

C0. Introduction

C0.1

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

Hacı Ömer Sabancı Holding A.Ş., one of Turkey's leading conglomerates, is the parent company and manages the Sabancı Group's companies with a strategic portfolio approach. Turkey's rapidly growing sectors including banking, insurance, energy, cement, retail and industrials are the main business areas of Sabancı Group. Sabancı Group companies are market leaders in their respective sectors. ÇİMSA is one of the industrial companies of Sabancı Group.

Sabancı Group companies currently operate in 13 countries and market their products in regions across Europe, Middle East, Asia, North Africa, North and South America. Sabancı Group, thanks to its reputation, brand image, strong joint ventures, extensive experience and know-how about the Turkish market, has fostered its core businesses that also become an important force contributing to the development of Turkish economy.

Çimsa is an international cement and construction materials company with a global and national experience and knowhow of 45 years; along with a R&D-based power, wide product range, environment and human-friendly approach and innovative employees. It is constantly growing by making a difference in its sector.

Çimsa is focused on completely and promptly meeting the product and solution needs of its customers with its market-focused approach and wide distribution network. As a reliable business partner of its stakeholders, Çimsa provides living environments for future generations, as well as materials needed for their infrastructures.

Çimsa is the leading innovation company in the cement and construction materials industry in Turkey with special products like white cement and calcium aluminate cement, in addition to grey cement.

One of the leading brands of white cement in the world, Çimsa increases the recognizability of its brand on international platforms by exporting value added products that it develops, all the while contributing to its sector and to Turkish economy. Çimsa exports white cement and special products to more than 65 countries, mainly to the Middle East, Europe, North Africa and the United States.

Çimsa understands that a strong financial performance alone does not ensure sustainable success. The company targets to create value for all its stakeholders through appropriate and efficient use of social and environmental resources which is key in achieving long-term sustainability. In 2017, the company took its long-running and successful reporting activities to the next level by issuing an integrated annual report that sets an example for the entire sector.

In culmination of its successful sustainability activities, Çimsa joined the BIST (Istanbul Stock Exchange) Sustainability Index on November 1, 2017. As such, the Company now has the opportunity to share its know-how and practices with companies listed on the stock exchange that have a superior corporate sustainability performance.

Çimsa aims at pursuing its growth by maintaining its competitive production power in the framework of the strategy it will be implementing in 2018 and beyond. The compass which Çimsa will be wielding to reach its goals is sustainability, which is also the leverage of all of its activities. Reviewing the benefits of the propagation of the integrated approach within the company, the business model and the main targets that are related to it, Çimsa firmly believes that it will pursue its leadership in the field, basing itself on these themes.

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
Row 1	January 1 2017	December 31 2017	No	<Not Applicable>
Row 2	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 3	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 4	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.

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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas 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

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) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board/Executive board	The sustainability performance and the targets are particularly managed by a Sustainability Committee which reports to Board of Directors. The committee is led by the General Manager (CEO) and meets in every 3 months. Chief Technical Officer is the main responsible person for environmental aspects of sustainability and he is responsible for leading, monitoring and managing the sustainability committee and the action plans taken by the committee.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy 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 Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The sustainability performance and the targets are particularly managed by a Sustainability Committee which reports to Board of Directors. The committee is led by the General Manager (CEO) and meets in every 3 months. Chief Technical Officer is the main responsible person for environmental aspects of sustainability and he is responsible for leading, monitoring and managing the sustainability committee and the action plans taken by the committee. The Sustainability and Process Control Manager was assigned in Agustos 2017 to more effectively manage the sustainability targets.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	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.

Climate Change is one of the most important subjects in sustainability management at ÇİMSA.

The sustainability performance and the targets are particularly managed by a Sustainability Committee which reports to Board of Directors. The committee is led by the General Manager (CEO) and meets in every 3 months. Chief Technical Officer is the main responsible person for environmental aspects of sustainability and he is responsible for leading, monitoring and managing the sustainability committee and the action plans taken by the committee. The Sustainability and Process Control Manager was assigned in Agustos 2017 to more effectively manage the sustainability targets.

C1.3

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

Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives?

Board/Executive board

Types of incentives

Monetary reward

Activity incentivized

Energy reduction target

Comment

In the cement industry; emissions could be particularly reduced by three ways; -Increase the ratio of additives to clinker, -Increase energy efficiency -Increasing the use of alternative fuels. These issues are assigned as KPIs for CTO and facility managers. The Board is the main responsible of the performance driven by ÇİMSA and assigned KPIs. KPIs are defined as energy reduction per ton of clinker, reducing the use of fossil fuels by increasing the use of alternative fuels, decrease clinker / cement ratio which directly affects the GHG emission because of the clinker incorporation rate, increase the use of alternative raw materials instead of natural additives. Risk management is in the basis of our company management and "List of risk and opportunities" is a living document. It has both strategy side and the operational units side. High risks are assessed by our Corporate Risk Management Department and action plans are approved by the Executive Board. The investment decision of climate related actions is the responsibility of Board.

Who is entitled to benefit from these incentives?

Other, please specify (CTO - Chief Technical Officer)

Types of incentives

Monetary reward

Activity incentivized

Energy reduction target

Comment

Chief Technical Officer is the main responsible person for environmental aspects of sustainability in ÇİMSA and responsible for leading, monitoring and managing the sustainability committee and the action plans taken by the committee. The main KPIs are defined as energy reduction per ton of clinker, reducing the use of fossil fuels by increasing the use of alternative fuels, decrease clinker / cement ratio which directly affects the GHG emission because of the clinker incorporation rate. Bonus is delivered as a monetary reward once a year according to the KPIs, therefore there is monetary rewards for climate related issues for CTO.

Who is entitled to benefit from these incentives?

Other, please specify (Environmental Executive)

Types of incentives

Monetary reward

Activity incentivized

Other, please specify (Enviromental Compliance)

Comment

It is the responsibility of the Environmental Executive to ensure compliance with legislation, including the Regulation on Monitoring of Greenhouse Gas Emissions. The Environmental Executive supports Environmental Leaders located at each facility. Integrated Reporting, Climate Change Management (including CDP- Climate Change and CDP-Water Reporting), environment and waste management legal compliance on environment are of main KPIs.

Who is entitled to benefit from these incentives?

Other, please specify (Sustainability, Process Control Manager)

Types of incentives

Monetary reward

Activity incentivized

Behavior change related indicator

Comment

ÇiMSA puts great importance to Sustainable Business Model, therefore behavioural change on Climate Change is one of the topics to be integrated both to core business and to corporate culture. The Sustainability and Process Control Manager was assigned in Agustos 2017 to more effectively manage the sustainability targets. The Sustainability and Process Control Manager is responsible for defining the sustainability company strategies and road map. She enables the sustainability strategy to be extended and internalized within the company through the internal trainings and communications with stakeholders. The Integrated Sustainability and Process Control Manager ensures the collection of data and internal coordination for the preparation of integrated sustainability report. The main KPI is releasing Integrated Sustainability Report successfully. By the achievement of the relevant responsibilities, a certain amount of profit is delivered as a monetary reward.

Who is entitled to benefit from these incentives?

Facilities manager

Types of incentives

Monetary reward

Activity incentivized

Energy reduction target

Comment

ÇiMSA has four cement facilities and one grinding plant. In each facility; Facility Managers are the main responsible persons for energy efficiency, emission reduction, waste management processes. The main KPIs are defined as energy reduction per ton of clinker, reducing the use of fossil fuels by increasing the use of alternative fuels, decrease clinker / cement ratio which directly affects the GHG emission because of the clinker incorporation rate, increase the use of alternative raw materials instead of natural additives. Bonus is delivered as a monetary reward once a year according to the KPIs, therefore there is a monetary rewards for the performances of Facility Managers.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Monetary reward

Activity incentivized

Other, please specify (Continuous Improvement)

Comment

ÇiMSA has a suggestion system for employee engagement and continuous improvement. Not only employees who have Environmental KPIs, but also all employees are included and encouraged to provide suggestions for improvements on Climate Change Management. The system is called "Idea Factory" and the suggestions are assessed by relevant experts on each topic. As a conclusion; ideas are assessed and the ones deemed worthy are rewarded cheques inline with the value added by their ideas.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Other, please specify (Continuous Improvement)

Comment

ÇiMSA has a suggestion system for employee engagement and continuous improvement. Not only employees who have Environmental KPIs, but also all employees are included and encouraged to provide suggestions for improvements on Climate Change Management. The system is called "Idea Factory" and the suggestions are assessed by relevant experts on each topic. As a conclusion; ideas are assessed and the ones deemed worthy are rewarded both by cheques and "Certificate of Appreciation". The certificate of appreciation is given in a meeting by Upper Management, therefore it also gives a recognition to the rewarded employee.

Who is entitled to benefit from these incentives?

Management group

Types of incentives

Recognition (non-monetary)

Activity incentivized

Behavior change related indicator

Comment

Risk management is in the basis of our company management and "List of risk and opportunities" is a living document. It has both strategy side and the operational units side. High risks are assessing by our Corporate Risk Management Department and action plans approved by the Executive Board. At the strategy side, in terms of business strategy our parent company Sabancı Holding and our strategical management department is assessing the risks and the opportunities for the company. CiMSA manages the risk assessment process on an annual basis with all functions across the company, identifies the company's most critical risks and report on a regular basis. Ensuring that the Corporate Risk Management System integrates with the corporate culture as a proactive process and becomes an important part of the strategic planning, business planning and operational management processes are the responsibility of Corporate Risk Management Department.

Who is entitled to benefit from these incentives?

Other, please specify (Environment & Resource Recovery Director)

Types of incentives

Monetary reward

Activity incentivized

Energy reduction target

Comment

Environment and Resource Recovery Director is responsible to; -Increase the usage of alternative fuel in cement plants, -Integrated Reporting, -Climate Change Management (including CDP- Climate Change and CDP-Water Reporting), -Environment and waste management. Alternative fuels KPI increase results in decrease of fossil fuels and CO2 emissions. He also represent the company in cement sector; sustainability NGO's and one of the member of sustainability committee of CiMSA. This critical position to bring the external know how to the company.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	1	3	Plannings done based on short term risk and opportunities expected not to have wide variation. Short terms plannings based on climate change is mostly about expected regulatory changes that may effect cement industry.
Medium-term	3	5	Medium term horizon plannings are mostly based on the trends that may occur between 3 to 5 years. Risk and opportunities about climate change is about acute weather effects.
Long-term	5	20	Long term horizon planning is mostly strategic planning to give the guidance to our company. Most of the climate change effects are expected to occur in this time horizon.

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	Risk management is in the basis of our company management and "List of risks and opportunities" is a living document. It has both strategy side and the operational units side. The risks from the operation are managed through ISO 9001:2015 Management System Standard and ISO 14001:2015 Environmental Management System standards. Each department (operation, environment, finance, legal, sales, etc.) defines their risks and as per risk management procedure. High risks are assessed by our Corporate Risk Management Department and action plans are approved by executive board. At the strategy side, in terms of business strategy our parent company Sabanci Holding and our strategical management department is assessing the risks and the opportunities for the company. As per result of the risk analysis, new investment decisions for a product or service are decided by the executive board. Key parameters to give perspective is defined in our risk management procedure which is applied by all company.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

Risk management is in the basis of our company management and "List of risk and opportunities" is a living document. It has both strategy side and the operational units side. The risks from the operation are managing through ISO 9001:2015 Management System Standard and ISO 14001:2015 Environmental Management System standards. Each department (operation, environment, finance, legal, sales, etc.) defines their risks and as per risk management procedure. High risks are assessed by our Corporate Risk Management Department and action plans are approved by executive board. At the strategy side, in terms of business strategy our parent company Sabancı Holding and our strategical management department is assessing the risks and the opportunities for the company. As per result of the risk analysis, new investment decisions for a product or service are decided by the executive board. Key parameters to give perspective is defined in our risk management procedure which is applied by all company. Some of the parameters are listed below;

- Efficient use of Energy,
- Using of Alternative Resources,
- Sufficiency of R&D,
- Prevention of the physical effects of climate change
- Legal compliance
- Customer needs and expectations
- Climate Change

Beside the risk and opportunities defined by our employees, we are getting service for risk analysis for all our company from a third party. This analysis is also done annually by risk engineers with meeting all departments.

Since we are performing integrated risk management, climate change risks and opportunities are identifying with the other parameters defined by our risk management procedure. The most important part of the risk management is to getting data's and following the future trends globally and sectoral. We have our sustainability committee which members are the head of each department in our company is identifiy and assess climate related risks with;

- working with NGO's which are focused on sector, climate change, sustainability and etc.
- in communication with the legal authorities to assess the legal risks,
- following the EU Directives because climate related obligations are much more strict in EU and Turkey may apply them in the future,
- following customer needs and expectations through researchs done for our sector.

During assessing part of the risk and opportunity we are using our own procedure/ methodology which is based on likelihood, impact, past events, legal requirements. Regarding to the degree of this methodology the action plans for the high risks are approved by the executive committee.

The risks we have identified over short term are;

- regulatory risks and increasing of manufacturing costs.

Mid Term;

- Increased severity of extreme weather conditions.

Long Term;

- Customer behaviour change and chronic weather conditions.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	In our risk procedure defined risks has to be assessed as per some parameters defined internally. Climate change risk is assessed as per current regulation. Since Turkey is not ratified Kyoto Protocol and Paris Agreement is not approved by the parliament however with the funding of World Bank, PMR project is developed and only direct regulation related to climate change is "GHG Monitoring Reporting Verification" regulation which is in force since 2015. As Cimsa we always commit to be in line with the current regulations and also we do the needs and all our reports since the beginning is verified and uploaded to the system of the Ministry of Environment and Urbanization. Since we are inline with the current regulation and there is no financial sanction of this regulation, we did not define this under our risks. As per our risk procedure the financial effect of the risk must be defined.
Emerging regulation	Relevant, always included	In our risk procedure defined risks has to be assessed as per some parameters defined internally. Climate change risk is assessed as per emerging regulation. Turkey is not ratified Kyoto Protocol and Paris Agreement is not approved by the parliament however with the funding of World Bank, PMR project is developed and only direct regulation related to climate change is "GHG Monitoring Reporting Verification" regulation which is in force in 2015. The expected next phase in 2020 of the project is the local emission trading or carbon tax scheme. The official announcement is not done however it is defined as one of the climate related risk. Since cement industry is the second energy intensive sector globally after steel and iron when cap and trade or carbon tax in force it is very likely going to effect us.
Technology	Relevant, always included	When we focus on technological developments in cement industry in terms of climate change we see that the industry is not focused to technology change to fight with climate change. The main focus is to minimize the GHG's through energy efficiency, alternative fuel usage, increasing additives in the cement. In 2017 we invested pre-calcination system and provide energy efficiency and installed vertical raw and cement mills which decrease energy use. Carbon capture and storage is underway in the sector we continue to search about this technology.
Legal	Relevant, always included	Climate change is not defined in any law in Turkey. We are also not ratified Kyoto Protocol and Paris Agreement is not approved by the parliament. There is only one regulation about GHG Monitoring, Reporting and Verification but it has no enforcement. In our risk procedures, legal shall be considered, however in terms of climate change it is not defined as a risk to have a legal problems.
Market	Relevant, always included	* Beside other materials, cement is very important building material in construction industry. It is popular in the market because there is no other building material that could compete with cement also it provides strength and durability to constructions. With this point of view we don't see the market risk but as an opportunity. As per researchs and market reports dd. 23.02.2018 the global cement demand will increase at a rate of 7.3% between 2017 and 2025. * Another issue about market is customer behaviour change and increased awareness about climate change. To manage this risk we get EPD certificate for some of our products. It makes us to determine environmental aspects in a wider perspective and create opportunity to show our sensitivity about environment and climate change. * Last issue we considered under market is higher energy prices due to international agreements. To fight with climate change it is expected to add some taxes and limitations to fossil fuels. Since our production is energy intensive, we see higher energy prices as a market risk which will cause higher operational cost."
Reputation	Relevant, always included	Climate change is not defined in any law in Turkey however public consciousness is much more important for our reputation. We are one of the biggest group companies of Sabancı Holding. Turkey's rapidly growing sectors including banking, insurance, energy, cement, retail and industrials are the main business areas of Sabancı Group. Sabancı Group companies are market leaders in their respective sectors.
Acute physical	Relevant, always included	As per IPCC 5. assessment report extreme changes are expected in the next decades. Acute events like cyclones and floods are risks that can damage our production sites and also may affect the supply of the raw materials and also transport to customers. We also have insurance for these type of weather extremes to prevent the damage that we can face.
Chronic physical	Relevant, always included	As per IPCC 5. assessment report projected changes in near term defined as likely with medium confidence. For Turkey it is expected that rainfall will increase in the north east of Turkey. Regions like Mersin the expectation is higher degrees which can be defined as an opportunity because we are heating our raw materials and since we have open storage areas, higher weather degrees will dry our raw materials so our fuel consumption will decrease.
Upstream	Relevant, always included	Cement production is based on natural resources as raw materials. As a strategy we are working with different suppliers for each raw material supply and when we analyze their locations they are all spread in different regions of Turkey. However due to logistic cost and the amount of raw material needs it won't be feasible to supply needed raw materials in long distances. To manage the worst case scenario which is not finding the raw materials we need, we have mining quarries near the factory that are not in use and ready for production however we don't do mining activities just keep them to manage supplier risks.
Downstream	Relevant, always included	Downstream of cement production is the construction companies. As per our risk management procedure, downstream is considered as an opportunity in terms of climate change effect. Extreme weather conditions can damage the buildings and also sea level rise may bring some new construction needs. So it is defined as an opportunity.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

Risk management is the basis of our company management and "List of risks & opportunities" is a living document. It has both strategy side and the operational units side. The risks from the operation are managed through ISO 9001:2015 Management System Standard and ISO 14001:2015 Environmental Management System standards. Each department (operation, environment, finance, legal, sales, etc.) defines their risks and as per risk management procedure. High risks are assessed by our Corporate Risk Management Department and action plans are approved by executive board. At the strategy side, in terms of business strategy our parent company Sabancı Holding and our strategic management department is assessing the risks and the opportunities for the company. As per result of the risk analysis, new investment decisions for a product or service are decided by the executive board.

Key parameters to give perspective is defined in our risk management procedure which is applied by all company. Some of the parameters are listed below;

- Efficient use of Energy,
- Using of Alternative Resources,
- Sufficiency of R&D,
- Prevention of the physical effects of climate change
- Legal compliance
- Customer needs and expectations
- Climate Change

Besides the risk and opportunities defined by our employees, we are getting service for risk analysis for all our company from a third party. This analysis is also done annually by risk engineers with meeting all departments.

Since we are performing integrated risk management climate change risks and opportunities are identifying with the other parameters defined by our risk management procedure. The most important part of the risk management is to getting data's and following the future trends globally and sectoral. We have our sustainability committee which members are the head of each department in our company is identifiy and assess climate related risks with;

- working with NGO's which are focused on sector, climate change, sustainability and etc.
- in communication with the legal authorities to assess the legal risks,
- following the EU Directives because climate related obligations are much more strict in EU and Turkey may apply them in the future,
- following customer needs and expectations through researchs done for our sector.

During assessing part of the risk and opportunity we are using our own procedure/ methodology which is based on likelihood, impact, past events, legal requirements. Regarding to the degree of this methodology the action plans for the high risks are approved by the executive committee.

The risks we have identified over short term are;

- regulatory risks and increasing of manufacturing costs.

Mid Term;

- Increased severity of extreme weather conditions.

Long Term;

- Customer behaviour change and chronic weather conditions.

As per our risk management procedure, impacts are categorized as financial, human, reputation, environment and compliance. As per impact and the frequency of the risk the risks are categorized on a heat map. All benefit/cost ratios are identified for the risks and defined action plans for high risks are sharing with executive board for the approval. High benefit/cost ratio ratings are prioritized. The climate related risks and opportunities for 2017 are regulation (transition risk), physical risk and reputation (Transition risk) based. To manage those risks mainly we are;

- informing policy makers about the sector,
- following other countries directives that we are having trade,

- following EU Directives to get the signals of emerging regulations,
- making insurances for the extreme weather events,
- making researchs for our brand image,
- working with NGO's who focused cement sector, climate change and sustainability.

In 2017 risk assessment, 128 risks identified. Key Risk Indicators (KRIs), their limits and responsible departments are set for monitoring purposes. These risks are monitored monthly and action plans are followed accordingly. Results are shared with the risk department and the executive board also.

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

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

Paris Agreement has not been signed by Turkish Parliament. However like many other countries, country based solutions to fight with climate change are under development. Local MRV Regulation is in force since 2015 and it is developed with the fund from World Bank organised by PMR. The expected next phase is Local ETS (Emission Trading Scheme) or Carbon Tax and it is planned to be in force in 2020 however it is not officially announced. It is certain that cement industry will be affected by this kind of regulation because it is the third largest consumer of energy and the second largest industrial emitter after the steel industry with 6% of global emissions (IEA, 2017). As a conclusion, the effect of the possible cap and trade or tax systems are considered as risk. When the Local ETS or Tax started to be applied, our operational costs will be increased because of the emission reduction unit (ERU) costs to be inline with the defined cap. Higher operational costs will be reflected to sales prices and this might create market advantages for our neighboring countries.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Potential financial impact

2002320

Explanation of financial impact

The defined ETS cap for EU countries is 766 kg CO₂ ton/grey clinker, however it is not suitable cap for Turkey due to missing historical data and a new cap for Turkey has to be determined. But only to define the financial risk, EU ETS cap is assumed to be used. Our emission value is 847 kg CO₂ ton/ grey clinker. It means the difference between actual emission and cap values is 81 kg CO₂/ton clinker. We multiplied our grey cement production volume which is 4.000.000 ton. For the price of the carbon, we used the voluntary emission reduction (VER) prices of the projects developed in Turkey. As per markit (www.markit.com) the price of VER is btw 0,4 Euro -1,5 Euro. As per the conservativeness principle of our risk procedure, we used the 1,5 Euro as the price of the carbon and we multiplied the volume with this price. Average Euro currency for 2017 accepted as 4,12 TL.

Management method

To manage risks from policy and legal points of views, we periodically visit policy makers directly or through NGO's we support. The relations between policy makers are managed by the ÇİMSA Environment and Resource Recovery Director who is also in the sustainability committee of the company and chairman at the Environment and Climate Change committee in TCMA (Turkish Cement Manufacturers Association). The Environment and Resource Recovery Director is attending the periodical meetings of PMR on GHG emissions organized by the Turkish Ministry of Environment Urbanization to give the technical information and comments about the cement sector. On behalf of the sector, the ÇİMSA director made a presentation at COP23 in Bonn on the two best practises of ÇİMSA to decrease GHG emissions.

Cost of management

20000

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Supply chain

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Increased pricing of GHG emissions

Type of financial impact driver

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

The cement sector is the third largest energy consumer (IEA, 2017) and energy production in Turkey is based on fossil fuel power plants which ratio is 51,6%. The fuels for the Power Plants are mainly imported from other countries. (REF.TEIAS 20.07.2018). While we are importing fuel, Turkey is also electricity importer from its neighboring countries like Greece, Bulgaria, Georgia. Turkey is not an official party of the international agreements like Paris Agreement but in trade with those countries who are the party of Paris Agreement. The possible legal obligations and limitations on emissions due to Paris Agreement may bring additional emission costs to the energy producers and this cost might be reflected to the customers. Higher cost of energy due to increased pricing of GHG emissions may create higher operational cost risks in our plants.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Potential financial impact

4472727

Explanation of financial impact

As per IEA 2017 World Energy Outlook defined coal price as 77 USD/tonne in 2025 and 80 USD/tonne in 2030 with the new regulations in EU. This makes 3,8% increase in energy price. In our risk scenario we used this publicly available document as a reference. We calculated potential financial impact with multiplying expected increase energy ratio with our energy costs.

Management method

All our production plants have energy efficiency objectives and we invest in energy efficiency projects to minimize the cost of energy. In 2017 we made an investment on the energy efficiency project in Niğde Plant. A new calciner, a new vertical raw mill and a new clinker cooler were installed and the preheater cyclones were replaced with the new ones in order to provide emission

reduction in 2019. Average USD currency accepted as 3,65 for 2017.

Cost of management

80300000

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Cement sector is depended to natural resources (limestone and etc.) Acute whether events may bring some difficulties in terms of raw material supply to cement plants. Çimsa has 4 cement plants which are located in different regions of Turkey and most of our storage areas are open which is under risk of raw material loss due the weather conditions. Raw material loss or disruptions in supply are defined as risk for our company.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Low

Potential financial impact

460836

Explanation of financial impact

Kayseri plant is sampled to give the financial cost of the risk scenario. 5 days per year of production interruption cost is estimated and the capacity has been multiplied by the number of loss days and also by the net profit of grey clinker .

Management method

We have insurance for the property damage and the business interruption loss. Those risks are managed through our insurance.

Cost of management

26266192

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Write-offs and early retirement of existing assets (e.g., damage to property and assets in "high-risk" locations)

Company- specific description

Extreme weather conditions expected as per IPCC 5th assessment report in all over the world. The risk scenario based on extreme weather conditions defined for damage on critical equipments. Critical equipment defined as kiln stack. If it fallen over due to the

cyclone in Mersin Plant. Approximately 5 days of kiln shut down will be occurred. If it occurs, we can face with manufacturing loss and this may create loss on income.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Low

Potential financial impact

1550615

Explanation of financial impact

5 days of kiln shut down estimated. The potential financial impact calculated with net profit loss that will occur from 5 days of production interruption and the new stack investment cost are estimated.

Management method

We have insurance for the property damage and the business interruption loss. Those risks are managed through our insurance.

Cost of management

26266192

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

Type of financial impact driver

Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company- specific description

Alternative fuels is one of the levers to reduce the GHG emissions in cement industry. Alternative fuel usage rate of cement plants in Turkey is 4.7% in 2017, in order to increase this value, Environment and Climate Change and Alternative Fuels, Alternative Raw Materials Committees of TCMA (Turkish Cement Manufacturers Association) are doing the necessary works to negotiate with Metropolitan Municipalities and the Turkish Ministry of Environment and Urbanization. In ÇİMSA, in addition to hazardous and non hazardous industrial alternative fuels, we continue to work on co-incinerating SRF (Solid Recovery Fuel) to increase alternative fuel usage rate which is 37% in Eskişehir Plant. Due to the limited amount of SRF in Turkey, the metropolitan municipalities are required to establish the mechanical and biological treatment plants (MBT) on the landfill. However, if these MBT's investments are completed and SRF is produced, we will be able to use SRF in Eskişehir plant to increase the alternative fuel rate and to decrease GHG emissions. We expect incentives from the Ministry of Environment and Urbanization for the cement plants which

increase alternative fuel usage.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

419025

Explanation of financial impact

We increased RDF usage from 58503 tonnes to 75264 tonnes in 2017. The incentive from the Ministry of Environment and Urbanization is expected to be given to the increased amount of RDF. 25 TRY of monetary incentive per increased tonnes of RDF co-incinerated is considered. And increased amount of RDF is multiplied with the expected incentive.

Strategy to realize opportunity

ÇİMSA Environment and Resource Recovery Director is chairman of these committees in TCMA. To realize this strategy we are working with NGO's who are working about cement industry and sustainability and Metropolitan Municipalities as well as the Turkish Ministry of Environment and Urbanization.

Cost to realize opportunity

40000

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Type of financial impact driver

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company- specific description

EPD Regulation is under development by the Ministry of Environment and Urbanization. When it comes into force, Çimsa will be in an advantage position due to its products already 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) certificated from EPD (Environmental Product Declaration)

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Low

Potential financial impact

904270

Explanation of financial impact

We have same product with EPD certified and non certified. EPD certified products are sold with higher prices. The sales price difference comes from EPD certification is multiplied with the volume of sold amount.

Strategy to realize opportunity

To get the benefits of this opportunity, we did EPD (Environmental Product Declaration) certification for some of our products. We get consultancy and after that the certification has been done. Three certification cost has been added as to realize the opportunity.

Cost to realize opportunity

90000

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Other

Type of financial impact driver

Other, please specify (Repairment of climate change effect)

Company- specific description

Due to climate change effect extreme weather events are expected. This may create sales increase of cement because of the repairment of the constructions.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Potential financial impact

3136900

Explanation of financial impact

With Katrina Hurricane unexpectedly the prices of cement rise steadily after the catastrophe. It is around 12,7% of increase in prices due to damage on transportation, loss of power to cement plants and increase demand for rebuild the roads and buildings. We assume that 10% of our total cement sales will be effected with this price increase. Net profit in 2017 was 247.000.000 TRY and its 10% multiplied with 1,127 to calculate the total income from price increase. And we subtracted our normal sales price income.

Strategy to realize opportunity

We have four different production plants and it provides us to gain sales income from different sales points. Last year we invested to increase our production capacity in Nigde Plant and it is added as cost of management.

Cost to realize opportunity

80300000

Comment

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Other

Type of financial impact driver

Reduced operational costs (e.g., through use of lowest cost abatement)

Company- specific description

The fuel usage due to seasonality is changing around %2 for drying of the natural raw materials. Due to WWF - Tomorrows of

Turkey and IPCC 5th assessment report, in the regions of our production plants, the rains will decrease so that it can be defined as opportunity. Under higher temperatures our fuel usage for drying our raw materials will decrease.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

1066020

Explanation of financial impact

The fuel usage due to seasonality is changing around %2. We calculated the financial impact based on this seasonality difference to demonstrate the financial impact.

Strategy to realize opportunity

We invest projects which maximize our energy efficiency. In 2017 the cost of energy efficiency projects has been defined as a cost of opportunity.

Cost to realize opportunity

80300000

Comment

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Not yet impacted	We are producing cement and we expect climate change will effect our business in terms of finance and the way we operate. Customer behaviour change and regulatory limitations will bring financial impact on our operation in medium term. Increased fuel costs due to international agreements to fight with climate change will effect our operation in a short term. We have R&D and energy efficiency budgets to reduce the possible future impact of climate change on our products. We have also EPD certified products to manage possible effect on our products.
Supply chain and/or value chain	Not yet impacted	Since Turkey has not ratified Kyoto Protocol and Paris Agreement has not been approved by the parliament, our business is not been impacted by risks or opportunities that comes from our local supply chain and/or value chain. In short term, we expect our business to be impacted due to international agreements signed by other countries. The increase on fossil fuel and emission taxes may bring risks to our financials. Through risk assessment we manage the risk and expected risk magnitude defined as medium.
Adaptation and mitigation activities	Not yet impacted	Regulatory risks defined for our company about the adaptation of climate change, however it has no financial impact yet. But in a short term we will face with financial impact of adaptation and mitigation activities applied by other countries which we are working with.
Investment in R&D	Impacted	We invest in R&D as a company to develop new products or projects which will decrease our GHG emissions and energy use. R&D is one the key operations under our company. We invested energy efficiency project in Nigde which financial impact was around 80,300,000 TL.
Operations	Not yet impacted	Our operation is not effected by climate change risks and opportunities yet, however we define increase in energy prices, cost of GHG emissions, customer behaviour change as risks and opportunities. Since Turkey did not sign any international agreement about climate change our operation has not been financially impacted by climate related risks and opps. but in a short term it will effect with low magnitude of impact.
Other, please specify	Not yet impacted	No other parameter defined for the risk assessment.

C2.6

(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

	Relevance	Description
Revenues	Not yet impacted	Our revenue is not impacted due to climate related risks and opportunities. Due to customer behaviour change, chronic temperature rise and extreme weather events our revenue will be impacted in a long term.
Operating costs	Not yet impacted	We defined increased operational costs as risks in our risk assessment however it is not impacted yet. Due to higher energy prices and expected GHG costs the magnitude of the impact calculated around 4 millions and 2 millions TRY respectively. The time horizon defined as short term.
Capital expenditures / capital allocation	Impacted	We decrease GHG emissions through energy efficiency projects. Those projects are needed because we expect increase in energy prices and GHG emissions. So by doing investment to energy efficiency project we manage our risk. In 2017 we invested an efficiency project in Nigde Plant which financial impact was 80,300,000 TL.
Acquisitions and divestments	Not yet impacted	In 2017 we did not have any acquisitions or divestments however we consider climate change risks and opportunities for new investment decisions and calculate the potential financial impacts.
Access to capital	Not yet impacted	Our climate related risks and opportunities have not factored our access to capitals yet.
Assets	Not yet impacted	Extreme weather events defined as risks in a long term. It is not impacted our financials yet however 460,836 TRY potential financial impact has been calculated.
Liabilities	Not yet impacted	As per our climate related risks and opportunities we did not define risks that liabilities will impact our financial planings. High potential financial impacts are expected in a long term horizon.
Other	Not yet impacted	There is no other parameter defined for financial planning based on climate change.

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

Yes, qualitative

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b)

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b)

Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

No, we do not have a low-carbon transition plan

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

Climate change is integrated into our company's overall business strategy. Sustainability is one of the four main strategic objectives of the Company and it takes part in the Company's Mission Statement. We have Climate Change Strategy and we updated it in 2017. Climate Change Management performance is followed as a part of this objective.

We do evaluate Climate Change Management Risks & Opportunities and integrate them into our core business activities. We develop our strategies, systems, processes and products inline with this. Beyond that we perform R&D activities on that purpose. We developed less pollutant (or emitant) and more environmental products. ÇİMSA is one of the pioneering companies, who has Environmental Product Declaration (EPD) in Turkey. Our product named CEM IV / B(P)32,5R. In addition to this product, Çimsa got two more EPDs to its products named ISIDAÇ 40 - Calcium Aluminate Cement and Çimsa Super White - CEM I 52,5 R - White Portland Cement in 2015. Environmental Product Declaration attached below could be examples. But, CEM IV / B(P)32,5R's Environmental Product Declaration (EPD) validity time is over, so we applied for update the Environmental Product Declaration (EPD). At the meantime; third party assessment was completed.

Our Key Performance Indicators (KPIs) to follow up the climate change performance are alternative fuel rate, electricity consumption, clinker/cement ratio, kiln heat consumption, tCO2e/ton clinker, tCO2e/ton cementitious and absolute gross CO2e values.

They are followed at plant level individually, and consolidated for annual reporting at Çimsa Group level. These KPIs are keys to input in modelling for future scenarios as well as these indicators are uploaded to GNR (Getting the Numbers Right) database of CSI(Cement Sustainability Initiative).

Our strategy for climate change related initiatives are:

-Waste Heat Recuperation (WHR) investments (the waste heat recovery system put into use in April 2012 and the generation of electricity has been started. With the help of project, the waste gas coming from 1 st and 2 nd rotary kilns are transformed to electricity and WHR generates 20% of its electricity consumed in these two lines) With this project, every year CO2 saving are carried out in Scope-2.

-Increasing the use of alternative fuels by HOTDISC System (The HOTDISC is a safe, simple and effective combustion device – a large, moving hearth furnace – integrated with the preheater and calciner systems. It has proven to be the best available technology for substituting calciner fuel with coarse alternative fuels. The HOTDISC combustion device provides the flexibility to burn all kinds of solid waste in sizes up to 1.2 metres in diameter, from sludge or grains to huge whole truck tyres. This eliminates the need for expensive shredding of lumpy waste material.) It is a unique technologic system, only used by Çimsa in Turkey. Every year, the alternative fuel ratio increases.

-Improving energy efficiency and process technology

-Reduction in clinker/cement factor

-In our SNCR (Selective Non Catalytic Reduction) systems, we are using ammonium hydroxide NH4OH (<25% of NH3) instead of urea solution in order not to generate CO2 emission. Please find detailed information on the attachment.

-Cooperation with national and local authorities on environmental issues

-Stakeholder engagement and involvement in the process

C3.1d

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios	Details
Nationally determined contributions (NDCs)	We used scenario analysis for our risk and opportunity assessment. We used company specific data where available and publicly available data for the assumptions. AS per INDC Report of Turkey our country is going to apply 21% reduction from business as usual scenario by 2030. Sectoral allocation is not defined in Turkey that's why we accepted EU ETS caps for the cement industry to define the financial impact of the risk. It is used for all facilities of Çimsa and the data used to calculate potential impact for one year. For the price of the carbon we used the voluntary emission reduction (VER) prices of the projects developed in Turkey. As per markit (www.markit.com) the price of VER is btw 0,4 Euro -1,5 Euro. As per the conservativeness principle of our risk procedure we used the 1,5 Euro as the price of the carbon.
2DS	We used scenario analysis for our risk and opportunity assessment. We used company specific data where available and publicly available data for the assumptions. As per IPCC 5. assessment report projected changes in near term defined as likely with medium confidence. Drough creates opportunity because we are heating our raw materials because of increase in tempreatures our fuel consumption will decrease.
2DS	We used scenario analysis for our risk and opportunity assessment. We used company specific data where available and publicly available data for the assumptions. As per IPCC 5. assessment report extreme changes are expected in the next decades. Acute events like cyclones and floods is a risk that can damage our production sites and also may affect the supply of the raw materials and also transport to costumers. We also have insurance for these type of weather extremes to prevent the damage that we can face.

C4. Targets and performance

C4.1

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

Intensity target

C4.1b

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

Target reference number

Int 1

Scope

Scope 1

% emissions in Scope

94.1

% reduction from baseline year

2.66

Metric

Other, please specify (Metric tons CO2e per ton of clinker)

Base year

2015

Start year

2016

Normalized baseline year emissions covered by target (metric tons CO2e)

864

Target year

2017

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)

73.91

Target status

Expired

Please explain

We have aimed to reduce our greenhouse gasses emissions per ton of clinker from 864 to 841 due to investment for the modification of the Eskişehir Plant and capacity increase at Niğde Plant. The Eskişehir Plant's modification project that's the first line of production has been transformed so as to produce both grey and white clinker. The transformation investment includes raw material transfer lines, new vertical raw mill, new preheater building, calcination, clinker cooling improvement, new vertical cement mill, silos and a new packaging facility. Eskişehir plant modification project has been started up at the beginning of 2018. With the capacity increase investment for Niğde Plant, a new calciner, a new vertical raw mill and a new clinker cooler were installed and the preheater cyclones were replaced with the new ones to decrease CO2 emissions. The investment process of the Niğde Plant has lasted longer than expected. Therefore, we could achieve 73.91% of the assigned target. Our emissions per ton of clinker has decreased to 847 from 864.

% change anticipated in absolute Scope 1+2 emissions

2.51

% change anticipated in absolute Scope 3 emissions

0

Target reference number

Int 2

Scope

Scope 1

% emissions in Scope

94.1

% reduction from baseline year

0.41

Metric

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

Base year

2015

Start year

2016

Normalized baseline year emissions covered by target (metric tons CO2e)

731

Target year

2017

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)

0

Target status

Expired

Please explain

We aimed to reduce our greenhouse gasses emissions per ton of cementitious from 731 to 728 due to investments in Eskişehir and Niğde Plants. The Eskişehir Plant's modification project that's the first line of production has been transformed so as to produce both grey and white clinker. The transformation investment includes raw material transfer lines, new vertical raw mill, new preheater building, calcination, clinker cooling improvement, new vertical cement mill, silos and a new packaging facility. Eskişehir plant modification project has been started up at the beginning of 2018. With the capacity increase investment for Niğde Plant, a new calciner, a new vertical raw mill and a new clinker cooler were installed and the preheater cyclones were replaced with the new ones to decrease CO2 emissions. The investment process of the Niğde Plant has lasted longer than expected and the ratio of additives is decreased due to the cement market conditions. Because of that, we couldn't reach to our assigned target. Our emissions per ton of clinker has increased to 732 from 731.

% change anticipated in absolute Scope 1+2 emissions
0.39

% change anticipated in absolute Scope 3 emissions
0

Target reference number
Int 3

Scope
Scope 1

% emissions in Scope
94.1

% reduction from baseline year
2.2

Metric
Other, please specify (Metric tons CO2e per ton of clinker)

Base year
2015

Start year
2018

Normalized baseline year emissions covered by target (metric tons CO2e)
864

Target year
2025

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)
89.47

Target status
New

Please explain
Energy efficiency and emission reduction is important for Çimsa and put effort to decrease the intensity figure for emissions released per clinker produced. Our intensity figure for 2015 is 864 metric tonnes CO2 / tonnes clinker and we aim to decrease it to 845 metric tonnes CO2 / tonnes clinker. That means 2.20% decrease in intensity figure.

% change anticipated in absolute Scope 1+2 emissions
2.07

% change anticipated in absolute Scope 3 emissions
0

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

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 projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	
To be implemented*	0	0
Implementation commenced*	2	37599
Implemented*	0	0
Not to be implemented	0	

C4.3b

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

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

18495

Scope

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

10950000

Investment required (unit currency – as specified in CC0.4)

109500000

Payback period

4 - 10 years

Estimated lifetime of the initiative

>30 years

Comment

The Eskişehir Plant's modification project which had been announced in 2015 has been finalized and the first line of production has been transformed so as to produce both grey and white clinker. The transformation investment costing 30 million USD includes raw material transfer lines, new vertical raw mill, new preheater building, clinker cooling improvement, new vertical cement mill, silos and a new packaging facility. As a result of this investment, it is aimed to decrease heat consumption and electricity consumption per tonne of clinker.

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

19103

Scope

Scope 1
Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

8030000

Investment required (unit currency – as specified in CC0.4)

80300000

Payback period

4 - 10 years

Estimated lifetime of the initiative

>30 years

Comment

Total investment at Niğde Plant is 22 million USD. With this investment following installations have been done; -The new horizontal raw mill -Preheating tower - New gas cooling tower, -The kiln coating, -Clinker cooling improvement, - converting of electrostatic precipitators into a bag filter, -New clinker cooler electrostatic precipitator. As a result of this investment, it is aimed to decrease heat consumption and electricity consumption per tonne of clinker.

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	One of our sustainability-based duties is to encourage the use of blended cements having high ratio of additives and direct the market. Because by increasing the additives in the cement, CO2 emissions are decreased. Blended cement is manufactured by recycling alternative raw materials of other industries like blast furnace slag, fly ash instead of the cement including high percentage of clinker. For that reason; Çimsa puts importance on R&D activities and sustainable products with its environmental products having less carbon dioxide release due to less clinker amount and its product quality.
Employee engagement	Employees are one of the most important stakeholders of Çimsa. Employees' role is extremely critical in the achievement of company's sustainability objectives both in operation and production processes. The behavioural change of employees will both help the integration of sustainability aspects to core business activities and also achievement of the targets in an effective and efficient way.
Dedicated budget for other emissions reduction activities	Technologies in production processes to be supported by innovative implementations also play a big role in energy savings. Energy Management System ISO 50001 standard ensuring a systematic approach to energy management, has been integrated in our Çimsa Kayseri Plant to mitigate energy losses and decreasing costs. It also helps to implement processes ensuring us to understand our base energy consumption. It ensures us to form our action plans, to determine our objectives to decrease our consumption and to form energy performance indicators, to determine improvement opportunities to develop our energy performance and to determine our priorities.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Product

Description of product/Group of products

We produced Masonry cement type N-S. Masonry cement products require less energy due to high isolation. Masonry cement meets the requirements of ASTM C 91, The Standard Specification for Masonry Cement, for the type specified. Masonry construction is energy efficient, providing thermal mass to help moderate temperature in buildings. Lighter weight units are made with lightweight aggregate to help provide added thermal resistance. In addition, masonry walls can be insulated in a wide variety of ways.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify (ASTM C91)

% revenue from low carbon product(s) in the reporting year

1

Comment

Çimsa puts forth the sustainable product approach with the environmental products having less GHG emissions due to less clinker amount. On the other hand our innovative products which has high isolation capability gives rise to energy efficiency which generates low GHG emissions .

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	23
Pre-calciner	77

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1 2015

Base year end

December 31 2015

Base year emissions (metric tons CO2e)

4495409

Comment

We produce three types of (Grey, White and CAC) cements. From this year onwards, we have decided to disclosure of all emissions occurred from all types of our products which were excluded in previous years. The given gross global Scope 1 emissions figure represents the emissions of all cement types. In line with the GHG Protocol Corporate Standard, base year emissions have been recalculated since organizational boundary has been changed.

Scope 2 (location-based)

Base year start

January 1 2015

Base year end

December 31 2015

Base year emissions (metric tons CO2e)

211105

Comment

We produce three types of (Grey, White and CAC) cements. From this year onwards, we have decided to disclosure of all emissions occurred from all types of our products. Also, ready mixed concrete facilities are included to the boundary, which were excluded in previous years. The given gross global Scope 2 emissions figure represents the emissions of all cement types and ready mixed concrete facilities. In line with the GHG Protocol Corporate Standard, base year emissions have been recalculated since organizational boundary has been changed.

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.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

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?

Row 1

Gross global Scope 1 emissions (metric tons CO2e)

4128853

End-year of reporting period

<Not Applicable>

Comment

We produce three types of (Grey, White and CAC) cements. From this year onwards, we have decided to disclosure of all emissions occurred from all types of our products. The given gross global Scope 1 emissions figure represents the emissions of all cement types which were excluded in previous years.

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

ÇiMSA consumes electricity from the interconnected grid.

C6.3

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

Row 1

Scope 2, location-based

261754

Scope 2, market-based (if applicable)

<Not Applicable>

End-year of reporting period

<Not Applicable>

Comment

We produce three types of (Grey, White and CAC) cements. From this year onwards, we have decided to disclosure of all emissions occurred from all types of our products. Also, ready mixed concrete facilities are included to the boundary, which were excluded in previous years. The given gross global Scope 2 emissions figure represents the emissions of all cement types and ready mixed concrete facilities.

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 relevant but not yet calculated

Relevance of location-based Scope 2 emissions from this source

Emissions are relevant but not yet calculated

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions excluded

Explain why the 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.

C6.5

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

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We focused on establishing data collection system for scope 3 emissions starting with the most relevant categories. This category is planned to be included in the near future.

Capital goods

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We focused on establishing data collection system for scope 3 emissions starting with the most relevant categories. This category is planned to be included in the near future.

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

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

157479.62

Emissions calculation methodology

DEFRA Greenhouse Gas Reporting: Conversion Factors 2018

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

0

Explanation

Fuel-and-energy-related activities include Well to tank (WTT) process emissions of consumed fuels and electricity.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

60409.95

Emissions calculation methodology

The 2006 IPCC Guidelines for National Greenhouse Gas Inventories

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

90

Explanation

The emission of raw material transportation are calculated in this scope. This year, the upstream emission of ready mixed concrete are calculated and disclosed.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

44.17

Emissions calculation methodology

DEFRA Greenhouse Gas Reporting: Conversion Factors 2018

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

0

Explanation

We record our all kind of waste generated in our activities every year and upload the amount of waste according to their waste code to 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

Metric tonnes CO₂e

809.15

Emissions calculation methodology

The Greenhouse Gas Protocol -Corporate Value Chain (Scope 3) Accounting and Reporting Standard

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

0

Explanation

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

Metric tonnes CO2e

896.13

Emissions calculation methodology

The Greenhouse Gas Protocol -Corporate Value Chain (Scope 3) Accounting and Reporting Standard

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

100

Explanation

Employee commuting is realized by scheduled buses and minibuses. Since employee number carried in each trip is assumed as equal to full capacity of vehicles, this calculation may include a little overestimation.

Upstream leased assets

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We focused on establishing data collection system for scope 3 emissions starting with the most relevant categories. This category is planned to be included in the near future.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

60629

Emissions calculation methodology

The 2006 IPCC Guidelines for National Greenhouse Gas Inventories

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

80

Explanation

%50 of sold goods are delivered to customer as exwork or FOB which transportation from Çimsa plants to customer locations are controlled by customer. Only CO2 emissions due to the inland transport are included in that report. For exported goods, overseas activities were kept as out of scope in 2016 due to complexity of supply chain. This year, the downstream emission of ready mixed concrete are calculated and disclosed.

Processing of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We focused on establishing data collection system for scope 3 emissions starting with the most relevant categories. This category is planned to be included in the near future.

Use of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We focused on establishing data collection system for scope 3 emissions starting with the most relevant categories. This category is planned to be included in the near future.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We focused on establishing data collection system for scope 3 emissions starting with the most relevant categories. This category is planned to be included in the near future.

Downstream leased assets

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We focused on establishing data collection system for scope 3 emissions starting with the most relevant categories. This category is planned to be included in the near future.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

ÇİMSA has no franchises.

Investments

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We focused on establishing data collection system for scope 3 emissions starting with the most relevant categories. This category is planned to be included in the near future.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

No other upstream emission is evaluated.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

No other downstream emission is evaluated.

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered 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

0.002946

Metric numerator (Gross global combined Scope 1 and 2 emissions)

4390607

Metric denominator

unit total revenue

Metric denominator: Unit total

1490579874

Scope 2 figure used

Location-based

% change from previous year

2.66

Direction of change

Decreased

Reason for change

We produce three types of (Grey, White and CAC) cements. From this year onwards, we have decided to disclosure of all emissions occurred from all types of our products and ready mixed concrete. The given gross global Scope 1 and Scope 2 emissions figure represents the emissions of all cement types and ready mixed concrete facilities. Therefore, total emissions released in 2017 is increased 23.98% compared to the previous year because of scope extension. The total turnover of 2017 was increased 27.37%. As a result of this, the intensity was decreased 2.66% comparing to the previous year.

Intensity figure

4287.7

Metric numerator (Gross global combined Scope 1 and 2 emissions)

4390607

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

1024

Scope 2 figure used

Location-based

% change from previous year

10.06

Direction of change

Increased

Reason for change

We produce three types of (Grey, White and CAC) cements. From this year onwards, we have decided to disclosure of all emissions occurred from all types of our products and ready mixed concrete. The given gross global Scope 1 and Scope 2 emissions figure represents the emissions of all cement types and ready mixed concrete facilities. Therefore, total emissions released in 2017 is increased 23.98% compared to the previous year because of scope extension. The number of FTE was increased 12.65% since ready mixed concrete employees are included. As a result of this, the intensity was increased 10.06% comparing to the previous year.

(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	0.847	0.822	0.052
Cement equivalent	0.736	0.714	0.045
Cementitious products	0.732	0.711	0.045
Low-CO2 materials	0	0	0

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

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
CH4	2527	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	4045	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	4128853

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	2968598
White Cement	1129696
Calcium Aluminate Cement (CAC)	30559

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	1086768	36.8	34.633333
Eskişehir Cement Plant	884374	39.78	30.520556
Kayseri Cement Plant	655635	38.75	35.549791
Niğde Cement Plant	341410	37.95	34.686367
Mersin Cement Plant - White Cement	1129696	36.8	34.633333
Mersin Cement Plant - CAC	30559	36.8	34.633333
Ankara Clinker Grinding Plant	411	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	4128853	4041150	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 generation 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 (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)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Turkey	261754	0	0	44085

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 emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Grey Cement	182525	0
White Cement	74326	0
Calcium Aluminate Cement (CAC)	2649	0
Ready Mixed Concrete	2254	0

C7.6b

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

Facility	Scope 2 location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Mersin Cement Plant - Grey Cement	48240	0
Eskişehir Cement Plant	62156	0
Kayseri Cement Plant	39769	0
Niğde Cement Plant	25678	0
Ankara Clinker Grinding Plant	6682	
Mersin Cement Plant White Cement	74326	
Mersin Cement Plant CAC Cement	2649	
Ready Mixed Concrete	2254	

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	261754	0	This figure includes grey, white and CAC cement production and ready mixed concrete 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 (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	There is no renewable energy consumption.
Other emissions reduction activities	113890	Decreased	3.2	Gross global emissions (scope 1 and scope 2) are increased 24% since boundary is extended. However, if it is compared with the same boundary of previous year, gross global emissions are decreased due to increasing of alternative fuels usage and decreasing clinker production during the investment period. Emission reduction activities decreased 3.2 of our total emissions.
Divestment	0	No change	0	There is no divestment.
Acquisitions	0	No change	0	There is no acquisitions.
Mergers	0	No change	0	There is no mergers.
Change in output	276325	Decreased	7.8	Gross global emissions (scope 1 and scope 2) are increased 24% since boundary is extended. However, production of less cementitious decreased 7.8% of our emissions. The particular part of our emissions are released during the production process of cementitious. Our production of cementitious has decreased 11.5% during the reporting year and it is resulted in 7.8% decrease in our emissions.
Change in methodology	0	No change	0	There is no methodology change.
Change in boundary	1239484	Increased	35	Gross global emissions (scope 1 and scope 2) are increased 24% since boundary is extended. We produce three types of (Grey, White and CAC) cements. From this year onwards, we have decided to disclosure of all emissions occurred from all types of our products. Also, ready mixed concrete facilities are included to the boundary, which were excluded in previous years. This scope extension increased by 35% of our emissions.
Change in physical operating conditions	0	No change	0	There is no change in physical operating conditions.
Unidentified	0	No change	0	There is no unidentified.
Other	0	No change	0	There is no other reason.

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 40% but less than or equal to 45%

C8.2

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

Indicate whether your organization undertakes this energy-related activity	
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 MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	6763618	6763618
Consumption of purchased or acquired electricity	<Not Applicable>	0	554564	554564
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>	44085	<Not Applicable>	44085
Total energy consumption	<Not Applicable>	44085	7318182	7362267

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)	4880022
Consumption of purchased or acquired electricity	<Not Applicable>	549788
Consumption of other purchased or acquired energy (heat, steam and/or cooling)	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	5429810

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 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.

Fuels (excluding feedstocks)

Other, please specify (Coal + Anthracite)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

239377

MWh fuel consumed for the 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>

Fuels (excluding feedstocks)

Petroleum Coke

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

4156058

MWh fuel consumed for the 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>

Fuels (excluding feedstocks)

Residual Fuel Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

17217

MWh fuel consumed for the 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>

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

33602

MWh fuel consumed for the 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>

Fuels (excluding feedstocks)

Lignite Coal

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

140239

MWh fuel consumed for the 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>

Fuels (excluding feedstocks)

Industrial Wastes

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

288808

MWh fuel consumed for the 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>

Fuels (excluding feedstocks)

Other, please specify (Other Fossil)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

4721

MWh fuel consumed for the 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>

C-CE8.2c

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

Fuels (excluding feedstocks)

Other, please specify (Coal + Anthracite)

Heating value

LHV

Total MWh fuel consumed for cement production activities

1415403

MWh fuel consumed at the kiln

1415403

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>

Fuels (excluding feedstocks)

Petroleum Coke

Heating value

LHV

Total MWh fuel consumed for cement production activities

4156058

MWh fuel consumed at the kiln

4156058

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>

Fuels (excluding feedstocks)

Residual Fuel Oil

Heating value

LHV

Total MWh fuel consumed for cement production activities

708806

MWh fuel consumed at the kiln

708806

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>

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV

Total MWh fuel consumed for cement production activities

899623

MWh fuel consumed at the kiln

49583

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

850040

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Lignite Coal

Heating value

LHV

Total MWh fuel consumed for cement production activities

140239

MWh fuel consumed at the kiln

140239

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>

Fuels (excluding feedstocks)

Industrial Wastes

Heating value

LHV

Total MWh fuel consumed for cement production activities

288808

MWh fuel consumed at the kiln

288808

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>

Fuels (excluding feedstocks)

Other, please specify (Other fossil)

Heating value

LHV

Total MWh fuel consumed for cement production activities

4721

MWh fuel consumed at the kiln

4721

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>

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Industrial Wastes

Emission factor

83

Unit

kg CO2 per GJ

Emission factor source

WBCSD Cement Sustainability Initiative (CSI) Cement CO2 and Energy Protocol Version 3.1

Comment

The Cement CO2 and Energy Protocol is intended as a tool for cement companies worldwide. It provides a harmonized methodology for calculating CO2 emissions, with a view to reporting these emissions for various purposes.

Lignite Coal

Emission factor

101

Unit

kg CO2 per GJ

Emission factor source

WBCSD Cement Sustainability Initiative (CSI) Cement CO2 and Energy Protocol Version 3.1

Comment

The Cement CO2 and Energy Protocol is intended as a tool for cement companies worldwide. It provides a harmonized methodology for calculating CO2 emissions, with a view to reporting these emissions for various purposes.

Natural Gas

Emission factor

56.1

Unit

kg CO2 per GJ

Emission factor source

WBCSD Cement Sustainability Initiative (CSI) Cement CO2 and Energy Protocol Version 3.1

Comment

The Cement CO2 and Energy Protocol is intended as a tool for cement companies worldwide. It provides a harmonized methodology for calculating CO2 emissions, with a view to reporting these emissions for various purposes.

Petroleum Coke

Emission factor

92.8

Unit

kg CO2 per GJ

Emission factor source

WBCSD Cement Sustainability Initiative (CSI) Cement CO2 and Energy Protocol Version 3.1

Comment

The Cement CO2 and Energy Protocol is intended as a tool for cement companies worldwide. It provides a harmonized methodology for calculating CO2 emissions, with a view to reporting these emissions for various purposes.

Residual Fuel Oil

Emission factor

77.4

Unit

kg CO2e per GJ

Emission factor source

WBCSD Cement Sustainability Initiative (CSI) Cement CO2 and Energy Protocol Version 3.1

Comment

The Cement CO2 and Energy Protocol is intended as a tool for cement companies worldwide. It provides a harmonized methodology for calculating CO2 emissions, with a view to reporting these emissions for various purposes.

Other

Emission factor

80

Unit

kg CO2e per GJ

Emission factor source

WBCSD Cement Sustainability Initiative (CSI) Cement CO2 and Energy Protocol Version 3.1

Comment

The Cement CO2 and Energy Protocol is intended as a tool for cement companies worldwide. It provides a harmonized methodology for calculating CO2 emissions, with a view to reporting these emissions for various purposes.

C8.2e

(C8.2e) 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	44085	44085	0	0
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C-CE8.2e

(C-CE8.2e) 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	44085	44085
Heat	0	0
Steam	0	0

C8.2f

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

Basis for applying a low-carbon emission factor

Off-grid energy consumption from an on-site installation or through a direct line to an off-site generator owned by another company

Low-carbon technology type

Other low-carbon technology, please specify (Waste Heat Recovery (WHR))

MWh consumed associated with low-carbon electricity, heat, steam or cooling

44085

Emission factor (in units of metric tons CO2e per MWh)

0

Comment

We produce our own electricity from the waste heat gases of first and second production kilns in Mersin Cement Plant. By this method, we generate approximately 20% of our electricity spend in these two production lines. During the reporting year, we generate 44,085 MWh electricity and all is used for our own production processes. By establishing and using Waste Heat Recovery (WHR) System, we saved 20,808 tCO2e in 2017. In WHR System, there is no combustion or process releasing GHGs, therefore the emission factor is zero.

C9. Additional metrics

C9.1

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

C-CE9.3a

(C-CE9.3a) Report your organization's split between white and grey cement production.

	Percentage of total production (%)
White cement	
Grey cement	

C-CE9.3b

(C-CE9.3b) Report your organization's clinker production and capacity percentage figures by kiln type.

	Percentage of metric tons of clinker production (%)	Percentage of metric tons of clinker capacity (%)	Comment
Dry kiln			
Semi-dry kiln			
Semi-wet kiln			
Wet kiln			
Shaft kiln			
Long kiln			
Other			

C-CE9.3c

(C-CE9.3c) Report your organization's cement-related production outputs and capacities by product.

	Production (metric tons)	Capacity (metric tons)
Limestone		
Gypsum		
Clinker		
Cement equivalent		
Cementitious products		
Low-CO ₂ materials		
Lime		

C-CE9.6

(C-CE9.6) Disclose your organization's low-carbon investments for cement production activities.

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	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.

Scope

Scope 1

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

EY_Çimsa_Assurance statement for 2018 CDP response_ENG.pdf

Page/ section reference

One full page

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

EY_Çimsa_Assurance statement for 2018 CDP response_ENG.pdf

Page/ section reference

One full page

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

99

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?

No, we do not verify any other climate-related information reported in our CDP disclosure

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, and we do not anticipate being regulated in the next three years

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?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

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

No, we do not engage

C12.1d

(C12.1d) Why do you not engage with any elements of your value chain on climate-related issues, and what are your plans to do so in the future?

As ÇiMSA, we are putting great importance on sustainability and climate change. In parallel to our vision we took many pioneering steps, such as being one the leading companies in sustainability reporting, publishing one of the first integrated report in Turkey and the first integrated report in real sector, publishing our climate change strategy, sponsoring CDP Turkey Climate Change Programme, We are trying to continuously improve our sustainability management system. We are willing to include our value chain step by step in the future.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers

Trade associations

Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Mandatory carbon reporting	Support	The mandatory carbon reporting regulation in Turkey came into the force in May 2014. 2017 GHG reports of our cement plants have been prepared, then verified and submitted to Ministry of Environment and Urbanisation. Our GHG reports have been evaluated for compliance.	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. On this purpose; we are working together with World Business Council of Sustainable Development - Cement Sustainability Initiative (WBCSD CSI) as a member. WBCSD CSI is one of the world's pioneering organization on sustainability in 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 ready. We are open and willing to share our accumulated experiences as well as by giving our comments with legal authorities to access to the most accurate and efficient reporting system. In addition to that we are working together with Turkish Cement Manufacturers Association (TCMA) on this purpose.
Other, please specify (Climate change adaptation)	Support with minor exceptions	We express our opinion through Turkish Industry and Business Association (TUSİAD) and Turkish Cement Manufacturers Association (TCMA) about climate change. The mandatory carbon reporting regulation in Turkey came into the force 17th of May 2014. We engage with the policy makers to improve the implementation of the law. An example is given at the proposed solution part.	As ÇİMSA; we support the Climate Change Adaptation and Mandatory Carbon Reporting legislation with 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.
Other, please specify (Reducing the use of fossil fuels)	Support	Cement industry is an energy intensive industry and we aim to reduce the 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.	Together with Turkish Cement Manufacturers Association (TCMA), our, 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.
Other, please specify (Reducing the use of fossil fuels)	Support	Cement industry is an energy intensive industry and we aim to reduce the 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. At the current situation; the use of municipal dried sewage treatment sludge and SRF (Solid Recovery Fuel) produced from the municipal solid wastes. We are discussing to establish a feasible system to use these wastes as alternative fuels with Ministry of Environment and Urbanisation.	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 the 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.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

Turkish Cement Manufacturers Association (TCMA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

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.

How have you, or are you attempting to, influence the position?

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 General Manager of ÇİMSA. Therefore, we take an active role in pioneering the cement industry on sustainability in Turkey. Çimsa's Environment and Resource Recovery Director is the chairman of the Environment and Climate Change Committee of TCMA. He shares his accumulated experience and fosters the use of alternative raw materials and alternative fuels which is important for reducing CO2 emissions at cement industry and in 2017 he made a presentation on the behalf of TCMA at COP23 in Bonn on the best practices in the Turkish Cement Industry to decrease CO2 Emissions.

Trade association

Business and Sustainable Development Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Business and Sustainable Development Association is a part of global organization, World Business Council for Sustainable Development (WBCSD). It performs to foster sustainable development and raise the awareness. It tries to develop action plans for switching to Sustainable Business.

How have you, or are you attempting to, influence the position?

Çimsa is a member of 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 cement industry for the further plans.

Trade association

Cement Sustainability Initiative

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Core members of the Cement Sustainability Initiative (CSI) include cement companies who are also members of the World Business Council for Sustainable Development (WBCSD). They manage the CSI, maintain the CSI 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 the CSI's work

How have you, or are you attempting to, influence the position?

We engage with CSI and search for the solutions to mitigate and adapt to our Climate Change effects. We also discuss about legislations and also gather opinions from pioneering and peer companies all around the World. We actively involve CSI's efforts on this purpose and we actively involved to the 11th CSI Forum in New Delhi, India. 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.

Trade association

Sabancı Holding

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Çimsa is a group company of Sabancı Holding and there is an Environment Committee established by the members from all Sabancı Group companies.

How have you, or are you attempting to, influence the position?

Environment and Resource Recovery Director is also a member and reflects its own and industries opinions. Common solutions are searched for environmental issues and legislations.

Trade association

Association of Turkish Construction Material Producers (IMSAD)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

IMSAD is a non-governmental organization representing the construction industry domestically and abroad. IMSAD sustainability committee focuses on 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 Sustainability Committee which conducts above mentioned duties precisely.

How have you, or are you attempting to, influence the position?

Environment Executive is also member and shares its own improvement works in sustainability meeting, contributes IMSAD sustainability report, follows all construction industry working about sustainability issues for sustainability world.

Trade association

TUSIAD

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

TUSIAD (Turkish Industry and Business Association) is 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.

How have you, or are you attempting to, influence the position?

Environment and Resource Recovery Director is actively involving into TUSIAD's Environment and Climate Change Committee. TUSIAD prepared its Position Paper on the Material Issues of Fighting Against Climate Change. Çimsa is willing to convey its accumulated experience on the transformation of cement industry for Low Carbon Economy in Turkey.

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

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 into 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.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Our company strategy is to track the environmental legislation of climate change continuously and attend platforms such as, Climate Change Committees of Ministry of Environment and Urbanization, TCMA (Turkish Cement Manufacturers Association) and Association of Turkish Construction Material Producers (IMSAD).

We take an active role especially in associations on sustainability, climate change and environmental pillars.

We develop common solution about climate change and environmental issues, share studies, learnings and enhancements in production processes; share targets about climate change inline with all companies related to the Sabancı Holding.

Turkish Cement Manufacturers Association, in cement industry, efforts are driven to decrease GHG emissions. Most important pillars are; reduction of kiln heat consumption, reduction of electricity consumption, increase of alternative fuels by reducing the use of fossil fuels and increase of cement additives.

Also Çimsa becomes the first and only Turkish company joining Cement Sustainability Initiative (CSI). As sustainability committee members, we take part in task forces of CSI since 2013.

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 voluntary sustainability report

Status

Complete

Attach the document

Cimsa 2017 EY report_EN.pdf

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

C14. 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.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Technical Officer	Chief Operating Officer (COO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

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