

Module: Introduction**Page: Introduction****CC0.1****Introduction**

Please give a general description and introduction to your organization.

Sabancı Holding is the parent company of the Sabancı Group; Turkey's leading industrial and financial conglomerate. The main business units include financial services, energy, retail, cement, automotive, tire & tire reinforcement materials.

Akçansa, a collaborate foundation of Sabancı Holding and HeidelbergCement, is a leader company in Turkish market in cement, ready-mixed concrete and aggregate business and jetty activities.

Akçansa, with its sustainability vision, through its products of world quality standards, environmentally friendly identity, comprehension of superior service and facilities with state of art technology, meets 10% of Turkey's cement demand and 16% of Turkey's cement and clinker export.

Akçansa's history goes back to the founding of Akçimento in 1967. The company became the biggest cement producer of Turkey through the merger of Akçimento with Çanakkale Cement in 1996. Today, H.Ö. Sabancı Holding A.Ş. and HeidelbergCement AG equally own 79.4% of Akçansa's shares. The general public owns the remaining 20.6% shares of the company. The stocks are traded on the İstanbul Stock Exchange (ISE) with AKCNS symbol.

Partnership with HeidelbergCement, one of the global players of the cement sector, creates synergies and facilitates the transfer of knowledge and Akçansa's access to international markets. The Sabancı brand assures the superior service quality of the company.

For further information about company profile and annual report, please visit www.akcansa.com.tr

CC0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Tue 31 Jan 2012 - Thu 31 Jan 2013

CC0.3**Country list configuration**

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response.

Select country

Turkey

CC0.4**Currency selection**

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

TRY

CC0.6**Modules**

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors, companies in the oil and gas industry, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco sectors should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Further Information

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Individual/Sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

In addition to the Chairman the Board of Directors Mr. Mehmet Göçmen, the General Manager of Akçansa Mr. Hakan Gürdal is the highest level of direct responsibility for climate change.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

| Who is entitled to benefit from these incentives? | The type of incentives | Incentivized performance indicator |
|---|------------------------|---|
| All employees | Monetary reward | Attainment of targets related with the climate change |

Further Information

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

| Frequency of monitoring | To whom are results reported | Geographical areas considered | How far into the future are risks considered? | Comment |
|--------------------------------|---|--|---|---------|
| Six-monthly or more frequently | Individual/Sub-set of the Board or committee appointed by the Board | Where Akçansa cement plants are located, thus Turkey Çanakkale, Büyükçekmece and Ladik region. | > 6 years | |

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

Risk and opportunities are defined with a workshop performed with top management and medium management participation, considering the global and local trends and threats.

CC2.1c

How do you prioritize the risks and opportunities identified?

The prioritization is done according to the risk type, its probability and the financial magnitude.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

| Main reason for not having a process | Do you plan to introduce a process? | Comment |
|--------------------------------------|-------------------------------------|---------|
| | | |

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

In order to tackle with climate change Akçansa is committed to reduce CO2 emissions. Akçansa adopts, as suggested by WBCSD Cement Sustainability Initiative, a tripartite strategy composed of energy efficiency in production, preferring alternative energy sources, focusing on low-clinker content products developed with alternative raw materials. The outcomes are energy efficiency obtained at the plants, new products provided to the market, resource efficiency, shifting to the alternative fuels instead of fossil fuel.

Akçansa with this clear strategy target to create leadership and awareness in the construction materials market and cement market in Turkey.

CC2.2b

Please explain why climate change is not integrated into your business strategy

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers

Other

CC2.3a

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 | Akçansa engages in contributing in the issuance of mandatory carbon reporting regulation which includes cement industry emission reporting. Akçansa environmental department contributes in the preparation of the content of the reporting guideline, to ensure cement industry calculates and report in a correct method. | To issue MRV (monitoring, reporting and verification) regulation in parallel with EU legislation. |

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

| Trade association | Is your position on climate change consistent with theirs? | Please explain the trade association's position | How have you, or are you attempting to, influence the position? |
|--------------------------|---|--|--|
|--------------------------|---|--|--|

CC2.3d

Do you publically disclose a list of all the research organizations that you fund?

CC2.3e

Do you fund any research organizations to produce or disseminate public work on climate change?

CC2.3f

Please describe the work and how it aligns with your own strategy on climate change

CC2.3g

Please provide details of the other engagement activities that you undertake

Akçansa is closely working with the technical universities (İTÜ, Sabancı University) and R&D institute TÜBİTAK to create and to optimize low carbon product and resource efficiency solutions.

CC2.3h

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?

Akçansa puts 2020 sustainability ambitions which covers CO2 reduction, low carbon product, Environmental Product Declaration targets, which provide clear direction for the activities.

Executive committee and the sustainability committee periodically check the progress. The results are shared with the stakeholders through sustainability report available on Akçansa web site.

Additionally, all personal targets available in the scorecards are connected to the corporate sustainability targets.

CC2.3i

Please explain why you do not engage with policy makers

Further Information

CC3.1

Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?

Intensity target

CC3.1a

Please provide details of your absolute target

| ID | Scope | % of emissions in scope | % reduction from base year | Base year | Base year emissions (metric tonnes CO2e) | Target year | Comment |
|----|-------|-------------------------|----------------------------|-----------|--|-------------|---------|
| | | | | | | | |

CC3.1b

Please provide details of your intensity target

| ID | Scope | % of emissions in scope | % reduction from base year | Metric | Base year | Normalized base year emissions | Target year | Comment |
|------|---------|-------------------------|----------------------------|------------------------------|-----------|--------------------------------|-------------|------------------------------|
| Int1 | Scope 1 | 100% | 7.5% | Other: kg CO2/ton of clinker | 1990 | 914 | 2015 | The longterm target is 2020. |

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

| ID | Direction of change anticipated in absolute Scope 1+2 emissions at target completion? | % change anticipated in absolute Scope 1+2 emissions | Direction of change anticipated in absolute Scope 3 emissions at target completion? | % change anticipated in absolute Scope 3 emissions | Comment |
|------|---|--|---|--|---|
| Int1 | Decrease | 5 | No change | 0 | Akçansa installed a new cement kiln line over the years and also bought a new cement plant which resulted in an increased production capacity, therefore there is an increase in absolute value compared to 1990. |

CC3.1d

For all of your targets, please provide details on the progress made in the reporting year

| ID | % complete (time) | % complete (emissions) | Comment |
|------|-------------------|------------------------|---------|
| Int1 | 90% | 65% | |

CC3.1e

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

CC3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

CC3.2a

Please provide details of how the use of your goods and/or services directly enable GHG emissions to be avoided by a third party

Akcansa is co-processing waste as secondary raw materials and fuel resources.

This co-business contributes in third parties to minimize their negative impact on environment and create solution to them in controlling GHG emissions especially generating from waste landfilling.

On the other hand, our innovative products increasing the heat isolation capability of the construction, results in energy efficiency of the buildings thus ensures GHG emissions to be reduced.

The effects of our low carbon products are calculated based on Life Cycle Analysis, Environmental Product Declarations are approved and shared with the stakeholders through our web site.

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

| Stage of development | Number of projects | Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *) |
|---------------------------|--------------------|--|
| Under investigation | | |
| To be implemented* | | |
| Implementation commenced* | 2 | 100000 |
| Implemented* | 10 | 50000 |
| Not to be implemented | | |

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

| Activity type | Description of activity | Estimated annual CO2e savings (metric tonnes CO2e) | Annual monetary savings (unit currency - as specified in CC0.4) | Investment required (unit currency - as specified in CC0.4) | Payback period | Estimated lifetime of the initiative, years | Comment |
|--------------------------------|---|--|---|---|----------------|---|---------|
| Low carbon energy installation | Waste heat recovery power generation plant | 45000 | | 40000000 | 1-3 years | 20 years | |
| Energy efficiency: Processes | Replacement in electrical equipment with efficient types, use of frequency convertors (10 projects at 3 plants) | 50000 | 1000000 | 30000000 | | 20 years | |
| Product design | Low clinker cement | 55000 | 0 | 0 | <1 year | 10 years | |

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

| Method | Comment |
|---|---|
| Dedicated budget for energy efficiency | Several energy saving gaps have been determined, accordingly necessary budget for heat and electrical energy optimization projects are planned for each plant. |
| Dedicated budget for low carbon product R&D | Low carbon products both in cement and ready-mixed business line are developed, necessary budgeting is planned for the R&D projects and or necessary revisions in the existing production systems. |
| Partnering with governments on technology development | Cooperation with institutes and governmental bodies to develop innovative concrete products, to study use mineralizer to optimize calorific energy need and to enhance cement product resistance. This will bring considerable clinker savings, thus process CO2 will be minimized. |
| Employee engagement | Thanks to the vision of the Board, the employees are committed to the company targets. |

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

Page: CC4. Communication

CC4.1

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 | Page/Section reference | Attach the document |
|---|--|---|
| In voluntary communications (underway) – previous year attached | pp 7-8 / Progress in 2020 Sustainability Ambitions | https://www.cdp.net/sites/2014/33/35233/Investor CDP 2014/Shared Documents/Attachments/CC4.1/Akcansa Sustainability Report 2010-2011.pdf |

Further Information

The Sustainability Report which include 2012 and 2013 progresses is in the approval stage, the report will be available on our web site in July 2014. We would appreciate if you could consider the most actual report as climate change performance communication document.

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

CC5.1a

Please describe your risks driven by changes in regulation

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--|---|---|--------------|-------------------------|-------------|---------------------|---|---|------------------------|
| International agreements | Due to the delay in ratification of Kyoto Protocol, Turkish Government could not determine clearly the sectoral position. In near future, the negotiations could have driving force against national actions. | Increased capital cost | 3 to 6 years | Direct | Likely | High | If not correctly managed, it may result in the decrease in production capacity. | - Contribution in Correct calculation of GHG reduction capacities - Lobbying in regulations which will ensure higher accessibility of low carbon and/or biomass type alternative fuels in the market, which will substitute fossil fuels. | - Human ressource cost |
| Lack of regulation | There is no any national emission calculation standard nor regulation available yet. | Other: Additional cost due to deviations from target. | Up to 1 year | Direct | Very likely | Medium | If not correctly managed, it may result in the decrease in production capacity. | - If not correctly managed, it may result in the decrease in production capacity. | - Human ressource cost |
| Other regulatory drivers | Fuel, energy and other regulatory arrangements are under discussion. | Increased operational cost | 1 to 3 years | Indirect (Supply chain) | Likely | Medium | | | |
| Product labeling regulations and standards | Requirement for Environmental Product Declaration. | Reduced demand for goods/services | 1 to 3 years | Indirect (Supply chain) | Likely | Low | - Label certification and approval costs | Akçansa is mostly prepared for product labeling i.e. Environmental Product Declaration certified by IBU Institute. Akçansa JV of HeidelbergCement is also uses internal software for LifeCycle | Certification cost |

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|-------------|-------------|------------------|-----------|------------------|------------|---------------------|----------------------------------|---|--------------------|
| | | | | | | | | Assesement developed for cement and concrete. | |

CC5.1b

Please describe your risks that are driven by change in physical climate parameters

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--------------------------------------|---|----------------------------|--------------|-------------------------|------------|---------------------|----------------------------------|---|-------------------------------|
| Change in mean (average) temperature | Cement production highly depends on natural resources as raw materials and water use. | Increased operational cost | 1 to 3 years | Indirect (Supply chain) | Likely | Medium-high | Higher operational cost | - Research on other alternative ressources, R&D studies are conducted with the universities and institutes. - Alternative water sources are studies i.e. seawater desalination plants. - Wastewater recovery systems are already installed | - R&D cost - Operational cost |

CC5.1c

Please describe your risks that are driven by changes in other climate-related developments

| Risk driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated Financial Implications | Management method | Cost of management |
|-------------|---|----------------------------|--------------|-------------------|------------|---------------------|---|---|--|
| Reputation | The cement plants are known to be among the highest CO2 emitting industries. Future trends and awareness may affect the company's reputation. | Wider social disadvantages | 3 to 6 years | Indirect (Client) | Likely | Medium | - Decrease in the interest of sustainable investors | - Stakeholder engagement activities are already started. - Preparation in sustainability stock indexes. - Akçansa is positioning itself not only as a cement producer but also as waste recycler, energy recovery solution. | - Marketing, stakeholder engagement activities |

CC5.1d

Please explain why you do not consider your company to be exposed to risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

Please explain why you do not consider your company to be exposed to risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your opportunities that are driven by changes in regulation

| Opportunity driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--------------------------|---|---------------------------|--------------|-----------------|------------|---------------------|--|---------------------|--|
| International agreements | Akçansa with the future international agreements, will switch to a low carbon economy | Reduced operational costs | 3 to 6 years | Direct | Likely | Medium-high | - Investment cost for the changes in the plant equipment - Higher interests with | New product designs | R&D costs Labelling certification costs Some additional changes in the plant |

| Opportunity driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--|---|--------------------------------|--------------|-------------------------|------------|---------------------|---|---------------------|--|
| | model. | | | | | | new and products | | |
| Product labeling regulations and standards | Akçansa with this driver, can apply Life Cycle Analysis approach. By this way, may optimize its operations. | Reduced operational costs | 1 to 3 years | Indirect (Supply chain) | Likely | Medium | - Investment cost for the changes in the plant equipment - Higher interests with new and products | New product designs | R&D costs Labelling certification costs Some additional changes in the plant |
| Cap and trade schemes | Low carbon and environmental friendly projects and applications provide advantage in tax compensation. | New products/business services | 3 to 6 years | Direct | Likely | Medium | - Investment cost for the changes in the plant equipment | New product designs | R&D costs Labelling certification costs Some additional changes in the plant |

CC6.1b

Please describe the opportunities that are driven by changes in physical climate parameters

| Opportunity driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|----------------------------|--|---------------------------|--------------|-----------------|------------|---------------------|----------------------------------|----------------------------------|--------------------|
| Induced changes in natural | Physical changes have mostly negative impact for all construction and cement | Reduced operational costs | 1 to 3 years | Direct | Likely | Medium-high | Lower water cost | Producing own water by sea water | - 5 mio Euro |

| Opportunity driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--------------------|---|------------------|-----------|------------------|------------|---------------------|----------------------------------|--------------------|--------------------|
| resources | industry; however we may have a minor opportunity for being more prepared than our competitors. Also physical changes may bring the need for alternative construction solutions, material and applications which can be benefited as terms of product design. | | | | | | | desalination plant | |

CC6.1c

Please describe the opportunities that are driven by changes in other climate-related developments

| Opportunity driver | Description | Potential impact | Timeframe | Direct/ Indirect | Likelihood | Magnitude of impact | Estimated financial implications | Management method | Cost of management |
|--------------------|---|-----------------------|--------------|-------------------|------------|---------------------|----------------------------------|---|--------------------|
| Reputation | Akçansa's commitment for climate change adaptation and mitigation activities will impact the reputation among stakeholders. | Wider social benefits | 3 to 6 years | Indirect (Client) | Likely | Medium | Higher interest of stakeholders | Communication of climate change initiatives Leadership in the market Awareness raising activities | Ressource cost |

CC6.1d

Please explain why you do not consider your company to be exposed to opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

Please explain why you do not consider your company to be exposed to opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

| Base year | Scope 1 Base year emissions (metric tonnes CO2e) | Scope 2 Base year emissions (metric tonnes CO2e) |
|-----------------------------------|--|--|
| Sat 31 Dec 2011 - Mon 31 Dec 2012 | 5660019 | 306419 |

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

| Please select the published methodologies that you use |
|---|
| IPCC Guidelines for National Greenhouse Gas Inventories, 2006 |

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

| Gas | Reference |
|-----|--|
| CO2 | IPCC Fourth Assessment Report (AR4 - 100 year) |

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

| Fuel/Material/Energy | Emission Factor | Unit | Reference |
|----------------------|-----------------|------|-----------|
|----------------------|-----------------|------|-----------|

Further Information

Please see attached the excel spreadshee for the emission factors

Attachments

[https://www.cdp.net/sites/2014/33/35233/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/Fuel factors 2012.xlsx](https://www.cdp.net/sites/2014/33/35233/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/Fuel%20factors%202012.xlsx)

Page: CC8. Emissions Data - (31 Jan 2012 - 31 Jan 2013)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Equity share

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

5759761

CC8.3

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

318496

CC8.4

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

CC8.4a

Please 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 | Relevance of Scope 1 emissions from this source | Relevance of Scope 2 emissions excluded from this source | Explain why the source is excluded |
|---|---|--|---|
| Ready mix concrete plants and aggregate plants are not included | No emissions from this source | Emissions are not relevant | This source does not emit Scope 1 emission, only Scope 2. Scope 2 (indirect energy use) is relatively very low compared to cement plants. |

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

| Scope 1 emissions: Uncertainty range | Scope 1 emissions: Main sources of uncertainty | Scope 1 emissions: Please expand on the uncertainty in your data | Scope 2 emissions: Uncertainty range | Scope 2 emissions: Main sources of uncertainty | Scope 2 emissions: Please expand on the uncertainty in your data |
|--------------------------------------|--|--|--------------------------------------|--|--|
| Less than or equal to 2% | Assumptions | Scope 1 emissions are reported based on calculations. But raw data used in the calculations such as coal use, clinker production etc. are continuously measured and reported. Operational data are cross checked with financial reports as well. | Less than or equal to 2% | Assumptions | Scope 2 emissions are reported based on electrical energy use and electricity emission factor calculations. Electrical energy values are continuously measured and reported. Operational data are cross checked with financial reports as well. Turkey does not have any regional emission factor, therefore we are using EIA report Turkey emission factor. |

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

No third party verification or assurance

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

| Type of verification or assurance | Attach the statement | Page/section reference | Relevant standard | Proportion of reported Scope 1 emissions verified (%) |
|-----------------------------------|----------------------|------------------------|-------------------|---|
|-----------------------------------|----------------------|------------------------|-------------------|---|

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

| Regulation | % of emissions covered by the system | Compliance period | Evidence of submission |
|------------|--------------------------------------|-------------------|------------------------|
|------------|--------------------------------------|-------------------|------------------------|

CC8.7

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

No third party verification or assurance

CC8.7a

Please provide further details of the verification/assurance undertaken for your Scope 2 emissions, and attach the relevant statements

| Type of verification or assurance | Attach the statement | Page/Section reference | Relevant standard | Proportion of Scope 2 emissions verified (%) |
|-----------------------------------|----------------------|------------------------|-------------------|--|
|-----------------------------------|----------------------|------------------------|-------------------|--|

CC8.8

Please identify if any data points other than emissions figures have been verified as part of the third party verification work undertaken

| Additional data points verified | Comment |
|---------------------------------|---------|
| No additional data verified | |

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

Yes

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

60947

Further Information

CC9.1

Do you have Scope 1 emissions sources in more than one country?

No

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

| Country/Region | Scope 1 metric tonnes CO2e |
|----------------|----------------------------|
| | |

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By facility

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

| Business division | Scope 1 emissions (metric tonnes CO2e) |
|-------------------|--|
| | |

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

| Facility | Scope 1 emissions (metric tonnes CO2e) | Latitude | Longitude |
|--------------------|--|----------|-----------|
| Büyükçekmece plant | 1567255 | | |
| Çanakkale plant | 3605768 | | |
| Ladik plant | 586738 | | |

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

| GHG type | Scope 1 emissions (metric tonnes CO2e) |
|----------|--|
| | |

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

| Activity | Scope 1 emissions (metric tonnes CO2e) |
|----------|--|
|----------|--|

CC9.2e

Please break down your total gross global Scope 1 emissions by legal structure

| Legal structure | Scope 1 emissions (metric tonnes CO2e) |
|-----------------|--|
|-----------------|--|

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (31 Jan 2012 - 31 Jan 2013)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

No

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

| Country/Region | Scope 2 metric tonnes CO2e | Purchased and consumed electricity, heat, steam or cooling (MWh) | Purchased and consumed low carbon electricity, heat, steam or cooling accounted for CC8.3 (MWh) |
|----------------|----------------------------|--|---|
|----------------|----------------------------|--|---|

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

| Business division | Scope 2 emissions (metric tonnes CO2e) |
|-------------------|--|
| | |

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

| Facility | Scope 2 emissions (metric tonnes CO2e) |
|--------------------|--|
| Büyükçekmece plant | 112680 |
| Çanakkale plant | 150671 |
| Ladik plant | 55145 |

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

| Activity | Scope 2 emissions (metric tonnes CO2e) |
|----------|--|
|----------|--|

CC10.2d

Please break down your total gross global Scope 2 emissions by legal structure

| Legal structure | Scope 2 emissions (metric tonnes CO2e) |
|-----------------|--|
|-----------------|--|

Further Information

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 35% but less than or equal to 40%

CC11.2

Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

| Energy type | MWh |
|-------------|------------|
| Fuel | 6445122.52 |
| Electricity | 778557 |
| Heat | 4563.50 |
| Steam | |
| Cooling | |

CC11.3

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

| Fuels | MWh |
|-----------------------------------|------------|
| Petroleum coke | 4421852.72 |
| Other: Coal | 108134.82 |
| Other: Heavy fuel | 15519.04 |
| Natural gas | 7393.54 |
| Lignite | 1462331.84 |
| Waste tire derived fuels | 110754.88 |
| Waste oils | 25879.14 |
| Refuse-derived fuel | 22657.31 |
| Other: Mixed industrial waste | 100812.38 |
| Other: Solvents | 35.18 |
| Other: Other waste | 6539.54 |
| Other: Biomass like sewage sludge | 163212.12 |

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the Scope 2 figure reported in CC8.3

| Basis for applying a low carbon emission factor | MWh associated with low carbon electricity, heat, steam or cooling | Comment |
|---|--|---|
| Non-grid connected low carbon electricity generation owned by company, no instruments created | 93227.4 | The waste heat produced in Çanakkale cement plant is recovery and returned to the electrical energy which is equal to the around 30% of the electrical energy need of Çanakkale cement plant. Therefore 30% of less electrical energy is taken from the grid. |

Further Information

Page: **CC12. Emissions Performance**

CC12.1

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

No change

CC12.1a

Please 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

| Reason | Emissions value (percentage) | Direction of change | Comment |
|--------------------------------|------------------------------|---------------------|---|
| Emissions reduction activities | | No change | There are lots of reduction activities such as higher use of alternative fuels, waste heat recovery but no particular change in the absolut values due to increase in the production. |
| Divestment | | | |
| Acquisitions | | | |

| Reason | Emissions value (percentage) | Direction of change | Comment |
|---|------------------------------|---------------------|---------|
| Mergers | | | |
| Change in output | | | |
| Change in methodology | | | |
| Change in boundary | | | |
| Change in physical operating conditions | | | |
| Unidentified | | | |
| Other | | | |

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

| Intensity figure | Metric numerator | Metric denominator | % change from previous year | Direction of change from previous year | Reason for change |
|------------------|--------------------|--------------------|-----------------------------|--|--------------------------------------|
| 0.0051 | metric tonnes CO2e | unit total revenue | 10 | Decrease | Higher production, thus higher sales |

CC12.3

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

| Intensity figure | Metric numerator | Metric denominator | % change from previous year | Direction of change from previous year | Reason for change |
|------------------|--------------------|--------------------|-----------------------------|--|----------------------|
| 5664.38 | metric tonnes CO2e | FTE employee | 4.6 | Decrease | Higher number of FTE |

CC12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

| Intensity figure | Metric numerator | Metric denominator | % change from previous year | Direction of change from previous year | Reason for change |
|------------------|--------------------|--|-----------------------------|--|---------------------------------|
| 772 | metric tonnes CO2e | Other: per tonne of cementitious product | 0.2 | Decrease | use of alternative raw material |

Further Information

Page: **CC13. Emissions Trading**

CC13.1

Do you participate in any emissions trading schemes?

No, but we anticipate doing so in the next 2 years

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

| Scheme name | Period for which data is supplied | Allowances allocated | Allowances purchased | Verified emissions in metric tonnes CO2e | Details of ownership |
|-------------|-----------------------------------|----------------------|----------------------|--|----------------------|
|-------------|-----------------------------------|----------------------|----------------------|--|----------------------|

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Turkey is in the volunteer scheme, as Akçansa we are in the process of verification of Gold Standard carbon credits from Waste Heat Power Generation plant.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

| Credit origination or credit purchase | Project type | Project identification | Verified to which standard | Number of credits (metric tonnes of CO2e) | Number of credits (metric tonnes CO2e): Risk adjusted volume | Credits cancelled | Purpose, e.g. compliance |
|---------------------------------------|--------------|------------------------|----------------------------|---|--|-------------------|--------------------------|
|---------------------------------------|--------------|------------------------|----------------------------|---|--|-------------------|--------------------------|

Further Information

CC14.1

Please account for your organization’s Scope 3 emissions, disclosing and explaining any exclusions

| Sources of Scope 3 emissions | Evaluation status | metric tonnes CO2e | Emissions calculation methodology | Percentage of emissions calculated using primary data | Explanation |
|---|--------------------------|--------------------|---|---|-------------|
| Purchased goods and services | | | | | |
| Capital goods | | | | | |
| Fuel-and-energy-related activities (not included in Scope 1 or 2) | | | | | |
| Upstream transportation and distribution | | | | | |
| Waste generated in operations | | | | | |
| Business travel | | | | | |
| Employee commuting | Not relevant, calculated | 0.05 | Fuel consumption, fuel emission factor is used to calculate CO2 emission. | 100% | |
| Upstream leased assets | | | | | |
| Downstream transportation and distribution | | | | | |
| Processing of sold products | | | | | |
| Use of sold products | | | | | |
| End of life treatment of sold products | | | | | |
| Downstream leased assets | | | | | |
| Franchises | | | | | |
| Investments | | | | | |
| Other (upstream) | | | | | |
| Other (downstream) | | | | | |

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

No third party verification or assurance

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

| Type of verification or assurance | Attach the statement | Page/Section reference | Relevant standard | Proportion of Scope 3 emissions verified (%) |
|-----------------------------------|----------------------|------------------------|-------------------|--|
|-----------------------------------|----------------------|------------------------|-------------------|--|

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

No, this is our first year of estimation

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

| Sources of Scope 3 emissions | Reason for change | Emissions value (percentage) | Direction of change | Comment |
|------------------------------|-------------------|------------------------------|---------------------|---------|
|------------------------------|-------------------|------------------------------|---------------------|---------|

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers

Yes, other partners in the value chain

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

The engagement is in the beginning phase, it is for now limited to the collection and reporting of the data.
The correct and detailed data will be an important achievement at the first step.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

| Number of suppliers | % of total spend | Comment |
|---------------------|------------------|---|
| 5 | 10% | The suppliers cover raw material supply |

CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

| How you make use of the data | Please give details |
|------------------------------|---------------------|
| We do not have any data | |

CC14.4d

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

| Name | Job title | Corresponding job category |
|--------------|-----------------|----------------------------|
| Hakan Gürdal | General Manager | Board/Executive board |

Further Information

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