

Module: Introduction

Page: Introduction

0.1

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 Heidelberg Cement, is Turkey's largest cement and ready mixed concrete producer and is the leader of the market.

Akçansa with products of world quality standards, environment friendly identity, comprehension of superior service and facilities with state of art technology, provides %10 of cement consumption, %6 of ready mixed concrete consumption, %12,5 of cement and clinker exportation of Turkey.

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.

0.2

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

Fri 01 Jan 2010 - Fri 31 Dec 2010

0.3

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

0.4

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.

USD(\$)

0.5

Please select if you wish to complete a shorter information request

0.6

Modules

As part of the Investor CDP information request, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors and companies in the oil and gas industry 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 be marked as default options to your information request. If you want to query your classification, please email respond@cdproject.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.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Module: Management [Investor]

Page: 1. Governance

1.1

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

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

1.1a

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

In Akçansa sustainability is a management issue governed by the Board of Directors, where targets are set and followed. The head of the Board is responsible for leading the execution of Akçansa Sustainability Report based on GRI principles. First sustainability report has been prepared for 2007-2009 and it was published in 2011.

Akçansa has identified its sustainability ambitions based on the "Sustainability Ambitions 2020" of its German partner HeidelbergCement, and the top management monitors these targets on a regular basis. The Sustainability Committee established in the beginning of 2010 manages all operations towards the

implementation of sustainability ambitions at Akçansa.

The committee, which meets every two months, is comprised of an executive council composed of members of the executive committee, a reporter, a communication specialist, and sub working group members. The Working Groups have been organized under six main topics regarding strategic issues (Please find in Further Information field Akçansa's sustainability organisation chart).

In addition to GRI sustainability report, Akçansa declares each year its environmental key performance indicators via Sabancı Holding's Environment Portal which is designed based on GRI format.

1.2

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

No

Further Information

Further information for Question 1.1a

For Akçansa sustainability committee organisation, please see attached Akçansa 2007-2009 GRI sustainability report, page 11.

Attachments

https://www.cdproject.net/Sites/2011/33/35233/Investor_CDP_2011/Shared_Documents/Attachments/InvestorCDP2011/1.Governance/Akçansa_Sustainability_Report_2007-2009.pdf

Page: 2. Strategy

2.1

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

2.1a

Please provide further details (see guidance)

Akçansa's risk management activities are executed and coordinated by Corporate Performance and Risk Management Manager.

A risk management procedure which describes the assessment and reporting principles is applied in corporate level. Accordingly a yearly assessment and monthly monitoring activities are conducted.

The assessments are done in terms of regulatory, customer behaviour changes, reputational and environmental perspectives. The managers are determining the impact and prob of each risk based on the risk scale of Akçansa. The priorities are determined with respect to the risk scale of Akçansa.

The analysis is reported monthly to risk manager and risk owners, and if the risk is critical to Excom.

2.2

Is climate change integrated into your business strategy?

Yes

2.2a

Please describe the process and outcomes (see guidance)

Akcansa Cement recognizes the significant global threat caused by high concentration of Green House Gases (GHG) in the atmosphere. We consider ourselves responsible and voluntary commit and put in efforts to limit the impact on climate change.

Climate change is integrated into our company's overall business strategy. We are aware of the need to adapt to the climate change and the need to capitalize on opportunities presented by the climate change. Sustainability is one of our five strategic pillars that are needed for continuous growth.

Sustainable development is an indispensable commitment and cement sector in Turkey has adopted European norms on production, environment, health and safety issues.

As part of negotiations with the European Union accession conference in 2009 on environmental issues, greenhouse gases, Kyoto Protocol and industrial emissions were the main topics.

Our business strategy on sustainability has been mainly influenced by the need to reduce emissions and Kyoto protocol.

Our strategy for preventing climate change includes continuous efforts aimed at the following sustainability related initiatives :

- **Short term;**
 - Renewable energy investments (waste heat recovery power plant, solar or biomass use)
 - Increasing the rate of alternative fuels and materials use.
 - Investments on waste to energy technology
 - Target of 30% AF rate by 2014 in our Buyukcekmece plant. (12% in 2010)
 - Target of 20% AF rate by 2015 overall. (4% in 2010)
 - Emission reducing and dedusting investments : Target: 10 mg/m3
 - Reduction in clinker/cement factor. Increased use of cementitious materials.
 - Target of 70% by 2015. (86% in 2010)
 - Cooperation with local authorities on environmental issues
 - Improving energy efficiency and process technology
- **Long term;**
 - Establishing a Recycling Company
 - Carbon trading

Most substantial business decisions influenced by climate change include a decision on waste heat recovery power generation plant investment in Canakkale, a decision to invest in sewage sludge plant (increased AF use) in our Buyukcekmece plant.

2.3

Do you engage with policy makers to encourage further action on mitigation and/or adaptation?

Yes

2.3a

Please explain (i) the engagement process and (ii) actions you are advocating

(i) Engagement process

Akcansa, being member of Sabancı Holding Environment Committee, is member of environmental working committees of industrial associations/bodies and shares sector specific positions in several platforms. Such as Turkish Cement Manufacturers Association, TÜSIAD (Turkish Industry and Business Association), İSO (Istanbul, Chamber of Industry), REC Turkey, Climate Platform, etc.

(ii) Actions

In 2011, with the presidency of TÜSIAD Environment Committee, sector wise representation is expected to be realised in National Climate Change Coordination Body. However, the realisation of this representation depends on the decision of related governmental bodies. The experts of SA group companies will work in the sub committees, if they are established by the decision of the related governmental bodies. SA Holding will lead also to share its views with its related sectors.

The most important participation has been realised in the workshops of National Climate Change Strategy and Action Plan in 2010 where the Ministry of Environment and Forestry/UNDP considered SA Group Companies' views and sector position comments and included in the draft plan. The final version is expected to be published in summer 2011.

Further Information

As a part of Akcansa Business Strategy sustainability ambitions were set. For sustainability ambitions, please see Akcansa 2007-2009 Sustainability Report , page 58.

Attachments

[https://www.cdproject.net/Sites/2011/33/35233/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/2.Strategy/Akcansa Sustainability Report 2007-2009.pdf](https://www.cdproject.net/Sites/2011/33/35233/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/2.Strategy/Akcansa%20Sustainability%20Report%202007-2009.pdf)

Page: 3. Targets and Initiatives

3.1

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

Intensity target

3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
CO2	Scope 1+2	100%	0.45%	Other: kg CO2 per ton clinker	2009	873	2010	

3.1c

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	Comments
CO2	Increase	100%	No change	0%	Depending on the amount of the production, the absolute emission value can show an increase. Scope 3 emission data is not measured and reported.

3.1d

Please provide details on your progress against this target made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
CO2	100%	100%	In 2010, intensity figure is 889 kg CO2/ton clinker, the targeted value (869 kg/ton clinker) could not be reached because of the change in fuel composition.

3.2

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

Yes

3.2a

Please provide details (see guidance)

Waste can be disposed off with different methods. Most of these methods do not consider modern waste disposal and/or incineration techniques and environmental protection measures.

Akcansa by using waste materials as secondary fuel resources contributes in third parties to minimize their negative impact on environment and create solution to them in controlling GHG emissions.

3.3

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

Yes

3.3a

Please provide details in the table below

Activity type	Description of activity	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
Other	Renewable & clean energy investment : Waste heat recovery power generation plant in our Canakkale plant where waste heat energy will be recovered as electrical energy. Nearly 105 million kWh/year energy will be recovered. This amount stands for 30% of the total energy consumption of Canakkale plant. In 2010, the project was in beginning of the implementation phase.	10000000	24000000	>3 years
Other	Waste as a resource : Investment to increase the rate of substitution of fossil fuel by waste-derived fuels : Sewage sludge plant investment in our Buyukcekmece plant where dry sludge is stored in silos and fed at a constant dosing rate.	921270	2914500	>3 years

3.3b

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

Method	Comment
Compliance with regulatory requirements/standards	Akcansa is planning its emission reduction investments based on forthcoming Turkish and EU regulation and IPPC directive. Akcansa is referring to the "Best Available Techniques" document in applying related technologies.
Dedicated budget for other emission reduction activities	Akcansa is planning 3 yearly capital expenditure budget. This plan includes "environmental investment" item. This item stands mainly for emission reduction, clean energy, energy efficiency, alternative fuel and waste management projects.

Page: 4. Communication

4.1

Have you published information about your company's response to climate change and GHG emissions performance for this reporting year in other places than in your CDP response? If so, please attach the publication(s)

Publication	Page/Section Reference	Identify the attachment
In voluntary communications (underway) – previous year attached	p.43 CO2 emission performance and p.58 Sustainability Ambitions	2007-2009 Sustainability Report

Further Information

Our company's response to climate change and GHG emission performance for 2009 has been reported in our 2007-2009 Sustainability Report which is published in 2011. Please find in the attachment field, the Sustainability Report.

On the other hand 2010 figures are reported in Sabancı Holding's environmental database.

Attachments

https://www.cdproject.net/Sites/2011/33/35233/Investor_CDP_2011/Shared_Documents/Attachments/InvestorCDP2011/4.Communication/Akcansa_Sustainability_Report_2007-2009.pdf

Module: Risks and Opportunities [Investor]

Page: 5. Climate Change Risks

5.1

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

Risks driven by changes in regulation

5.1a

Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
R1	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.	Inability to do business	1-5 years	Direct	Unknown	High
R2	Lack of regulation	There is no any national emission calculation standard nor regulation available yet.	Other: Additional cost due to deviations from target.	1-5 years	Direct	Very likely	Medium
R3	Other regulatory drivers	Fuel, energy and other regulatory arrangements are under discussion.	Increased operational cost	1-5 years	Indirect (Supply chain)	Likely	Medium
R4	Product labeling regulations and standards	Lack of awareness against carbon bans.	Reduced demand for goods/services	1-5 years	Indirect (Supply chain)	Likely	Medium

5.1b

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

- i) we are assessing the potential threats and opportunities of the risk,
- ii) we either avoid, transfer or retain the risk,
- iii) to transfer or retain the risk we either buy insurance and / or make necessary investments within our capex plans.

5.1h

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

Akcansa production facilities are located in Turkey, which is not considerably affected by physical climate parameters. Therefore physical climate risks are not included yet in our risk management yet.

5.1i

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

There is no sufficient data to foresee and analyse the risks other than described in Article 5.1.a.

Page: 6. Climate Change Opportunities

6.1

Have you identified any climate change opportunities (current or future) 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

6.1a

Please describe your opportunities that are driven by changes in regulation

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
O1	International agreements	New environmental and low carbon investment opportunities.	Reduced operational costs	1-5 years	Direct	Likely	Medium
O2	Voluntary agreements	Low carbon and environmental friendly projects and applications reflect social	Wider social benefits	1-5 years	Indirect (Client)	Likely	Medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		and economical trends and expectations.					
O3	Cap and trade schemes	Low carbon and environmental friendly projects and applications provide advantage in tax compensation.	New products/business services	1-5 years	Direct	Unknown	Medium

6.1b

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

(i) These opportunities thanks to the implementation of low carbon investments result in potential reduced electrical and heat energy savings. In long term, these savings lead to considerable cost and competitive advantage.

(ii) These advantages are studied by means of several tools : market analysis, SWOT analysis, feasibility report.

If feasible, in order to benefit the most, Akcansa shows a proactive attitude to be the first in the market and in its sector. Akcansa plans necessary corporate, administrative, financial applications and technical investments.

(iii) The potential costs are consultancy fees and/or investments within our capex plans. However, the investments can be financed by green loans.

6.1h

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

N/A in the regions we are operating in.

6.1i

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

There is no sufficient data and workshop for that analysis. But it is obvious that the necessity for low carbon investments will contribute to R&D studies and technology transfer in Turkey.

Further Information

The climate change theme, thanks to the communication opportunities with our stakeholders, has a positive impact on our social performance.

Please see chapter "Our dialogue with our stakeholders" in 2007-2009 Sustainability Report.

Attachments

[https://www.cdproject.net/Sites/2011/33/35233/Investor_CDP_2011/Shared Documents/Attachments/InvestorCDP2011/6.ClimateChangeOpportunities/Akcansa Sustainability Report 2007-2009.pdf](https://www.cdproject.net/Sites/2011/33/35233/Investor_CDP_2011/Shared_Documents/Attachments/InvestorCDP2011/6.ClimateChangeOpportunities/Akcansa_Sustainability_Report_2007-2009.pdf)

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

Page: 7. Emissions Methodology

7.1

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)
Thu 01 Jan 2009 - Thu 31 Dec 2009	1968262	115754

7.2

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

Other

7.2a

If you have selected "Other", please provide details below

World Business Council for Sustainable Development Cement Sustainability Initiative CO2 Emissions Inventory Protocol, Version 2.0

7.3

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

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

7.4

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

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

Fuel/Material/Energy	Emission Factor	Unit	Reference
			Pls. see further information field for the emission factors.

Further Information

For question 7.4

Emission factors Akcansa applies have presented in the attached excel file. These values are defined as default fuel CO2 values by World Business Cement Sustainability Development Cement Sustainability Initiative CO2 Protocol.

Attachments

[https://www.cdproject.net/Sites/2011/33/35233/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/7.EmissionsMethodology/worksheet-to-input-of-EF.xlsx](https://www.cdproject.net/Sites/2011/33/35233/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/7.EmissionsMethodology/worksheet-to-input-of-EF.xlsx)

Page: 8. Emissions Data - (1 Jan 2010 - 31 Dec 2010)

8.1

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

Equity share

8.2a

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

2337838

8.3a

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

134709

8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

No

8.5

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

Scope	Uncertainty Range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope	Less than or equal	Published Emissions	Turkish electricity emission factor is not clearly

Scope	Uncertainty Range	Main sources of uncertainty	Please expand on the uncertainty in your data
2	to 2%	Factors	declared by the Ministry of Energy.

8.6

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

Not verified or assured

8.7

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

Not verified or assured

8.8

Are carbon dioxide emissions from the combustion of biologically sequestered carbon (i.e. carbon dioxide emissions from burning biomass/biofuels) relevant to your company?

No

Further Information

Clarification to question 8.8:

Akcansa uses sewage sludge or waste tyres as alternative fuel which contain biomass fraction; however in current Turkish waste regulation these wastes do not count for biomass yet.

Page: 9. Scope 1 Emissions Breakdown - (1 Jan 2010 - 31 Dec 2010)

9.1

Do you have Scope 1 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

No

9.2

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

Page: 10. Scope 2 Emissions Breakdown - (1 Jan 2010 - 31 Dec 2010)

10.1

Do you have Scope 2 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

No

10.2

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

Page: 11. Emissions Scope 2 Contractual

11.1

Do you consider that the grid average factors used to report Scope 2 emissions in Question 8.3 reflect the contractual arrangements you have with electricity suppliers?

No

11.1a

You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tonnes CO₂e

134709

11.1b

Explain the basis of the alternative figure (see guidance)

Akcansa's global contractual Scope 2 GHG emissions are determined based on following criteria :

- Akcansa is purchasing electricity from the local grids close to its plant location. Until today, we did not retire renewable energy certificates.
- In Turkey, electricity suppliers do not declare different emission factors but Turkish electricity governmental body declares a default value.
- The emission factor applied is 453 kg CO₂/MWh.

11.2

Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

No

Further Information

Further information for Question 11.2

Turkey is in the voluntary carbon market where Voluntary Emission Reduction (VER) projects can apply for CO₂ credits. Certificates will be used for voluntary carbon offset measures.

Akcansa with its Canakkale Waste Heat Power Generation Project will apply for Gold Standard VER credits. It is still under evaluation by Gold Standard and Dedicated Operational Entity for validation and verification processes (Please see attached a basic flow scheme of the Canakkale Waste Heat Power Generation Plant).

Attachments

[https://www.cdproject.net/Sites/2011/33/35233/Investor_CDP_2011/Shared Documents/Attachments/InvestorCDP2011/11.EmissionsScope2Contractual/Canakkale WHPG Flow Scheme.png](https://www.cdproject.net/Sites/2011/33/35233/Investor_CDP_2011/Shared_Documents/Attachments/InvestorCDP2011/11.EmissionsScope2Contractual/Canakkale_WHPG_Flow_Scheme.png)

Page: 12. Energy

12.1

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

More than 15% but less than or equal to 20%

12.2

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

Energy type	MWh
Fuel	2552739
Electricity	297525
Heat	
Steam	
Cooling	

12.3

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

Fuels	MWh
Anthracite	340000
Petroleum coke	1156667
Other: Ultra heavy fuel	8333
Natural gas	2500
Lignite	929444
Waste oils	13889
Waste tire derived fuels	40833
Waste plastics	30355
Other: Mixed industrial waste	7500
Other: Other fossil based wastes	13055
Other: Sewage sludge	7777
Other: Paper, carton	277
Other: Other biomass	555
Diesel/Gas oil	1350

Page: 13. Emissions Performance

13.1

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

Increased

13.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Change in output	18	Increase	Due to the increase in production (clinker) capacity the absolute CO2 emission figure has been increased.

13.2

Please describe your gross 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	Explanation
	metric tonnes CO2e	unit total revenue			

13.3

Please describe your gross 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	Explanation
2321.64	metric tonnes CO2e	FTE Employee	18	Increase	In parallel with the increase in the absolute emission, the intensity figure has been increased. The FTE has remained the same.

13.4

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	Explanation
889	metric tonnes CO2e	Other: kg CO2/ton clinker.	2	Increase	The intensity figure has been increased due to the change in the use of fuel combination.

14.1

Do you participate in any emission trading schemes?

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

14.1b

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

Turkey is in the voluntary market. Our strategy is to follow-up the regulatory and market oriented developments and to be prepared for CDM or other mechanisms. Our strategy for preventing climate change includes continuous efforts aimed at the following sustainability related initiatives:

Short term;

Renewable energy investments (waste heat ♣ recovery power plant, solar or biomass use)

Increasing the rate of ♣ alternative fuels and materials use.

Investments on waste to energy ♣ technology

Target of 30% AF rate by 2014 in our Buyukcekmece plant. (12% in ♣ 2010)

Target of 20% AF rate by 2015 overall. (4% in 2010) ♣

Emission ♣ reducing and dedusting investments

Target: 10 mg/m3 ♣

Reduction in ♣ Clinker factor. Increased use of cementitious materials.

Target of 70% by ♣ 2015. (86% in 2010)

Cooperation with local authorities on environmental ♣ issues

Improving energy efficiency and process technology ♣

Long term;

Establishing a Recycling Company ♣

Carbon trading ♣

Most substantial business decisions influenced by climate change include a decision on waste heat recovery power generation plant investment in Canakkale, a decision to invest in sewage sludge plant (increased AF use) in our Buyukcekmece plant.

14.2

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

No

Further Information

Clarification to Question 14.2

Turkey is in the voluntary carbon market where Voluntary Emission Reduction (VER) projects can apply for CO2 credits. Certificates will be used for voluntary carbon offset measures.

Akcansa with its Canakkale Waste Heat Power Generation Project will apply for Gold Standard VER credits. It is still under evaluation by Gold Standard and Dedicated Operational Entity for validation and verification processes (Please see attached a basic flow scheme of the Canakkale Waste Heat Power Generation Plant).

Attachments

[https://www.cdproject.net/Sites/2011/33/35233/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/14.EmissionsTrading/Canakkale WHPG Flow Scheme.png](https://www.cdproject.net/Sites/2011/33/35233/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/14.EmissionsTrading/Canakkale%20WHPG%20Flow%20Scheme.png)

Page: 15. Scope 3 Emissions

15.1

Please provide data on sources of Scope 3 emissions that are relevant to your organization

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
Other: Business travel, employee commuting, etc.			Scope 3 emissions data is not reliable. In Akçansa mainly business travel and contractors vehicles and outsources staff transportation emissions are tracked.

15.2

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

Not verified or assured

15.3

How do your absolute Scope 3 emissions for the reporting year compare to the previous year?

We don't have any emissions data

Module: Sign Off

Page: Sign Off

Please enter the name of the individual that has signed off (approved) the response and their job title

Hakan Gürdal
General Manager
Akçansa Çimento Sanayi ve Ticaret A.Ş.
Carbon Disclosure Project