA's net zero target dates earlier than RCP 2.6's projection of net zero emissions by 2080s and as a company operating in countries with stringent decarbonization agenda ÇİMSA wants to contribute to the decarbonization by company-wide actions. According to the global developments and company-wide set targets, CIMSA could assess physical risks under the circumstances of RCP 2.6 in an ideal world moving 1,5-2 Ds global warming by 2100; however, ÇİMSA takes into account that climate change driven physical risks with higher impact may occur due to hard to abate sectors and less ambitious governments in close future. Considering such adverse effects, in assessment of physical risks CIMSA account higher concentration pathways.
Physical climate scenarios: RCP 4.5	Country/area	<Not Applicable>	Current status quo of moderate global and national NDCs which do not meet 1,5 D Scenario poses higher acute and chronical physical risks to CIMSA, which is also considered under RCP 4.5 and more pessimist scenarios. As pointed out in IPCC 6th Assessment Report (AR6) fire weather conditions, aridity, hydrological drought risks with high confidence as well as pluvial floods with medium confidence are integrated to our risk assessment processes with higher impact in comparison to the previous years. CIMSA considers all these risks and adaptation measures in accordance with RCP 4.5 scenario which will be re-visited in upcoming years - whether there is a need for update for higher concentration pathway- considering the sensitivity of Mediterranean geography with increasing frequency and impact of aridity, wildfires and also fluvial floods.
Transition scenarios: Bespoke transition scenario	Country/area	Unknown	Beyond climate driven physical risks, CIMSA also considers regulatory and market risks regarding establishment of local emission trading system (ETS) system as well as carbon tariffs that may apply on CIMSA products in foreign markets particularly in emerging Green Deal context. Considering the fact that free allocations and carbon prices are not settled yet in Turkey, we develop our financial models based on EU ETS system regarding carbon pricing both in internal carbon pricing and future ETS in Turkey. In our model two parameters, namely carbon price and demand level, are analysed with low and high impact levels (i.e., high carbon price and low demand on our products represents the high impact) leads to 4 main scenarios under developing circumstances. Outcomes of this model is analysed by Sustainability Committee and reported to the Executive Committee and Board of Directors. Potential financial (market, regulatory and physical risks combined) burdens are integrated in what-if analysis of carbon intense status quo and decarbonization investments. Decarbonization investments are assessed with potential financial burdens that are avoided through investment. In this regard, particularly for the future scenario where demand to our products increase and carbon prices stay high, investments in renewable energy, energy efficiency projects, CCUS technologies, increased use of alternative raw material and fuel become financially more feasible with closer payback periods.

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

By scenario analysis ÇİMSA wants to clarify its decarbonization agenda in short-run and not lag behind the global efforts to meet 1,5- 2 Ds global warming by 2100. Even tough, in long-run ÇİMSA is planning to set ambitious decarbonization pathway in comparison to 2053 Net Zero target of Turkey and RCP 2.6 projection, ÇİMSA wants to assure its decarbonization performance is in line with a stringent pathway in next years. Considering the outcomes of potential future scenarios analysed, ÇİMSA looks for developing sufficient adaptation measures as well as assessing physical risks with suitable financial impacts. The most relevant physical risks are questioned with its likelihood and impact on ÇİMSA's facilities, production capacity, supply chain continuity and ÇİMSA aims to develop resilience accordingly. Another focal question of ÇİMSA is related to the potential future financial burdens of national and international carbon tariffs. The potential financial burdens and change in market dynamics are analysed under bespoke transition scenario.

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

Considering currently available technologies, ÇİMSA targets to achieve largest decarbonization achievements through alternative raw material and fuel use combined operational enhancements and energy management projects. As outcome of these ongoing projects, ÇİMSA is expecting to be in parallel to the emission decline trend of RCP 2.6. ÇİMSA is expecting the largest impacts by physical risks due to hydrological drought and interruption in supply chain. Also, 2021 summer showed that wildfires and fluvial floods pose serious risks to our physical assets and business continuity in all supply chain. ÇİMSA develops projects related to water harvest and close-loop water use in its activities in order to save the water reservoirs relied on from depletion. Localization in supply chain and increasing share of alternative fuel and raw materials are prioritized in order to overcome potential supply chain problems.

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	At the risk front, CIMSA foresees the fact that there might be a swift shift towards low carbon products in many markets driven by carbon tariff and change in customer behaviour - relevant market and financial risks are assessed under. However, CIMSA rather positions itself on opportunity front by developing products with EPD licences and diversifying sustainable product portfolio fitting to the definitions under EU Taxonomy references. In 2021 CIMSA developed 10 products fitting to the EU Taxonomy and seized opportunities that circular economy practices bring particularly in accessing alternative raw material and fuel sources. In Escoria project, CEM II/C ve CEM V type cement with mineral rich composition products - as substitute of clinker- are designed and low-clinker cement formulae with optimized composition of alternative raw materials are developed. Also, as sole calcium aluminate cement producer in Turkey, CIMSA developed Re-AL project where alternative raw materials are used as substitute of imported calcinated bauxite which also provided advantages in logistics emissions due to the local supply. Having life cycle approach on our products, we also focus on properties of longevity, resistance, strength, anti-corrosion properties of our products with aim of extending life span and causing least environmental impact during life cycle which also contributes to several sustainability goals. As product of ALTO project, we are developing cement with properties of high insulation, high air and watertightness, high resistance, resilience to pressure and leaning. Products developed in ALTO project is welcomed by clients and accomplished after consumer tests. In section 2 of this report the risks and opportunities related to products and services has been discussed and financialised.
Supply chain and/or value chain	Yes	CIMSA approaches its supply chain management with perspective of emission scopes and targets lowering carbon intensity in all of its operations from cradle to grave. With localized supply chain network and lower logistics emissions CIMSA aims decreasing Scope 3 emissions - comprising 5% of total emissions- and gives utmost importance in fostering local economy and creating a robust network feeding into the circular economy. CIMSA works with more than 20000 suppliers in total and 1746 out of 20000 suppliers are the major partners in terms of the volume of economic activity. %75 of 1746 suppliers are local companies in vicinity of our plants, and for critical raw materials and circular economy opportunities CIMSA aims to enlarge its local supplier network and seeks for potential partners. CIMSA also considers low-carbon alternatives in procurement of logistics services and prefers low emission routes, low emission fuel use transportation over high emission alternatives. Starting from 2022, CIMSA plans to switch to EVs in road-transport in company scale for lowering transportation (Scope 1) and commuting (Scope 3) caused emissions. For decarbonizing Scope 2 emissions due to electricity use, CIMSA prioritizes use of renewable energy sourced electricity with I-REC and YEK-G (local) certificates. As the top environmental related topic in our materiality index, use of alternative raw materials and fuels plays a key role at decreasing upstream emissions. CIMSA increased share of alternative fuel use by 71% in 2021 - from 7,8% to 12,4%- and 22%, 25% and %40 alternative fuel is targeted for 2022, 2025 and 2030 respectively. The lobbying activities for increasing the market for alternative fuel continue through the engagement with NGO's. The total scope 3 emissions are verified and its about 5 % of total emissions. More than 75% of suppliers are local which decrease our logistics emissions in the supply chain.
Investment in R&D	Yes	CIMSA puts R&D investments in forefront of its decarbonization activities considering the significance of diversification of alternative raw material and fuels. R&D activities also play a big role at integration of CCUS technologies to the currently existing technological infrastructure. In 2021, CIMSA increased sustainability centered R&D investments by %371, mainly on projects regarding tests for development of alternative raw material as substitute of clinker, development of sustainable products, optimization of AF (alternative fuel) and ARM (alternative raw materials) effects on processes and process improvements. CIMSA aims to expand its sustainable product portfolio with new generation cement, particularly by experimenting different composition of raw materials with lower sintering temperature; New World project is an example of development of products with low carbon intensity where alternative materials with low environmental footprint used in composition of white and grey cement. It is planned to start low-carbon white cement pilot production in 2022 and R&D work is accomplished along 2021. Another focal point in CIMSA's R&D investments is about carbon sequestration in new products and integration of CCUS technologies which is crucial at achieving carbon neutrality targets. CIMSA projects that CCUS will be influential in its decarbonization pathway by capturing 30-50 % of emissions, in these terms CIMSA follows technological developments closely in integration of CCUS technologies in cement industry. Ongoing CWorld project, focuses on sequestration of carbon in cement and design alternatives are analysed for higher utilization of carbon in material composition. CIMSA looks for opportunities taking part in hydrogen energy projects and looks for deployment of this technology in rotary kilns for achieving decarbonization targets. CIMSA also takes part in ICEBERG project where rubbles from destroyed buildings are separated and used in circular economy applications like development of light weight elements in wall structures. Business and sustainability strategy are integrated in 2021 and it is certain and that R&D plays key role in ESG parameters in order to reach 2050 target.
Operations	Yes	Considering the emerging regulatory and market risks, CIMSA considers the fact that highest stress might be on its operations both financially and technically - in terms of technological limits on decarbonization potential of currently available technologies. In this regard, CIMSA's strategy is to exploit all available technological progress for improvement in operational performance, mainly by implementing energy efficiency and energy management measures which play a key role at achieving emission reduction targets. In our Mersin Plant, CIMSA improved operational performance of rotary cyclone furnace and the connected transfer lines conveying material and gas which resulted in performance enhancement in pre-heater efficiency significantly. After this investment, 34000 TJ thermal and 3.319 MWh electrical energy was saved in 2021. In Ligni-tech project, design of the furnace used in calcium aluminate content cement production is altered and energy losses are prevented meanwhile achieving higher operational performance. By this means, daily generation capacity is increased by 30%, daily furnace efficiency is increased by 15% and operational breaks are shortened by 25% resulting in energy and material savings - particularly refractor and cement. Also, for better utilization of alternative fuels, we integrated fuel and tyre feeding systems in Kayseri, Niğde, Afyon, Mersin and Eskişehir plants which lead to a significant increase of AF share from 7,8% to 12,37%. Crane integrated alternative fuel feeding system is under implementation process which will be actively operating 2022 on and will provide significant increase in alternative fuel use. Alternative fuel use and energy management projects go hand in hand in operational improvements in line with CIMSA's decarbonization strategy.

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 Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets	Climate change related opportunities with financial return that CIMSA wants to seize are basically centered on proliferation of circular economy practices for diversifying alternative fuel sources and implementing energy saving measures in company scale. Even tough, investing 17.587.608 TL in energy efficiency projects and integration of AF feeding systems into currently existing technological infrastructure brings new cost items related to technology expenditure; CIMSA avoids the fossil fuel expenses in return. Considering the increase in oil derived fuels and other fossil fuels like lignite and Petro coke along 2021, by using AF CIMSA provided 52 million TL saving, also due to the energy saving projects CIMSA saved 34.764 TJ thermal and 4.126 MWh electrical energy. All in all, from capital expenditure point of view these investments are expense items but due to the decrease in indirect cost there is an increase in revenue stream which will increase in parallel to the increasing rate of alternative fuel and raw material use. Another dynamic that CIMSA takes into account is the emerging local ETS and carbon tariffs that will be applied to CIMSA's products in foreign markets. By internalizing these costs, CIMSA reassessed the payback periods and prioritizes to invest in decarbonization projects instead of expenditures on carbon pricing instruments. Financial risks and opportunities driven by climate change driven market and regulatory context is analysed by Risk and Finance department and reported to Sustainability Committee led by our CEO, these reports are influential on financial planning of new decarbonization investments. Ongoing decarbonization investment demonstrates dedication of our company to sustainability targets and also bring advantages on access to low interest rate capital for future investments.

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

Year target was set
2018

Target coverage
Business division

Scope(s)
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Base year
2017

Base year Scope 1 emissions covered by target (metric tons CO2e)
4148165

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
4148165

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
78

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
78

Target year
2025

Targeted reduction from base year (%)
20

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
3318532

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
4498485

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
4498485

% of target achieved relative to base year [auto-calculated]
-42.2258998858531

Target status in reporting year
Underway

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain target coverage and identify any exclusions
We produce three types of (Grey, White, and CAC) cement and ready-mixed concrete. Our total emissions occurred from all types of our products. The target is set for the

gross Scope 1 emissions of grey cement production which covers 78% of our total gross Scope 1 emissions in the base year. Our gross grey cement Scope 1 emissions for 2017 is 4,148,165 tCO2 and we aimed to decrease it to 3,318,532 tCO2 by 20% reduction. Our grey cement Scope 1 emissions are 4.498.485 for the year 2021. Çimsa aims to continuously increase the use of alternative fuels and alternative raw materials in the production process and reduce greenhouse gas emissions.

Plan for achieving target, and progress made to the end of the reporting year
Çimsa contributes to its environmental and carbon neutral targets by prioritizing the use of alternative fuels and alternative raw materials in its production processes. By replacing carbon-intensive fuels with carbon-free biomass and non-fossil fuels, it also supports the waste management processes of various industries and reduces the environmental impact of the waste. The rate of alternative fuel use reached 12.4% in 2021, marking an increase of 71% compared to the previous year.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

Year target was set
2020

Target coverage
Business division

Scope(s)
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Base year
2020

Base year Scope 1 emissions covered by target (metric tons CO2e)
4237076

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
4237076

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
75

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
75

Target year
2025

Targeted reduction from base year (%)
4.6

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
4042170.504

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
4498485

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
4498485

% of target achieved relative to base year [auto-calculated]
-134.120897237295

Target status in reporting year
Underway

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain target coverage and identify any exclusions

We produce three types of (Grey, White, and CAC) cement and ready-mixed concrete. Our total emissions occurred from all types of our products. The target is set for the gross Scope 1 emissions of grey cement production which covers 75% of our total gross Scope 1 emissions in the base year. Our gross grey cement Scope 1 emissions for 2020 is 4,237,076 tCO2 and it is aimed to decrease it to 4,042,171 tCO2 by 4.6% reduction. Our grey cement Scope 1 emissions are 4.498.485 for the year 2021. Çimsa aims to continuously increase the use of alternative fuels and alternative raw materials in the production process and reduce greenhouse gas emissions.

Plan for achieving target, and progress made to the end of the reporting year
Çimsa contributes to its environmental and carbon neutral targets by prioritizing the use of alternative fuels and alternative raw materials in its production processes. By replacing carbon-intensive fuels with carbon-free biomass and non-fossil fuels, it also supports the waste management processes of various industries and reduces the environmental impact of the waste. The rate of alternative fuel use reached 12.4% in 2021, marking an increase of 71% compared to the previous year.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 3

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2
Scope 3

Scope 2 accounting method
Location-based

Scope 3 category(ies)
Category 1: Purchased goods and services
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 9: Downstream transportation and distribution

Base year
2020

Base year Scope 1 emissions covered by target (metric tons CO2e)
5642232

Base year Scope 2 emissions covered by target (metric tons CO2e)
309829

Base year Scope 3 emissions covered by target (metric tons CO2e)
343294

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
6295985

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
95.4

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
99.7

Target year
2050

Targeted reduction from base year (%)
100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
0

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
6090290

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
347228

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
343924

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
6781442

% of target achieved relative to base year [auto-calculated]
-7.71058063194242

Target status in reporting year
New

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain target coverage and identify any exclusions
Sabancı Group, which Çimsa is a member of, has committed to expanding its circular business model practices on an end-to-end basis and reaching “Net Zero” greenhouse gas emissions by 2050. This target covers all our Scope 1, Scope 2, and Scope 3 emissions. The baseline year for Scope 3 is defined as 2021 which is the first year the Scope 3 emissions were verified by an independent third party. The following categories are calculated under Scope 3 emissions: Purchased goods and services, Fuel-and-energy-related activities, Upstream transportation and distribution, and Downstream transportation and distribution.

Plan for achieving target, and progress made to the end of the reporting year
Çimsa considers the management of Scope 1, Scope 2 and Scope 3 greenhouse gas emissions as a whole throughout the value chain as its main strategy. The methodology developed by the World Business Council for Sustainable Development (WBCSD) and the Global Cement and Concrete Association (GCCA) is used to calculate our greenhouse gas emissions from production processes. While planning our carbon neutral journey, we determine the main levers at our disposal to cut all types of emissions and we create our investment and action plans according to their potential to contribute to our targets. Alternative Fuel and Raw Materials: Çimsa contributes to its environmental and carbon neutral targets by prioritizing the use of alternative fuels and alternative raw materials in its production processes. By replacing carbon-intensive fuels with carbon-free biomass and non-fossil fuels, it also supports the waste management processes of various industries and reduces the environmental impact of the waste. The rate of alternative fuel use at Çimsa reached 12.4% in 2021, marking an increase of 71% compared to the previous year. Energy Management and Use of Green Energy: Increasing energy efficiency in production processes and reducing energy consumption is an area open to continuous improvement. Çimsa closely follows technological developments in this regard. In 2021, energy efficiency projects brought savings of 34,764 TJ of thermal energy and 4,126 MWh of electricity for Çimsa. Work on Decarbonized Raw Materials: One of the important issues in our journey to being carbon neutral is the reduction of CO2 emissions generated during calcination, by using decarbonized raw materials. Our plan includes the testing of alternative raw materials through our raw material supply network along with R&D activities. Carbon Capture, Utilization and Storage (CCUS) Technologies: It is thought that carbon capture, use and storage technologies will reach a share of 30-50% in the process of reaching the carbon neutral target. With the contribution of the Global Cement and Concrete Association (GCCA), which we are a member of, and Çimsa’s other collaborations, we follow CCUS technologies and start-up projects around the world. We are working on joint projects within the Sabancı Group. Our R&D Unit develops designs in our products which will allow carbon storage, by working on alternatives for capturing carbon dioxide in concrete with the “C-World” project.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.1b

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

Target reference number
Int 4

Year target was set
2021

Target coverage
Business division

Scope(s)
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Intensity metric
Other, please specify (metric tons CO2e per metric ton of cementitious)

Base year
2020

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)
0.792

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)
0.792

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure
99

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure
<Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure
<Not Applicable>

% of total base year emissions in all selected Scopes covered by this intensity figure
99

Target year
2030

Targeted reduction from base year (%)
22

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]
0.61776

% change anticipated in absolute Scope 1+2 emissions
21

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)
0.774

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)
0.774

% of target achieved relative to base year [auto-calculated]
10.3305785123967

Target status in reporting year
New

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain target coverage and identify any exclusions
The target cover Scope 1 emissions of grey and white cement production which covers 99% of our total Scope 1 emissions in the base year. The intensity figure is defined as metric tons CO2e per metric ton of cementitious. The intensity is 0.792 tCO2e/ton cementitious for the base year defined as 2020 and it is aimed to decrease it to 0.618 tCO2e/ton cementitious by 2030. The intensity figure for the reporting year is 0.774 tCO2e/ton cementitious.

Plan for achieving target, and progress made to the end of the reporting year
It views 2025 and 2030 as key milestones on the road towards meeting 2050 targets in the most precise way; we create our action and investment plans with the participation of internal and external stakeholders. During 2021, Çimsa continued to support the efforts taken to tackle the climate crisis, one of its priority issues, with planned and target-based studies. Çimsa contributes to its environmental and carbon neutral targets by prioritizing the use of alternative fuels and alternative raw materials in its production processes. By replacing carbon-intensive fuels with carbon-free biomass and non-fossil fuels, it also supports the waste management processes of various industries and reduces the environmental impact of the waste. The rate of alternative fuel use reached 12.4% in 2021, marking an increase of 71% compared to the previous year.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

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

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
Abs3

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 2 years

Please explain target coverage and identify any exclusions
Sabancı Group, which Çimsa is a member of, has committed to expand its circular business model practices on an end-to-end basis and reach “Net Zero” greenhouse gas emissions by 2050. This target covers all our Scope 1, Scope 2, and Scope 3 emissions. The baseline year for Scope 3 is defined as 2021 which is the first year the Scope 3 emissions were verified by an independent third party. The following categories are calculated under Scope 3 emissions: Purchased goods and services, Fuel-and-energy-related activities, Upstream transportation and distribution, and Downstream transportation and distribution.

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
The methodology developed by the World Business Council for Sustainable Development (WBCSD) and the Global Cement and Concrete Association (GCCA) is used to calculate our greenhouse gas emissions from production processes. While planning our carbon neutral journey, we determine the main levers at our disposal to cut all types of emissions and we create our investment and action plans according to their potential to contribute to our targets. Alternative Fuel and Raw Materials Çimsa contributes to its environmental and carbon neutral targets by prioritizing the use of alternative fuels and alternative raw materials in its production processes. By replacing carbon-intensive fuels with carbon-free biomass and non-fossil fuels, it also supports the waste management processes of various industries and reduces the environmental impact of the waste. The rate of alternative fuel use at Çimsa reached 12.4% in 2021, marking an increase of 71% compared to the previous year. Energy Management and Use of Green Energy Increasing energy efficiency in production processes and reducing energy consumption is an area open to continuous improvement. Çimsa closely follows technological developments in this regard. In 2021, energy efficiency projects brought savings of 34,764 TJ of thermal energy and 4,126 MWh of electricity for Çimsa. Work on Decarbonized Raw Materials One of the important issues in our journey to being carbon neutral is the reduction of CO2 emissions generated during calcination, by using decarbonized raw materials. Our plan includes the testing of alternative raw materials through our raw material supply network along with R&D activities. Carbon Capture, Utilization and Storage (CCUS) Technologies It is thought that carbon capture, use and storage technologies will reach a share of 30-50% in the process of reaching the carbon neutral target. With the contribution of the Global Cement and Concrete Association (GCCA), which we are a member of, and Çimsa’s other collaborations, we follow CCUS technologies and start-up projects around the world. We are working on joint projects within the Sabancı Group. Our R&D Unit develops designs in our products which will allow carbon storage, by working on alternatives for capturing carbon dioxide in concrete with the “C-World” project.

Planned actions to mitigate emissions beyond your value chain (optional)
Çimsa considers the management of Scope 1, Scope 2 and Scope 3 greenhouse gas emissions as a whole throughout the value chain as its main strategy. We aim to work in cooperation with our suppliers and customers in tackling the climate crisis, with due attention placed on the management of our impact stemming from our value chain. Aware of its sectoral responsibilities, Çimsa will develop sustainable business models by including suppliers, customers and other business partners with investments that touch society and the lives of people to create sustainable cities and living spaces. By focusing on sustainable cities and living spaces, Çimsa will proceed with the steps of sustainable product development through its R&D activities, energy efficiency, the use of low-carbon energy resources and raw material and fuel supply based on the principle of a circular economy. At the same time, our company is focused on developing the formula to be carbon neutral by 2050 by planning advanced technological investments such as carbon capture and storage.

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	8	486000
To be implemented*	22	523762
Implementation commenced*	2	123722
Implemented*	5	281144
Not to be implemented	3	

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 (Alternative feul)

Estimated annual CO2e savings (metric tonnes CO2e)
144114

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)
54000000

Investment required (unit currency – as specified in C0.4)
52000000

Payback period
<1 year

Estimated lifetime of the initiative
16-20 years

Comment
One of our main actions to reduce CO2 emissions is to provide a variety of alternative fuels with low emissions. As part of this goal, we completed the installation of waste derived fuel (ATY) and tire feeding systems at our Kayseri, Niğde, Afyon, Mersin and Eskişehir plants. While the rate of alternative fuel we used in grey cement production was 7.8% in 2020, it increased to 12.37% with the contribution of the investments completed in 2021.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
135000

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)
17000000

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
16-20 years

Comment
It is aimed to reduce the clinker ratio in the products with the clinker optimization project.

Initiative category & Initiative type

Energy efficiency in production processes	Product or service design

Estimated annual CO2e savings (metric tonnes CO2e)
2283

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
500000000

Investment required (unit currency – as specified in C0.4)
17597689

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment
At our Mersin Plant, we increased the efficiency of the pre-heater with the technological improvement investment we carried out in the rotary kiln cyclone stages and the lines that provide gas and material flow connected to them. As a result of the investment, we saved 34,000 TJ of thermal energy and 3,319 MWh of electricity.

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	Çimsa's R&D center is working on the development of new generation additive product projects in grey, white, and calcium aluminate cement types. While developing sustainable low-emission products through the use of by-products, wastes, and various sources from other sectors such as slag, bottom ash, and fly ash as additives, research is also being conducted on alternative raw material sources. On the other hand, work continues on a new generation cement clinker project, whose raw material composition differs from Portland cement clinker and has a lower firing temperature. The outputs of this project will be considered for our sustainable product portfolio. In 2021, the sustainability focused R&D/Innovation investment budget is 8.7 million which increased 371% compared to 2020. The climate-related R&D projects completed in 2021 are given below. Alto With the project started in 2020, self-compacting high performance (UHPC) concrete was developed for the production of thin-section white concrete products offering high impermeability, durability, compressive and flexural strength performance. As a result of the improvements achieved, as reflected in end-user feedback regarding product trials, the project was successfully completed. Escora Eco-friendly cement designs with low clinker content were created by creating recipes that meet the standard requirements in their optimum composition. Real The Re-AL project was aimed at using domestic raw materials which can replace imported calcined bauxite for calcium aluminate cement, to reduce production costs and to reduce natural resource consumption by using alternative raw materials. Ligni-Tech In the calcium aluminate cement production processes, the project was successfully completed by carrying out changes in the kiln design and improvements at the points where energy losses are experienced, preventing operational downtime, increasing production volume and reducing energy use. HorusCam The HorusCam project aimed to estimate the LSF value of raw materials with image processing and artificial intelligence algorithms, to examine the effects on the performance of the mill by conducting grain size analysis and improving energy efficiency and quality. The high accuracy estimates obtained minimized quality deviations from the expected outputs of the project.
Employee engagement	Employees are one of the most important stakeholders of Çimsa. Employees' role is extremely critical in the achievement of the company's sustainability objectives both in operation and production processes. The behavioral change of employees will both help the integration of sustainability aspects to core business activities and also the achievement of the targets in an effective and efficient way. In 2021, the R&D competencies and the employment of qualified personnel were stepped up, the production studies started to be given weight, and a complete project-based work system has been transitioned into with the development of the R&D center philosophy.
Dedicated budget for other emissions reduction activities	Increasing energy efficiency in production processes and reducing energy consumption is an area open to continuous improvement. Çimsa closely follows technological developments in this regard. In 2021, energy efficiency projects brought savings of 34,764 TJ of thermal energy and 4,126 MWh of electricity for Çimsa. Our goal is to save 1.5 kWh of energy for every tonne of clinker in 2022. Çimsa is evaluating options for purchasing low-emission energy generated from renewable energy sources. At the same time, talks continue on energy consumption certified with the International Green Energy Certificate (I-REC). Our Mersin Plant operates to the highest level of efficiency in converting waste heat from the process into electricity, while negotiations for new projects continue. We closely monitor the steps regarding the production of hydrogen energy in Turkey and the issue of using hydrogen as a rotary kiln fuel is under consideration. We are also preparing to support this strategy with R&D projects.
Internal price on carbon	Under MRV reporting's conducted by CIMSA since 2015, stationary combustion and process emissions of our facilities are reported to the ministerial authorities. With respect to the production capacity and emission levels, carbon intensity of each facility is determined and internal pricing is applied on lower performing facilities. Performance of the plants are followed by Environment and Sustainability Executive and reported to the Sustainability Committee. Internal carbon price is also determined by Sustainability Committee considering the emerging regulatory framework and actual carbon price in international emission trading systems. Considering the geographical concentration of our facilities, we use uniform internal carbon pricing for each facility. On the other hand, we apply ± 3 EUR which is %3 of EUR 100 considering the record high prices of carbon in EU ETS in 2021. Internal carbon pricing is a leverage point in terms of acceleration of decarbonization actions and assessing payback periods of projects by integrating avoided carbon costs. Potential financial burdens due to upcoming ETS system as well as new perspectives on financial analysis are shared in company scale. Also, carbon pricing applied in our organization raises income for decarbonization and R&D projects.

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
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (To determine sustainable cement products, the Company has taken the clinker utilization rate as a basis (a clinker utilization rate of less than 80%)

Type of product(s) or service(s)
Please select

Description of product(s) or service(s)
The products which have a clinker utilization rate of less than 80% are defined as low carbon products. In the scope, 10 products are defined as sustainable products.

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

Methodology used to calculate avoided emissions
Guidelines for Assessing the Contribution of Products to Avoided Greenhouse Gas Emissions (ILCA)

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

Functional unit used
Sold cementitious product

Reference product/service or baseline scenario used
The CO2 savings obtained with products with a clinker utilization rate below 80% were evaluated. In addition, scenarios where clinker usage is over 80% but CO2 savings can be achieved by using optimum clinker with various improvements are included.

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

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
135000

Explain your calculation of avoided emissions, including any assumptions
170,000 tons of clinker were saved through low-carbon products. With this clinker savings, 135,000 tons of CO2 savings were achieved according to the calculation based on emission intensity.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
7.8

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	18
Pre-calciner	82

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?
No

Name of organization(s) acquired, divested from, or merged with
<Not Applicable>

Details of structural change(s), including completion dates
<Not Applicable>

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?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

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

Scope 1

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
4844326

Comment
We produce three types of (Grey, White, and CAC) cement. The given gross global Scope 1 emissions figure represents the emissions of all cement types.

Scope 2 (location-based)

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
314923

Comment
We produce three types of (Grey, White, and CAC) cement. The given gross global Scope 1 emissions figure represents the emissions of all cement types and ready-mixed concrete .

Scope 2 (market-based)

Base year start
January 1 2015

Base year end
December 31 2015

Base year emissions (metric tons CO2e)
0

Comment
CIMSA consumes electricity from the interconnected grid.

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2021

Base year end
December 31 2021

Base year emissions (metric tons CO2e)
134349

Comment
It includes upstream (cradle-to-gate) emissions of purchased goods and services. The emission related to the purchased good and services was calculated and verified by a third party first in 2021. Therefore, the baseline year for this category is 2021.

Scope 3 category 2: Capital goods

Base year start
January 1 2021

Base year end
December 31 2021

Base year emissions (metric tons CO2e)
2604

Comment
It includes upstream (cradle-to-gate) emissions of capital goods. The emission related to the capital good was calculated and verified by a third party first in 2021. Therefore, the baseline year for this category is 2021.

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

Base year start
January 1 2021

Base year end
December 31 2021

Base year emissions (metric tons CO2e)
82151

Comment
Fuel-and-energy-related activities include Well to tank (WTT) process emissions of consumed fuels and electricity. The emission related to this category was calculated and verified by a third party first in 2021. Therefore, the baseline year for this category is 2021.

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2021

Base year end
December 31 2021

Base year emissions (metric tons CO2e)
52626

Comment
This category covers WTW emissions from outsourced logistics services used which are not already reported in scopes 1 and 2 emissions. It covers our global operations across all business units. The emission related to this category was calculated and verified by a third party first in 2021. Therefore, the baseline year for this category is 2021.

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2021

Base year end
December 31 2021

Base year emissions (metric tons CO2e)
36

Comment
Emissions from waste depend on the type of waste being disposed of, and the waste diversion method. The emission related to this category was calculated and verified by a third party first in 2021. Therefore, the baseline year for this category is 2021.

Scope 3 category 6: Business travel

Base year start
January 1 2021

Base year end
December 31 2021

Base year emissions (metric tons CO2e)
11636

Comment
Emissions arising from air travel have been accounted for under business travel-related Scope 3 emissions. The emission related to this category was calculated and verified by a third party first in 2021. Therefore, the baseline year for this category is 2021.

Scope 3 category 7: Employee commuting

Base year start
January 1 2021

Base year end
December 31 2021

Base year emissions (metric tons CO2e)
2335

Comment
Employee commuting is realized by scheduled buses and minibuses. The emission related to this category was calculated and verified by a third party first in 2021. Therefore, the baseline year for this category is 2021.

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1 2021

Base year end
December 31 2021

Base year emissions (metric tons CO2e)
74799

Comment
It includes outsourced logistic services for the transportation of sold products. The emission related to this category was calculated and verified by a third party first in 2021. Therefore, the baseline year for this category is 2021.

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

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

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019
IEA CO2 Emissions from Fuel Combustion
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
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

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)
6090290

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
We produce three types of (Grey, White, and CAC) cement. The given gross global Scope 1 emissions figure represents the emissions of all cement types.

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 have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment
We have no operations where we are able to access electricity supplier emissions factors or residual emissions factors and are unable to report a Scope 2, market-based figure.

C6.3

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

Reporting year

Scope 2, location-based
347228

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
We are reporting a Scope 2, location-based figure. We have no operations where we are able to access electricity supplier emissions factors or residual emissions factors and are unable to report a Scope 2, market-based figure.

C6.4

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

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
The administrative building facilities and head office

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
No emissions from this source

Explain why this source is excluded
The administrative building of facilities and head office are not included since their emissions are negligible according to the CO2 emissions. The head office is located in the business center. Since there is no separate meter owned by ÇİMSA, consumption quantities are determined by allocation method and invoiced to ÇİMSA by the business center management. The emissions are not calculated since it is very low and estimated based on allocation.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Explain how you estimated the percentage of emissions this excluded source represents
The administrative building of facilities and head office are not included since their emissions are negligible according to the CO2 emissions. The head office is located in the business center. Since there is no separate meter owned by ÇİMSA, consumption quantities are determined by allocation method and invoiced to ÇİMSA by the business center management. The emissions are not calculated since it is very low and estimated based on allocation.

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)
134349

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
The average-data method, which involves estimating emissions using secondary (e.g., industry average) emission factors for upstream emissions per consumption unit (e.g., kg CO2e/kWh) is applied. The "DEFRA Greenhouse Gas Reporting: Conversion Factors 2021" is used. It includes upstream (cradle-to-gate) emissions of purchased goods and services.

Capital goods

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2604

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
It includes upstream (cradle-to-gate) emissions of capital goods. The average-data method is applied according to the "GHG Protocol Technical Guidance for Calculating Scope 3 Emissions". Emissions are calculated by the data on the mass (kilograms), or other relevant units of capital goods and multiplied by the emission factor. Emission factors are obtained from the "DEFRA Greenhouse Gas Reporting, Conversion Factors 2021".

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

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
82151

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
The average-data method, which involves estimating emissions using secondary (e.g., industry average) emission factors for upstream emissions per consumption unit (e.g., kg CO2e/kWh) is applied. The "DEFRA Greenhouse Gas Reporting: Conversion Factors 2021" is used. Fuel-and-energy-related activities include Well to tank (WTT) process emissions of consumed fuels and electricity. The energy consumption figures are based on invoices or measured parameters.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
52626

Emissions calculation methodology
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
This category covers WTW emissions from outsourced logistics services used which are not already reported in scopes 1 and 2 emissions. It covers our global operations across all business units. The distance-based and the fuel-based method are applied depending on the obtained data. The distance based method involves determining the mass, distance, and mode of each shipment, then applying the appropriate mass-distance emission factor for the vehicle used. The fuel-based method involves determining the amount of fuel consumed (i.e., scope 1 and scope 2 emissions of transport providers) and applying the appropriate emission factor for that fuel.

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
36

Emissions calculation methodology
Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
The waste-type-specific method is applied which involves using emission factors for specific waste types and waste treatment methods. The emissions are calculated based on the "DEFRA Greenhouse Gas Reporting: Conversion Factors 2021" tool. Emissions from waste depend on the type of waste being disposed of, and the waste diversion method. Therefore, waste data based on its type (e.g., cardboard, food waste, wastewater) and the waste treatment method (e.g., incinerated, landfilled, recycled) are necessary for calculation. We record all kinds of waste generated in our activities every year and upload the amount of waste according to their waste code to the online system in line with the local regulation. By this declaration, we calculate emissions inventory according to DEFRA GHG Conversion Factors.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
11636

Emissions calculation methodology
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
The distance-based method, which involves determining the distance and mode of business trips, then applying the appropriate emission factor for the mode used is applied as per the Greenhouse Gas Protocol -Corporate Value Chain (Scope 3) Accounting and Reporting Standard. The distance-based method involves multiplying activity data (i.e., vehicle-kilometers or person-kilometers traveled by vehicle type) by emission factors (typically default national emission factors by vehicle type). Vehicle types include all categories of aircraft, rail, subway, bus, automobile, etc. The GHG Protocol has a calculation tool for transportation that uses a combination of fuel-based and distance-based methods. This combination is used because CO2 is better estimated from fuel use, and CH4 and N2O are better estimated from distance traveled. The tool uses fuel-efficiency ratios to convert either type of activity data (fuel or distance) supplied by the user into either fuel or distance depending on the GHG being calculated. Therefore, “GHG emissions from transport or mobile sources” is used. We gathered travel information from our travel management company which includes both domestic and international flights. The emissions arising from air travel have been calculated.

Employee commuting

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2335

Emissions calculation methodology
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
The distance-based method, which involves collecting data from employees on commuting patterns (e.g., distance traveled and mode used for commuting) and applying appropriate emission factors for the modes used is applied as per the Greenhouse Gas Protocol -Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Total distance traveled by employees over the reporting period (e.g., passenger-kilometers traveled) and mode of transport used for commuting (e.g., train, subway, bus, car, bicycle) data are necessary for calculation. The GHG Protocol has a calculation tool for transportation that uses a combination of fuel-based and distance-based methods. This combination is used because CO2 is better estimated from fuel use, and CH4 and N2O are better estimated from distance traveled. The tool uses fuel-efficiency ratios to convert either type of activity data (fuel or distance) supplied by the user into either fuel or distance depending on the GHG being calculated. Therefore, “GHG emissions from transport or mobile sources” is used. Employee commuting is realized by scheduled buses and minibusses. Since the employee number carried on each trip is assumed to equal the full capacity of vehicles, this calculation may include a little overestimation. The distance data is obtained from the supplier service agreement.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Based on World Business Council for Sustainable Development - Cement Sustainability Initiative - Scope 3 Guidance it is not relevant.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
74799

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
80

Please explain
It includes outsourced logistic services for the transportation of sold products. The average-data method is applied according to the "GHG Protocol Technical Guidance for Calculating Scope 3 Emissions". Emissions are calculated by the data on the mass (kilograms), or other relevant units of capital goods and multiplied by the emission factor. Emission factors are obtained from the "DEFRA Greenhouse Gas Reporting, Conversion Factors 2021".

Processing of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Based on World Business Council for Sustainable Development - Cement Sustainability Initiative - Scope 3 Guidance it is not relevant.

Use of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Based on World Business Council for Sustainable Development - Cement Sustainability Initiative - Scope 3 Guidance it is not relevant.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Based on World Business Council for Sustainable Development - Cement Sustainability Initiative - Scope 3 Guidance it is not relevant.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Based on World Business Council for Sustainable Development - Cement Sustainability Initiative - Scope 3 Guidance it is not relevant.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Based on World Business Council for Sustainable Development - Cement Sustainability Initiative - Scope 3 Guidance it is not relevant.

Investments

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Based on World Business Council for Sustainable Development - Cement Sustainability Initiative - Scope 3 Guidance it is not relevant.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Based on World Business Council for Sustainable Development - Cement Sustainability Initiative - Scope 3 Guidance it is not relevant.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Based on World Business Council for Sustainable Development - Cement Sustainability Initiative - Scope 3 Guidance it is not relevant.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

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
0.0017188

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
6437518

Metric denominator
unit total revenue

Metric denominator: Unit total
3745370304

Scope 2 figure used
Location-based

% change from previous year
41

Direction of change
Decreased

Reason for change
Total emissions released in 2021 increased by 8% compared to the previous year. The total turnover of 2021, has increased by 80%. As a result of this, the intensity decreased by 41% compared to the previous year. One of our main actions to reduce CO2 emissions is to provide a variety of alternative fuels with low emissions. As part of this goal, we completed the installation of waste derived fuel and tire feeding systems as described under section C4.3b.

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	0.852	0.826	0.051
Cement equivalent	0.735	0.713	0.044
Cementitious products	0.793	0.774	0.045
Low-CO2 materials	0	0	0

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	6080321	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	3223	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	6747	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Turkey	6090290

C7.3

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

By business division

By facility

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Grey Cement	4498485
White Cement	1547805
Calcium Aluminate Cement (CAC)	44000

C7.3b

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

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Mersin Cement Plant - Grey Cement	1068141	36.8	34.633333
Eskişehir Cement Plant - Grey Cement	746139	39.78	30.520556
Kayseri Cement Plant - Grey Cement	668655	38.75	35.549791
Niğde Cement Plant - Grey Cement	699988	37.95	34.686367
Afyon Cement Plant - Grey Cement	1315562	38.66	30.615968
Mersin Cement Plant - White Cement	1197896	36.8	34.633333
Eskişehir Cement Plant - White Cement	349909	39.78	30.520556
Mersin Cement Plant - CAC	44000	36.8	34.633333
Ankara Clinker Grinding Plant	0	39.97	33.11712

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, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	6090290	5943178	This figure includes grey, white, and CAC cement production activities.
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Turkey	347228	0

C7.6

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

By business division

By facility

C7.6a

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

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Grey Cement	267843	0
White Cement	76524	0
Calcium Aluminate Cement (CAC)	2861	0

C7.6b

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

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Mersin Cement Plant - Grey Cement	56640	0
Eskişehir Cement Plant - Grey Cement	65284	0
Kayseri Cement Plant - Grey Cement	32644	0
Niğde Cement Plant - Grey Cement	33459	0
Afyon Cement Plant - Grey Cement	78441	0
Mersin Cement Plant - White Cement	54657	0
Eskişehir Cement Plant - White Cement	21867	0
Mersin Cement Plant - CAC	2861	0
Ankara Clinker Grinding Plant	1375	0

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, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	345853	0	This figure includes grey, white and CAC cement production activities.
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

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?

Increased

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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	At Mersin Plant Waste Heat Recovery Plant produces electricity and used for the plant consumption. No other renewable energy consumption provided during 2021.
Other emissions reduction activities	297198	Decreased	5	Our total emissions (Scope 1 and Scope 2) in the previous year were 5,952,061 tons of CO2e. Therefore there is a 20% increase in emissions. (297,198/ 5,952,061) * 100 = 5% In 2021, energy efficiency projects brought savings of 34,764 TJ of thermal energy and 4,126 MWh of electricity for Çimsa. Our goal is to save 1.5 kWh of energy for every tonne of clinker in 2022. Our investments, which aim to reduce CO2 emissions by achieving energy efficiency and variety, came to the forefront in improving our operational performance in 2021. At our Mersin Plant, we increased the efficiency of the pre-heater with the technological improvement investment we carried out in the rotary kiln cyclone stages and the lines that provide gas and material flow connected to them. As a result of the investment, we saved 34,000 TJ of thermal energy and 3,319 MWh of electricity. One of our main actions to reduce CO2 emissions is to provide a variety of alternative fuels with low emissions. As part of this goal, we completed the installation of waste-derived fuel (ATY) and tire feeding systems at our Kayseri, Niğde, Afyon, Mersin and Eskişehir plants. While the rate of alternative fuel we used in grey cement production was 7.8% in 2020, it increased to 12.37% with the contribution of the investments completed in 2021.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output	782654	Increased	13.1	Our total emissions have increased by 8.1% compared to the previous year. The clinker production has increased by 8.1% compared to the previous year. As a result of more production, total emissions increased by 8.1%. Due to more clinker production, 782,654 tCO2 is emitted. Our total emissions (Scope 1 and Scope 2) in the previous year were 5,952,061 tons of CO2e. Therefore there is a 20% increase in emissions. (782,654/ 5,952,061) * 100 = 13.1%
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

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 80% but less than or equal to 85%

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)	LHV (lower heating value)	0	6866533	6866533
Consumption of purchased or acquired electricity	<Not Applicable>	0	654170	654170
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	34000	<Not Applicable>	34000
Total energy consumption	<Not Applicable>	34000	7520703	7554703

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)	6866533
Consumption of purchased or acquired electricity	<Not Applicable>	654170
Consumption of other purchased or acquired energy (heat, steam and/or cooling)	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	7520703

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	No
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
0

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other biomass

Heating value
LHV

Total fuel MWh consumed by the organization
162577

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
This figure includes sewage sludge, wood, non-impregnated saw dust, animal meal, other biomass, and biomass content from alternative fuels which are consumed as an alternative fuel.

Other renewable fuels (e.g. renewable hydrogen)

Heating value
LHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Coal

Heating value
LHV

Total fuel MWh consumed by the organization
6187192

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
The provided data includes coal, anthracite, petrol coke, and lignite consumption.

Oil

Heating value
LHV

Total fuel MWh consumed by the organization
31682

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
The data includes heavy fuel and diesel oil consumption.

Gas

Heating value
LHV

Total fuel MWh consumed by the organization
7652

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
The given data represents natural gas consumption.

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

Heating value
LHV

Total fuel MWh consumed by the organization
477430

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
This figure includes waste oil, tyres, RDF including plastics, mixed industrial waste, other fossil based wastes (excl. biomass content of mixed fuels) which are consumed as an alternative fuel.

Total fuel

Heating value
LHV

Total fuel MWh consumed by the organization
6866533

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

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
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
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Other biomass

Heating value
LHV

Total MWh fuel consumed for cement production activities
162577

MWh fuel consumed at the kiln
162577

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
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

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
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Coal

Heating value
LHV

Total MWh fuel consumed for cement production activities
6187192

MWh fuel consumed at the kiln
6187192

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
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Oil

Heating value
LHV

Total MWh fuel consumed for cement production activities
31682

MWh fuel consumed at the kiln
30929

MWh fuel consumed for the generation of heat that is not used in the kiln
753

MWh fuel consumed for the self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Gas

Heating value
LHV

Total MWh fuel consumed for cement production activities
7652

MWh fuel consumed at the kiln
7146

MWh fuel consumed for the generation of heat that is not used in the kiln
506

MWh fuel consumed for the self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

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

Heating value
LHV

Total MWh fuel consumed for cement production activities
477430

MWh fuel consumed at the kiln
477430

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
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Total fuel

Heating value
LHV

Total MWh fuel consumed for cement production activities
6866533

MWh fuel consumed at the kiln
6865274

MWh fuel consumed for the generation of heat that is not used in the kiln
1259

MWh fuel consumed for the self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

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	34000	34000	34000	34000
Heat	6866533	6866533	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	34000	34000
Heat	6866533	6858881
Steam	0	0

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area
Turkey

Consumption of electricity (MWh)
688170

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

Total non-fuel energy consumption (MWh) [Auto-calculated]
688170

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

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	Within the scope of its sustainable product development approach, Çimsa maintains its activities to reduce carbon emission intensity in the life cycle of its products. Within the framework of the EU taxonomy, ten different sustainable products, in which the clinker usage rates in cement were reduced and product content was enriched with cementitious materials were offered to our customers. Çimsa's R&D center is working on the development of new generation additive product projects in grey, white and calcium aluminate cement types. While developing sustainable low-emission products through the use of by-products, wastes and various sources from other sectors such as slag, bottom ash, fly ash as additives, research is also being conducted on alternative raw material sources. On the other hand, work continues on a new generation cement clinker project, whose raw material composition differs to Portland cement clinker and has a lower firing temperature. The outputs of this project will be considered for our sustainable product portfolio.

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	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Alternative low-CO2 cements/binders	Pilot demonstration	61 - 80%	8690369	All R&D projects in 2021 are within the scope of sustainability. The ratio of the sustainability focused R&D investment amount to the total R&D and innovation investment amount is 100%. Escora: Eco-friendly cement designs with low clinker content were created by creating recipes that meet the standard requirements in their optimum composition. Real: Re-AL project was aimed at using domestic raw materials which can replace imported calcined bauxite for calcium aluminate cement, to reduce production costs and to reduce natural resource consumption by using alternative raw materials. Ligni-Tech: In the calcium aluminate cement production processes, kiln efficiency was increased by 15% on a daily basis, leading to an 30% YoY increase in capacity. The annual mandatory downtime rate was improved by 25% with the volume of consumables such as refractory and concrete reduced. New World: The New World project is to develop a cement that has low carbon dioxide emissions compared to CEM I type cements and has a reduced environmental impact. The EU-supported HyperCog Project, which continues to work on the digital transformation, one of Çimsa's priority areas, has completed its second year. Within the scope of the project, in addition to integrating digital technological solutions to improve efficiency and product quality in the Mersin Plant white cement production line 3, it is also planned to reduce environmental impacts by optimizing natural resource consumption. French and Turkish project partners exchanged information with facility employees in the part of another phase of the project, the suitability and competence of employees for digital transformation. Within the scope of the ICEBERG Project on the circular economy, work on which got underway in May 2020, Çimsa will be responsible for developing more environmentally friendly cement and the use of environmentally friendly cement in concrete-based building products. The goal of FORGE, another Horizon2020 project, is to develop a composite protective coating containing metal alloys and ceramics resistant to harsh use conditions. This study is aimed at improving the materials used in energy-intensive industries through the life cycle approach, reducing CO2 emissions, increasing the resistance of existing materials to corrosion and erosion and reducing costs.
Carbon capture, utilization and storage (CCUS)	Applied research and development	≤20%	102520	C-World One of the important sustainability issues in recent years is carbon capture, use and storage (CCUS) technologies. With the C-World project, which started in October 2021, methods are being developed to reduce the amount of cement use by curing with carbon dioxide during the hydration of concrete and to trap carbon dioxide in the concrete.

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
Limited assurance

Attach the statement
Çimsa Limited Assurance Report_EN.pdf

Page/ section reference
Page 2

Relevant standard
ISAE 3410

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
Çimsa Limited Assurance Report_EN.pdf

Page/ section reference
Page 2

Relevant standard
ISAE 3410

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: Capital goods
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Employee commuting
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
Çimsa Limited Assurance Report_EN.pdf

Page/section reference
Page 2

Relevant standard
ISAE 3410

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?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Year on year emissions intensity figure	ISAE 3410	The following parameters are verified: "Scope 1 Cementitious Gross Specific CO2 Emissions" "Scope 1 Cementitious Net Specific CO2 Emissions" Çimsa Limited Assurance Report_EN.pdf
C8. Energy	Energy consumption	ISAE 3000	The following parameters are verified: "Annual energy and fuel consumption by resource" "Direct energy generation by source" "Renewable energy generation and consumption (Mwh)" "Total electricity generation (Mwh)"
C9. Additional metrics	Other, please specify (Amount of sustainable product and services revenue)	ISAE 3000	The following parameters are verified: "Amount of sustainable product and services revenue" "Ratio of sustainable product and service revenues to total revenue" "Number of of sustainable product and service" "R&D and innovation investments (TL)"

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)?
No, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

In current national and international regulatory framework, there is no legally binding statement regarding carbon pricing for cement industry. Cimsa is only subject to regular MRV reporting since 2015.

Partnership for Market Readiness Project completed by World Bank for development of carbon pricing policy instruments in Turkey and expected next phase will be for readiness for implementation. As product of this project, Draft Emission Trade System Regulation is anticipated to be released in 2024. In line with the implementation schedule of Green Deal which will be in practice in 2023 with reporting requirement and 2026 with tax payment requirement. National ETS is expected to be structured and national carbon tariff might be applied on cement products before reaching foreign markets.

For complying upcoming national and international carbon pricing instruments we focus on lowering our carbon intensity by prioritizing use of alternative fuels and conducting energy management projects -involving energy efficiency projects, heat recovery and implementation of renewable energy plants and CCUS- as we outlined in our strategy and 2025 and 2030 targets. We also focus on R&D activities in alternative raw material use for developing low carbon product portfolio as we foster a low carbon supply chain network.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

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.

Objective for implementing an internal carbon price

Navigate GHG regulations
Change internal behavior
Identify and seize low-carbon opportunities

GHG Scope

Scope 1

Application

Under MRV reporting's conducted by CIMSA since 2015, stationary combustion and process emissions of our facilities are reported to the ministerial authorities. With respect to the production capacity and emission levels, carbon intensity of each facility is determined and internal pricing is applied on lower performing facilities. Performance of the plants are followed by Environment and Sustainability Executive and reported to the Sustainability Committee. Internal carbon price is also determined by Sustainability Committee considering the emerging regulatory framework and actual carbon price in international emission trading systems.

Actual price(s) used (Currency /metric ton)

30

Variance of price(s) used

Considering the geographical concentration of our facilities, we use uniform internal carbon pricing for each facility. On the other hand, we apply ± 3 EUR which is %3 of EUR 100 considering the record high prices of carbon in EU ETS in 2021.

Type of internal carbon price

Internal fee

Impact & implication

Internal carbon pricing is a leverage point in terms of acceleration of decarbonization actions and assessing payback periods of projects by integrating avoided carbon costs. Potential financial burdens due to upcoming ETS system as well as new perspectives on financial analysis are shared in company scale. Also, carbon pricing applied in our organization raises income for decarbonization and R&D projects.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Innovation & collaboration (changing markets)

Details of engagement
Other, please specify (We have a collobration with waste management companies in terms of supply and production of low carbon fuelsWe have a collobration with waste management companies in terms of supply and production of low carbon fuels.)

% of suppliers by number
40

% total procurement spend (direct and indirect)

% of supplier-related Scope 3 emissions as reported in C6.5
95

Rationale for the coverage of your engagement
We have a collobration with waste management companies in terms of supply and production of low carbon fuels (alternative fuels) in our Eskişehir facility for the contribution to the management of the climate crisis, and it is an important step to increase the use of alternative fuels, which is one of the main action steps in our targets for both circular economy and reducing our scope 1 greenhouse gas emissions. The fact that the company prioritizes the selection of low-emission wastes while supplying waste and supports emission reduction. The life cycle approach starts with supplier engagement for Cimsa. ISO 14001 Environmental Management System applied in Cimsa since 2008 which creates maturity an environmental point of view. Third-party and internal audits cover our stakeholder engagement especially the supply chain. Supplier contracts items are reviewed in terms of environmental requirements and all feedback's are evaluated for improvement of the system. Cimsa defined its value chain and focused on emissions that can be controlled based on Global Cement and Concrete Association's "GCCA Sustainability Guidelines for the monitoring and reporting of CO2 emissions from cement manufacturing". All Supplier contracts cover GCCA supply chain 10 principles which are related to Human Rights, Labour, Environment, Anti-Corruption. The first chain that can be impacted is defined as transportation from suppliers. "Being In 3 Continents" strategy of the company has been evaluated in terms of emission reduction in the supply chain and expected emission reductions have been calculated with the new production sites and suppliers. In 2017 Cimsa invested to build a new cement factory in the USA and Bunol cement factory in Spain acquired. Besides getting data and providing emission reductions within the supply chain, Cimsa focus to share its climate change and sustainability know-how including its priorities which are; • Occupational Health and Safety, • Growing in International Markets • Profitability and Dividends • Equality at Work • Customer Loyalty • Risk Management • Digitalization • Cultural and Technological Transformation. Through surveys, online and offline meetings information are sharing to grow a strong and focused supply chain. In 2021 supply chain emissions has been calculated and verified by a 3rd party.

Impact of engagement, including measures of success
The engagement with our suppliers provides to work with a similar vision of companies and creates a strong and sustainable supply chain. At the know-how sharing level, the first objective was creating the same understanding of climate change and sustainability with our supply chain. Our critical suppliers in terms of climate change and sustainability are working in ready-mix concrete and aggregates. They are started to collect the data for emission calculation and in the next years, they will be obliged to present their emissions to be Cimsa suppliers. The impact of supplier engagement for transportation results in the calculation of scope 3 emissions with higher confidence levels and with TCFD point of view parameters except financial data's started to monitor. This engagement caused us to monitor the suppliers more closely on their costs.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number
50

% 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
At Cimsa we invest to develop low carbon products and share information with our customers for the transition to a low carbon economy and how we can be an enabler on this transition. This is supported by our strategy because are focused on sustainability and being human-oriented and in 2021 our strategy published as “We create sustainable stakeholder value through low-carbon economy-supporting products for the development of sustainable living spaces – We shape Today for Tomorrow”. In our risk analysis and stakeholder consultation performed in 2021, we also studied expectations including changing customer behaviour. Cimsa is aware of transmission to a low carbon economy and an increase of sales in low carbon products like FLUX, HyperCog and CSA will decrease the risk level that might occur due to regulatory changes. Products with a clinker utilization rate below 80% in cement group products were accepted as sustainable products and we have 10 sustainable products which created 280.5 M TL income. To get the expectations of our stakeholders we organize a stakeholder meeting and once a year, we meet with our customers to get their needs and expectations. Our R&D department joins international conferences and projects about low carbon products to meet customer requests. We also have EPD certified products and with the marketing of those products, we create awareness about climate change and environmental impacts. As reported in the opportunities section of this report 0,001 of our revenue comes from EPD certified products and we believe the increase of this in the further years.

Impact of engagement, including measures of success
With customer engagement, we expect an increased demand for EPD certified and sustainable products. Targets to increase sales of EPD certified and sustainable products have been set. Those products are preferred because they help earning points on LEED Green Building Certification. Ecovadis is another program that evaluates the sustainability performance of suppliers and some of the clients evaluate our sustainability performance through EcoVadis including climate-related data. We develop our marketing strategy, R&D Strategy, and Climate Change Strategy on low carbon transition and also evaluate the expectations through scenario analysis for further years. Our biggest production site and customer volume are in Turkey and the level of climate change awareness is still developing. When we focus on the financial positive impacts of our sustainable products they are becoming preferred products, and created 280.5 M TL income in 2021. With the strong R&D department, we both focus on customer expectations and environmental needs. We believe that it's the responsibility of becoming one of the global players in the cement sector.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Engagement with Ministries;

Cimsa has lobbying activities to open incentive mechanisms for processed biomass waste. In terms of creating incentives, we meet and share data with the Ministry of Environment and Ministry of Industry. With the incentive mechanisms, municipalities can build a Mechanical-Biological-Treatment facility with a biological dryer instead of regular storage, and the cement sector can both use these biomass fuels and reduce their emissions. With the driving force of zero waste regulation in place and the EU Green Deal Regulation that may come into force for the products sold to EU countries, search on biological treatment solutions has been accelerated.
The main focus is to minimize the GHG's through energy efficiency, alternative fuel usage, increasing additives in the cement. This will provide fewer emissions in all sectors not only for Cimsa and Cimsa is one of the leaders who work to create a solution for emission reductions in the cement sector in Turkey.

Engagement with Universities;

- Çimsa has entered a collaboration with Mersin University in order to measure the level of digital maturity. Çimsa provided its support as a field of execution for the thesis study which specifies the digital maturity level of the Turkish cement industry in 37 different parameters. These studies allowed the measurement of Çimsa's maturity level. Furthermore, the study exhibited development areas in different parameters, shedding light on the goals of digitalization.
- Within the scope of the "Industry PhD Program" conducted by TÜBİTAK in order to encourage the employment of researchers holding a PhD in the industry, the joint project application from Çimsa and Sabancı Holding was qualified to be supported. Within the context of the project, Sabancı University faculty members and 3 PHD students will develop cement with reduced environmental impacts, and PHD students will be provided with scholarships.
- 3D printing technology was aimed to develop by using Super White's fast setting and durability features for innovative solutions in digital design. The project, which was carried out with Özyeğin and Çukurova Universities, completed by printing different objects.

Engagement for R&D;

- Within the scope of HORIZON 2020, which was set up by the EU to support scientific and applied research, development and innovation projects, Çimsa received EUR 980,000 in total support with its three R&D projects. Çimsa was ranked in the top 10 in the list of the most successful Turkish Industrial Enterprises published by TÜBİTAK.
- In Mersin facility, we have a partnership with a waste handling company to produce RDF,
- Carbon Capture and Storage technology development studies by the R&D Department,
- Attendance at International Conferences and fairs to follow the developments about low carbon products.
- The EU-supported digitalization project, HyperCog, one of Çimsa's priority issues, completed its first year. The Company remotely participated in the project review meeting. Within the scope of the project, it is planned to increase efficiency and product quality by digitizing the white cement production line, as well as to optimize the use of natural resources and reduce environmental impact. At the same time, a big step towards Industry 4.0 will be taken with the transformation into a smart factory. The
- Iceberg project, an EU project, whose application was submitted in September 2019, qualified for support. Within the scope of the project, Çimsa will be responsible for the development and optimization of environmentally friendly cement and concrete-based building products. The project will involve cooperation for the development of ultra light non-structural wall elements and green wood chipping concrete panels by developing new ecohybrid cement with materials from the building demolition wastes. 100% of the budget is supported.
- FORGE has been one of the eight projects of the 11 Turkish organizations supported by the EU Commission within the scope of "nanotechnology, advanced materials, biotechnology, advanced manufacturing and processing technologies" under the Industrial Leadership and Competitiveness component of TÜBİTAK's Horizon 2020 Program. The project started in November 2020 and continued in 2021.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, suppliers have to meet climate-related requirements, but they are not 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 suppliers which are in the scope of local MRV regulation has to present their emission reports at the time of contract.

% suppliers by procurement spend that have to comply with this climate-related requirement

5

% suppliers by procurement spend in compliance with this climate-related requirement

5

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment

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

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly 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?

No, but we plan to have one in the next two years

Attach commitment or position statement(s)

<Not Applicable>

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

Cimsa's business and sustainability strategy is allign and it is focus on low carbon transition. The governance model of Cimsa does not allow any engagement which is opporsite to our strategy.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

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?

Focus of policy, law, or regulation that may impact the climate

Mandatory climate-related reporting

Specify the policy, law, or regulation on which your organization is engaging with policy makers

The mandatory carbon reporting regulation in Turkey came into force in May 2014. 2021 GHG reports of our cement plants have been prepared, then verified and submitted to Ministry of Environment and Urbanization. Our GHG reports have been evaluated for compliance.

Policy, law, or regulation geographic coverage

National

Country/region the policy, law, or regulation applies to

Turkey

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

We supported the Mandatory Carbon Reporting legislation and took the necessary precautions and actions for full compliance. We are putting effort to determine the most accurate and efficient GHG Monitoring Methodology. For this purpose; we are working together with the World Business Council of Sustainable Development - GCCA as a member. WBCSD GCCA is one of the world's pioneering organizations on sustainability in the cement industry. Therefore we evaluate all the methodologies relevant to GHG Monitoring available for the best fit. We finalized our preparations for GHG reporting and are ready. We are open and willing to share our accumulated experiences as well as by giving our comments to legal authorities to access the most accurate and efficient reporting system. In addition to that, we are working together with the Turkish Cement Manufacturers Association (TCMA) on this purpose.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

<Not Applicable>

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate

Other, please specify (Climate Change Adaptation)

Specify the policy, law, or regulation on which your organization is engaging with policy makers

We express our opinion through the Turkish Industry and Business Association (TUSİAD) and the Turkish Cement Manufacturers Association (TCMA) about climate change. Our R&D Department is in the climate change adaptation working group of TUSIAD. The mandatory carbon reporting regulation in Turkey came into force 17th of May 2014. We engage with policymakers to improve the implementation of the law. An example is given in the proposed solution part.

Policy, law, or regulation geographic coverage

National

Country/region the policy, law, or regulation applies to

Turkey

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

As ÇİMSA; we support the Climate Change Adaptation and Mandatory Carbon Reporting legislation with a minor exception. As an example for the improvement of the law; we propose that GHG calculations be made into account the biomass content of Alternative fuels and calculations should be made separately for each grey clinker and white clinker. We are attending PMR meetings regarding Emission Trading System and Carbon Tax as well as Carbon Leakage. We give our opinions and comments on these issues.

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 is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate
Other, please specify (Reducing the use of fossil fuels)

Specify the policy, law, or regulation on which your organization is engaging with policy makers
The cement industry is an energy-intensive industry and we aim to reduce fossil fuel usage. Therefore we are willing to use Refuse Derived Fuel (RDF) as much as possible as an alternative fuel to fossil fuels which has a lower emission factor and biomass content. On the behalf of Turkish Cement Manufacturers Association, we negotiated with the Ministry of Environment and Urbanisation to remove the calorific basis limit which is 40% as in European Waste Legislation. The Ministry accepted our proposal and this limit has been removed. This could increase the RDF usage in ÇİMSA and Turkey.

Policy, law, or regulation geographic coverage
National

Country/region the policy, law, or regulation applies to
Turkey

Your organization's position on the policy, law, or regulation
Support with no exceptions

Description of engagement with policy makers
Together with the Turkish Cement Manufacturers Association (TCMA), as in EU laws, our proposition has been accepted to abrogate the 40% restriction in terms of calorific value for the non-hazardous waste usage. This would allow more use of RDF and less GHG emissions.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
<Not Applicable>

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate
Other, please specify (Reducing the use of fossil fuels)

Specify the policy, law, or regulation on which your organization is engaging with policy makers
The cement industry is an energy-intensive industry and we aim to reduce fossil fuel usage. Therefore we are willing to use Refuse Derived Fuel (RDF) as much as possible as an alternative fuel to fossil fuels which has a lower emission factor and high biomass content. In the current situation; the use of municipal dried sewage treatment sludge and SRF (Solid Recovery Fuel) produced from the municipal solid wastes by means of Mechanical Biological Treatment Systems is not common in Turkey. We are discussing establishing a feasible system to use these wastes as alternative fuels with the Ministry of Environment and Urbanisation.

Policy, law, or regulation geographic coverage
National

Country/region the policy, law, or regulation applies to
Turkey

Your organization's position on the policy, law, or regulation
Support with no exceptions

Description of engagement with policy makers
As Çimsa, we are discussing with the Ministry of Environment and Urbanisation about municipal dried sewage treatment sludge and SRF (Solid Recovery Fuel) produced from municipal solid wastes. We are aiming to make long-term agreements with the Municipalities. Because the sewage sludge is carbon neutral (% 100 biomass) alternative fuel and the biomass contents in SRF especially varies from 17% to 55% to decrease CO2 emissions.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
<Not Applicable>

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (Turkish Cement Manufacturers Association (TCMA))

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
TCMA is a strong and an active association of cement manufacturing companies in Turkey. Beyond business wise topics it also started to guide and raise the awareness of its members on Sustainable Business. It tries to develop action plans for cement manufacturers. The Vice-Chairman of the Board and Chairman of the Sustainability Sub-Committee are members of our Board, the Industry Group Head of Sabancı Holding and CEO of ÇİMSA. Therefore, we take an active role in pioneering the cement industry on sustainability in Turkey. Çimsa's Environment and Sustainability Executive is a member of the Environment and Climate Change Committee of TCMA. She shares his accumulated experience and fosters the use of alternative raw materials and alternative fuels which is important for reducing CO2 emissions at the cement industry.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

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 (Business and Sustainable Development Association)

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
Business and Sustainable Development Association is a part of the global organization, the World Business Council for Sustainable Development (WBCSD). It performs to foster sustainable development and raise awareness. It tries to develop action plans for switching to Sustainable Business. Çimsa is a member of the Business and Sustainable Development Association and actively engage. Involve all the meetings and shares its opinions for decision making/action taking processes. Also provides feedbacks and vision on behalf of the cement industry for further plans.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

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)

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
Core members of the Global Cement and Concrete Association. (GCCA) include cement companies who are also members of the World Business Council for Sustainable Development (WBCSD). They manage and maintain the GCCA Charter (which identifies company commitments and responsibilities), define and fund its work program, and invite new members. Reducing GHG emissions from cement production is a key focus of GCCA's work. We are in Cement Innovation, Cement Best Practice, and Reporting working groups. We engage with GCCA and search for solutions to mitigate and adapt to our Climate Change effects. We also discuss legislation and also gather opinions from pioneering and peer companies all around the World. The event focused on how, through sharing knowledge and experience, the private sector can capture and build on the opportunities offered by the Sustainable Development Goals (SDGs) and understand the risks of inaction.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

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 of Turkish Consruction Material Producers (IMSAD))

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
IMSAD is a non-governmental organization representing the construction industry domestically and abroad. IMSAD sustainability committee focuses on the environment, energy management, energy efficiency to develop climate change adaptation policies. Besides; it aims the coordination within the construction industry and performs to take the necessary actions on these issues in the name of industry. It works to raise awareness by informing its members. Çimsa is a member of the Sustainability Committee which conducts the above-mentioned duties precisely. Environment and Sustainability Executive is also a member and shares its own improvement works in sustainability meetings, contributes the IMSAD sustainability report, follows all construction industry working about sustainability issues for the sustainability world.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

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 (TUSIAD (Turkish Industry and Business Association))

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
TUSIAD (Turkish Industry and Business Association) is the main association of the Turkish Business Society. Therefore it is the main channel of communication between the Turkish Business and Industrial Sector and the Turkish Government. Environment and Sustainability Executive is actively involving TUSİAD's Environment and Climate Change Committee. TUSİAD prepared its Position Paper on the Material Issues of Fighting Against Climate Change. ÇİMSA is willing to convey its accumulated experience on the transformation of the cement industry for the Low Carbon Economy in Turkey.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

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 in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization
Non-Governmental Organization (NGO) or charitable organization

State the organization to which you provided funding
Turkish Business World and Sustainable Development Association (SKD)

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate
Turkish Business World and Sustainable Development Association (SKD) is a non-governmental organization established in 2004 and it represents the World Business Council for Sustainable Development in Turkey. Çimsa is a member of SKD (Business World and Sustainable Development Association) and involving in Sustainability Committee. Çimsa is planning to get engaged to access to the Turkey Materials Marketplace platform which is a cloud-based platform designed to facilitate cross-industry materials reuse among Turkish companies & communities This is new and innovative business opportunities to reduce waste-to-landfill and carbon footprint, collaborate with like-minded peers, and implement real strategies within a new circular economy.

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, incorporating the TCFD recommendations

Status
Complete

Attach the document
Cimsa Integrated Report 2021.pdf

Page/Section reference
Page 28-41 Page 52-57 Page 58-61 Page 100-107 Page 257-260

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

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	Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	Cement productions is using natural sources and management of of biodiversity in quarries is one of the main responsibilities of Cimsa since the beginning of its operations. To decrease the use of raw material and rehabilitation of the quarries are in the KPI's of the management.	<Not Applicable>

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	No, but we plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	Yes, we assess impacts on biodiversity in both our upstream and downstream value chain	<Not Applicable>

C15.4

(C15.4) 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	No, we are not taking any actions to progress our biodiversity-related commitments, but we plan to within the next two years	<Not Applicable>

C15.5

(C15.5) 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 Response indicators

C15.6

(C15.6) 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 voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators Risks and opportunities	Page 68-73, Page 272 - Accounting Metrics - Biodiversity Impact Page 281 - GRI 304 Cimsa Integrated Report 2021.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 Executive Officer	Chief Executive Officer (CEO)

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