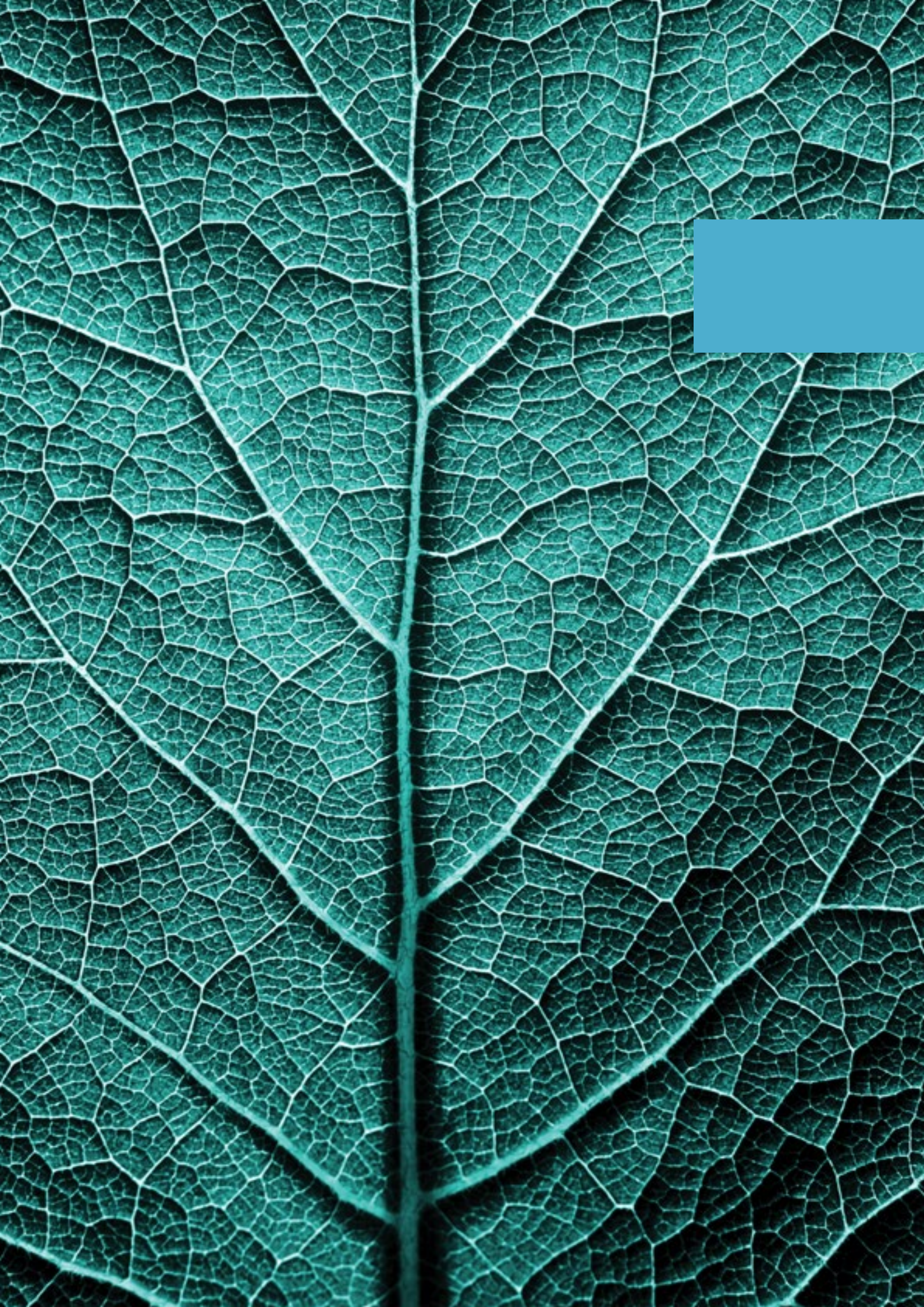
# A Viable World to Reach Out for Future

2012-2013
Akçansa
Sustainability
Report

AKÇANSA



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Akçansa Çimento Sanayi ve Ticaret A.Ş. (Akçansa) maintains its growth as the most appreciated and trusted company by all its stakeholders. While advancing on the path to realize this growth, Akçansa continues its pioneering studies in the sector with a view to creating value for its stakeholders in line with its corporate culture highlighting its social, environmental, legal and ethical responsibilities. We hereby submit the third Akçansa Sustainability Report covering an account of these studies for our stakeholders' view.

Akçansa has scored another first time in the Turkish cement sector by the launch of Akçansa 2012-2013 Sustainability Report since the report complies with the GRI G4 Standard "core" level requirements, the most up-to-date sustainability report framework issued by the Global Reporting Initiative.

The report has been prepared with respect to the rights of all the stakeholder groups including employees, shareholders, dealers, suppliers and NGOs to access direct, clear and up-to-date information on Akçansa in line with transparency and accountability principles. The reporting scope is composed of the operations undertaken by Akçansa in cement, aggregate and ready-mixed concrete business lines under Akçansa, Agregasa and Betonsa brands in Turkey during two calendar years from 01.01.2012 to 31.12.2013. The report neither covers the export operations undertaken by HC Trading, affiliated with Akçansa's multinational partner HeidelbergCement, nor does it cover the performance shown by Karçimsa, affiliated with Akçansa.

Drawn up to comply with the remaining GRI G4 Standard reporting principles, especially with the principle of prioritization, the report coverage not only includes the impact from production operations but also covers the impact stemming from the operations conducted outside the company in various value chain stages set according to prioritization attributes. Besides performance indicators recommended by the GRI G4 Reporting guidelines are mainly used to provide the performance information, the report features measurements widely accepted by the sector too. Sector-specific data, global trends, study reports issued by sector associations as well as NGOs have also contributed as data to determine and report the indicators regarding sustainability performance. Moreover, the feedback received through stakeholder engagement studies such as stakeholder meetings, Neighbour Council, Bridge Days, employee meetings and senior manager briefings, which are all organized in line with the importance attached by Akçansa to dialogue, is assessed and the issues highlighted during those studies are included in the prioritization process. Composed as a result of the aforementioned studies, the sustainability issues portfolio is then prioritized with the participation of company managers from all operation locations, and the prioritized issue portfolio is eventually defined through the workshops held by Akçansa Sustainability Committee and senior company managers. Akçansa Sustainability Committee evaluates the impact state of the Akçansa sustainability priorities regarding the value chain stages.

Drawn up to cover two reporting periods until 2013, the sustainability reports will be based on a single year plan as of next year. Akçansa Sustainability Reports for the past periods are available on the corporate website www.akcansa.com.tr.

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## Joint Statement of the Chairperson and the General Manager

Akçansa, leading and the most appreciated cement producer in its sector, reinforces its pioneer role in Turkish business life through its sustainable business models. We adopt sustainability, one of the main aspects in our management approach and work culture, as a basic strategic factor shaping our future; thus, we work to serve for sustainable development with regard to its social, environmental and economic dimensions both in corporate and societal sense when steering our activities.

Increasing population and urbanization result in new requirements in order to maintain communities' wellbeing and prosperity in future. According to expert opinions, approximately 1 billion of new mid-class population will emerge. This huge increase demonstrates that need for quality, safe and affordable housing; for infrastructure to enable access to basic utilities such as electricity, natural gas and water; for highways and bridges to maintain transportation between these cities; and for public service facilities such as schools and hospitals will significantly increase. In addressing these needs, cement sector will play an active role together with its branches such as ready-mix concrete. However the cement sector should also assume its responsibilities for sustainable development with regard to social, environmental and economic aspects when playing its role.

Under the given circumstances, a major change in global cement sector is observed. The perception of the sector, which could be identified with environmental impacts in the past, changes positively in line with products, services and business models developed in the recent years. Today, producers who adopt responsible business models, redesign their product and process compositions in order to contribute to establish a sustainable future. In this vein, cement sector is a candidate to become in future a major solution provider for city managements and industries in terms of environmental impacts such as wastes, energy and emissions, instead of being a polluting industry. For cement producers, making this transformation real means not only fulfilling environmental responsibilities but also a major condition for a profitable operation in the future. As Akçansa, we identify future of the cement sector with responsibilities to be assumed for sustainable development and we mount our strategies accordingly.

Akçansa's sustainability management approach is composed of material work areas expanding to various social, environmental and economic aspects. Most of these material aspects meet in a common phenomenon, namely the climate change. Climate change generates operational, legal, commercial and reputation risks on cement production sector which is still energy and emission intensive despite developing technologies. In order to mitigate these risks that can affect the future of our company and the community we operate in, we conduct projects and investments to increase our performance, we actively engage with national and international initiatives. With this regard, we also play a pioneer role in promoting sustainable business models within the sector by taking part in sectoral institutions. During the reporting period, we allocated 46.3 million TL for studies intending to increase our sustainability performance. We continued our voluntary participation to global initiatives such as Carbon Disclosure Project. We supported adoption of sustainability reporting practices, which we have presented the first example in our sector as a pioneer practice, by sectoral institutions. We aim to continue and increase such efforts in the upcoming years.

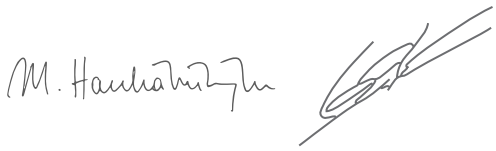
$CO_2$ emission which emerges from the energy usage and the clinker, which is the main raw material composing the product, increase climate change factor in cement production. In order to reduce this impact, Akçansa adopts practices such as alternative fuel usage and alternative raw material use in the product composition, which are also offered by WBCSD Cement Sustainability Initiative besides energy efficiency studies. During the reporting period, Akçansa continued its efforts in these practices despite the difficulties in access to alternative raw resources. Performance achieved during this reporting period from the Energy Recovery Plant from Waste Heat in Çanakkale Plant, investment phase of which was completed during the previous reporting period, increased. Hence more than 750,000 GJ of energy recovered from waste heat in Çanakkale Plant resulting in reduction of approximately 100,000 tons of $CO_2$ emissions in last 3 years since its first installation. As a result of dedusting and filtering investments, a significant performance increase achieved compared to the previous reporting period. Accordingly, dust emissions were decreased to 36 gr/ton in 2013 while it was 58 gr/ton in 2011.

For Akçansa, occupational health and safety is the most material aspect that we cannot compromise under any circumstance. We carry out practices to continuously improve employee safety in our operations which we conduct with 0 accident and occupational disease target. During the reporting period we launched a new pioneer practice and founded the first of Akçansa OHS Academies in Büyükçekmece Plant. After the foundation of Akçansa OHS Academies in Ladik and Çanakkale Plants, where Akçansa employees and other operational stakeholders receive OHS trainings from experts, we aim to provide 80,000 hours of trainings.

Beside our studies aiming to increase sustainability performance in our operations, we also continue our support for fulfilling community expectations and for efforts to reach sustainable development goals. Within this aim, during the reporting period we continued our community development projects and vocational training practices; we got together with universities more often. Especially, we have reinforced our stakeholder engagement studies with new practices and event thus we achieved to learn stakeholder expectations and views through more direct channels. We aim to conduct these studies in various operating locations in the upcoming terms.

In accordance with our vision, "maintaining sustainable growth beyond all limits", generating value for stakeholders, supporting the community we operate in to reach a safe and prosperous future are the ultimate goals of the studies we conduct. We express our gratitude to our stakeholders for their trust and support to our efforts to achieve these goals.

Mehmet Hacıkamiloğlu – General Manager
Hakan Gürdal – Chairperson of the
Board of Directors



# Corporate Profile

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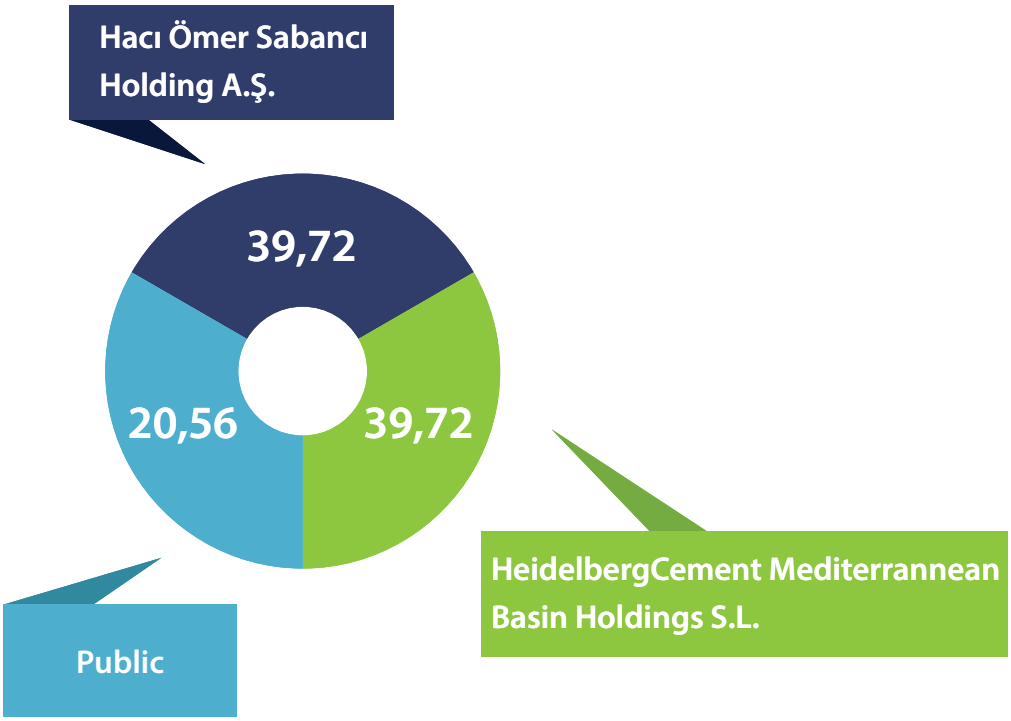
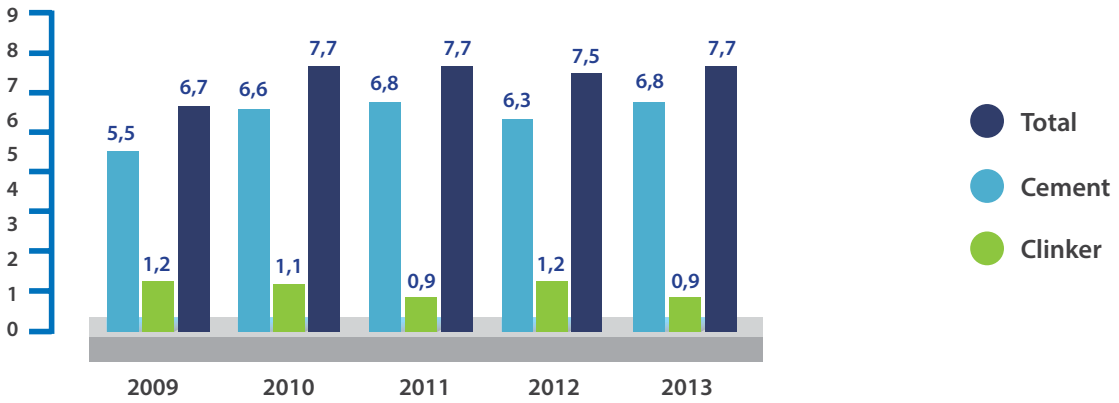
Established in 1996 by the merger of two long-established cement producers in Turkey, Akçimento and Çanakkale Çimento, Akçansa is a subsidiary of Sabancı Holding and HeidelbergCement. Merging later with its subsidiaries Betonsa in 1998 and Agregasa in 2002, Akçansa continues its ready-mixed concrete operations under Betonsa and aggregate production operations under Agregasa brands. Akçansa also owns 51% and Kardemir Demir Çelik Sanayi owns 49% of Karçimsa, which was established in 1996 to produce cement with the milling of the blast furnace slag from Kardemir and clinker from Akçansa. Maintaining its continuous growth, currently Akçansa is the largest cement and ready-mixed concrete producer in Turkey and a leading company in the sector.

Featuring cutting-edge technology facilities and boasting an environmentally friendly character awarded by Istanbul Chamber of Industry, Akçansa meets 10% of Turkey's cement demand today through its products complying with global quality standards.

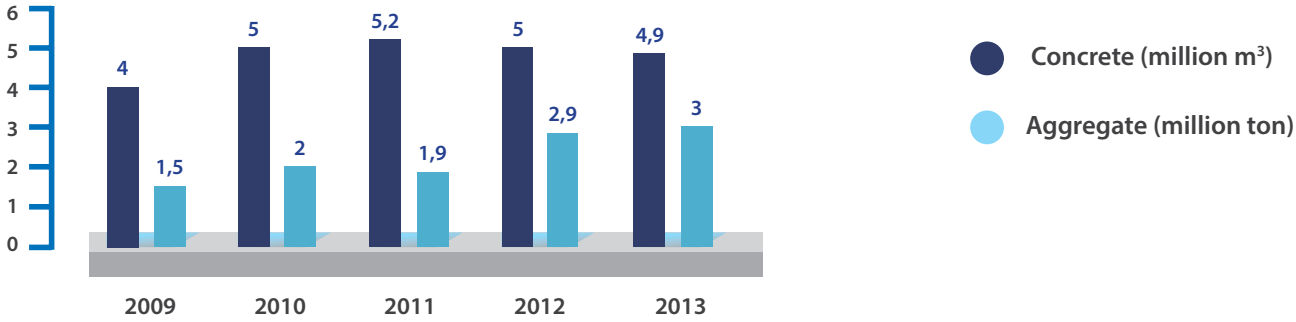
## Capital Structure



# Total Cement and Clinker Sales (million tons)




# Ready-Mixed Concrete and Aggregate Sales




# Key Indicators

| | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|
| Net Sales (TL million) | 709,6 | 817,4 | 1.010 | 1.056 | 1.202,2 |
| EBITDA (TL million) | 166,5 | 132,2 | 192,7 | 215 | 270,2 |
| EBITDA (%) | 23,46 | 16,2 | 19,1 | 20,4 | 22,48 |
| Net Profit (TL million) | 75 | 59,3 | 100,3 | 120 | 157,9 |
| Earnings per Share | 0,39 | 0,31 | 0,52 | 0,63 | 0,82 |
| Dividend per Share (%) | 34,18 | 20,4 | 46,34 | 57,45 | 75,43 |
| Net Financial Borrowing (TL million) | 148,2 | 160,5 | 133,3 | 210,8 | 163,5 |
| Equity (TL million) | 808,5 | 830,3 | 862,9 | 911,5 | 987,6 |
| Total Assets (TL million) | 1.161,60 | 1.231,80 | 1.278,50 | 1.388,57 | 1.477,20 |
| Clinker Production (million tons) | 6 | 6,6 | 6,47 | 6,5 | 6,6 |
| Cement Production (million tons) | 5 | 6,4 | 6,6 | 6,1 | 6,6 |
| Cement Exports (million tons) | 1,5 | 1,8 | 1,5 | 1,2 | 0,9 |
| Clinker Exports (million tons) | 1 | 1 | 0,8 | 1,1 | 0,9 |

# Vision & Mission

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## Vision

"Sustainable growth beyond all limits"

To ensure sustainable growth beyond all limits in the building materials sector as a company with the most preferred business model and as the most trusted company by all our stakeholders.

## Mission

To be a leading building materials company enhancing the quality of community life by means of our culture committed to environmental, legal and ethical values to generate further values,

- for our customers via innovative products, services and solutions,
- for our shareholders via our superior financial performance,
- for our employees via our occupational health and safety-focused management approach and continuous development opportunities,
- for our environment via the importance attached to energy efficiency, alternative fuel & raw material usage, recovery processes and biological diversity,
- for our all other stakeholders

# Awards Received in the Reporting Period

- Akçansa won the "Most Appreciated Company in Turkey" award in the cement sector for the 12th time in the "Most Appreciated Companies in Turkey 2013 Survey".

- "Safkan Cement" product won the Second Prize in the "Environmentally Friendly and Innovative Product Category of the 2013 İSO Environment Awards" organized by the İstanbul Chamber of Industry (İSO).

- Akçansa won the grand prize in the Sabancı Holding Golden Collar Awards in the following subcategories "Investment in People", "Development in Market Orientation", "Corporate Synergy".

- Akçansa ranked top in the cement sector and 75th on the overall listing in the "Top 500 Industrial Companies of Turkey 2013 Survey" held by İstanbul Chamber of Industry (İSO).

- Akçansa won the first prize in the "Cloud Computing Category" with the "MozaİK" and the second prize in the "Medium Implementation Category" with the "Procurement Project" in the "SAP 2013 Quality Awards".

- Büyükçekmece, Kemerburgaz and Samsun Ready-Mixed Concrete Facilities were awarded in the 2013 "Blue Helmet Occupational Safety Contest" organized by the Turkish Ready-Mixed Concrete Association.

- Akçansa made it to the finals in the "Innovative Sustainability Practices Contest" organized by the Business Council for Sustainable Development Turkey (BCSD Turkey).

- Developed by Akçansa, "CEM I 42.5 R" and "Safkan Cement" products turned out to be the first two products in Turkey with the right to bear the Environmental Product Declaration (EPD).

- Within the scope of "Carbon Disclosure Project (CDP) 2013 Turkey", Akçansa was presented as one of the most transparent companies from Turkey in combating the climate change.


# Material Sustainability Issues in the Akçansa Value Chain

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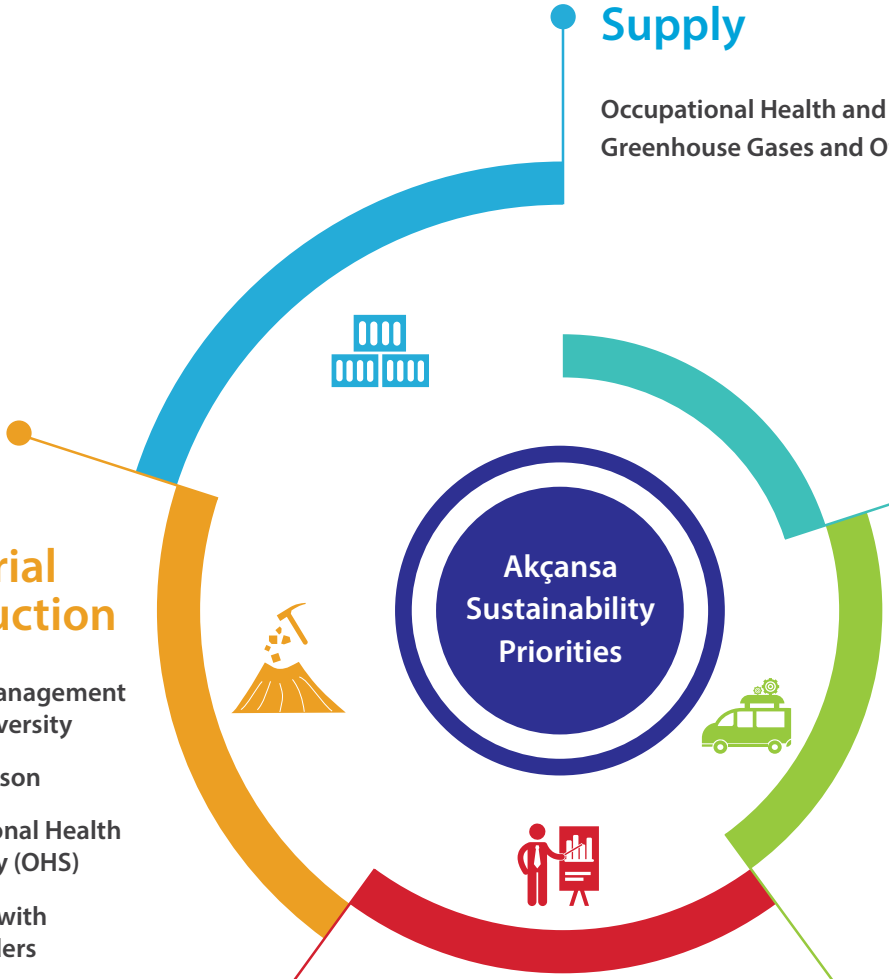


## Supply

Occupational Health and Safety (OHS)
Greenhouse Gases and Other Pollutants

## Raw Material Production

Quarry Management and Biodiversity

Dust Emisson

Occupational Health and Safety (OHS)

Dialogue with Stakeholders

## Production

Greenhouse Gases and Other Pollutants

Dust Emissions

Energy Efficiency

Alternative Raw Materials

Alternative Fuel

Water Use

Occupational Health and Safety (OHS)

Stakeholder Dialogue

## Sales & Marketing

Product Pricing

Sustainable, Innovative Products

Occupational Health and Safety (OHS)

## Logistics

Greenhouse Gases and Other Pollutants

Dust Emissions

Energy Efficiency

Occupational Health and Safety (OHS)

Stakeholder Dialogue

# Sustainability Ambitions 2020 Progress Chart

## 1. Attributing Utmost Priority to OHS

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G4 - EN19

| | Goal Definition | KPIs | 2012 Realization | 2013 Realization | Target 2015 | Target 2020 |
|---|---|---|---|---|---|---|
| **Cement** | Establishing best possible norms for employees, contractors and 3rd parties. | Accident Frequency Rate | 8,70 | 4.56 | 0 | 0 |
| | | Accident Severity Rate | 0,12 | 0,237 | 0 | 0 |
| | | Fatalities | 0 | 0 | 0 | 0 |
| | | Lost Time Injury Rate | 5 | 47,5 | 0 | 0 |
| **Ready-Mixed Concrete (RMC)** | | Accident Frequency Rate | 3,97 | 5,94 | 0 | 0 |
| | | Accident Severity Rate | 0,09 | 0,225 | 0 | 0 |
| | | Fatalities | 0 | 0 | 0 | 0 |
| | | Lost Time Injury Rate | 3,97 | 45,1 | 0 | 0 |
| **Aggregate** | | Accident Frequency Rate | n.a | 0 | 0 | 0 |
| | | Accident Severity Rate | n.a | 0 | 0 | 0 |
| | | Fatalities | n.a | 0 | 0 | 0 |
| | | Lost Time Injury Rate | n.a | 0 | 0 | 0 |

## 2 . Sustainable Supply Chain Management

| | Goal Definition | KPIs | 2012 Realization | 2013 Realization | Target 2015 | Target 2020 |
|---|---|---|---|---|---|---|
| | Alternative Fuel Supply | Practices for increasing supply of alternative fuels | Contracts and Cooperations | Long-term contracts, waste tire exports | 20% | 29% |
| **Cement, RMC and Aggregate** | Raising awareness of stakeholders in the supply chain on sustainable business models | Projects with stakeholders in the supply chain | | One Hundred Percent with Akçansa Project, Conducting OHS and environmental trainings and audits for suppliers and customers | Enhancing sustainability, environmental and OHS trainings and audits in the supply chain | Establishing KPIs for sustainability in the supply chain |

## 3. Delivering Prominent, Positive Contribution to Biodiversity

| | Goal Definition | KPIs | 2012 Realization | 2013 Realization | Target 2015 | Target 2020 |
|---|---|---|---|---|---|---|
| **Cement and Aggregate** | Preparation of rehabilitation plans and their approval by public authorities | Rate of quarries with rehabilitation plan approved by public authorities | 100% | 100% | 100% | 100% |
| | Decommissining of quarries where the production is terminated | Areas rehabilitated (ha) | 6,1 | 11,00 | 15,00 | 25,00 |

## 4. Combatting the Climate Change

| | Goal Definition | KPIs | 2012 Realization | 2013 Realization | Target 2015 | Target 2020 |
|---|---|---|---|---|---|---|
| **Cement** | Reduction of fossil fuel use | Rate of fuel substituted by waste (as thermal value) | 5,20% | 6,60% | 20% | 29% |
| | | Rate of fuel substituted by biomass (as thermal value) | 1,10% | 1,10% | 5,00% | 6,33% |
| | Reduction of clinker use in the cement | Clinker usage rate in the cement | 86,77% | 87,12% | 81% | 79% |
| **Cement** | Continuous monitoring of emissions | NOx emissions | | < 800 mg/m$^3$ | < 800 mg/m$^3$ | < 800 mg/m$^3$ |
| | | SOx emissions | | < 50 mg/m$^3$ | < 50 mg/m$^3$ | < 50 mg/m$^3$ |
| | | Dust emissions | | < 30 mg/m3 "< 30 mg/m3 *Ladik Plant will achieve this performance in 2014 through bagged filtre investment" | < 10 mg/m$^3$ | < 10 mg/m$^3$ |
| | | Specific $CO_2$ emissions (kg $CO_2$/ton clinker) | 870 | 871 | 845 | 830 |
| **Cement** | Online monitoring of NOx and Sox values | Rate of rotary kilns monitored online | 17% | 17% | 100% | 100% |
| | Dedusting of Plants | Covered stokehole rate | 60% | 60% | 100% | 100% |
| | | Rate of covered clinker conveyor belts and stokeholes | 83,33% | 85,00% | 90% | 100% |
| | Replacement of electrostatic filters with bagged filters | Bagged filter rate in raw mills, kilns and cement mills | 76% | 76% | 95% | 100% |
| **RMC** | Storage of aggregate in closed units | Rate of facilities where the aggregate is stored in covered units | 64,80% | 70% | 85% | 100% |
| | Increasing usage of new mixer and pumps | Rate of mixers and pumps under 10 years-old | 85,60% | 85% | 95% | 100% |
| | Reduction of environmental complaints | Annual rate of complaints | 7 | 7 | 0 | 0 |
| **Aggregate** | Installation of truck tire washing systems | Rate of installed washing systems | 25% | 25% | 100% | 100% |
| | Covering tops of the facilities | Rate of top-covered facilities | 80% | 100% | 100% | 100% |
| **Cement, RMC, Aggregate** | Installation of truck tire washing systems | Water saving rate and projects for efficient management of water | Reporting guideline for efficient water management was established | Reporting practice in line with Cement Sustainability Initiative (CSI) was initiated | Preparing a guideline for RMC. Specifying water saving potentials in all plants | Reducing water usage by 5% compared to 2013 |

## 5 . Sustainable Construction Solutions

| | Goal Definition | KPIs | 2012 Realization | 2013 Realization | Target 2015 | Target 2020 |
|---|---|---|---|---|---|---|
| **RMC** | Becoming solution provider in green building projects | Rate of projects contributed in Marmara market | 16% | 16% | 25% | 30% |
| **Cement and RMC** | Reducing environmental footprint of buildings | Obtaining environmental product labels (EPD) for cement and concrete | It is decided to obtain EPDs and Produc Life Cycle Studies initiated. | EPD obtained for CEM I 42,5R and CEM II 42.5R A-S. | Obtaining EPD for RMC durability grades | Developing products and service solutions regarding sustainable buildings |
| **Aggregate** | Production of recycled aggregate | Recycled aggregate production rate in total aggregate production | 0% | 0% | 12% | 20% |

## 6. Stakeholder Engagement

| | Goal Definition | KPIs | 2012 Realization | 2013 Realization | Target 2015 | Target 2020 |
|---|---|---|---|---|---|---|
| Corporate Governance and Sustainability | Corporate Citizenship | Conducting corporate citizenship projects in line with sustainability strategy | Local level social projects mostly in education and culture<br><br>"There is Environment All Around Me" Project | In addition to 2012 projects,<br><br>"Equality at Work Decleration" was signed.<br><br>Ladik Glass Workshop was established. | Increasing and enhancing voluteering projects<br><br>Developing projects in line with local community expectations and Akçansa sustainability strategy | Contributing community development and growth |
| | Increasing stakeholder engagement | Researches and mechanisms regarding increase of stakeholder engagement | Different communication plans and events are conducted regarding different stakeholder groups. | In addition to 2012 practices, as a best practice, "Neighbour Council" was initiated.<br><br>Awareness and information platforms were established in line with speciality fields regarding Akçansa Sustainability Priorities.<br><br>Regarding internal stakeholders, individual targets of all employees were associated with sustainability targets. | Prioritization and project design regarding needs and expectations received as an outcome of stakeholder engagement platforms | Establishing mechanisms with direct access to the Board of Directors in order to ensure stakeholder expectations |
| | Being the employer of choice | Place at employer of choice listing | | Employer brand positioning study was conducted. Becoming the employer of choice was adopted as a target | Developing projects to become an employer of choice | Being an employer of choice within the sector constantly and ranking amongst the first 50 in general |

# Cement Sector, Local Economy and Akçansa

# Cement Sector, Local Economy and Akçansa

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G4 - EC6
G4 - EC9

Cement is an essential raw material for constructing the hard infrastructure, a key indicator of a country's development level. Produced from the most available materials in the world, cement and concrete have been widely used everywhere, and they will remain to be popular building materials in the future thanks to their solidity, durability, cost advantage and easy implementation.

Construction sector has developed significantly in recent years as a result of the increase in public infrastructure investments as well as long-term private sector projects initiated. In parallel to such developments in the Turkish construction sector, cement and concrete production has also gone up, which eventually made Turkey the country with the highest amount of cement and concrete production in Europe as of 2009. In 2012 cement production in the Turkish market rose by 1% when compared with 2011 and turned out to be 63.9 million tons while in 2013 it rose by 12% and reached 71.3 million tons.

Due to its production and product features especially regarding freight issues, cement mainly appeals to regional markets. Therefore, although it is not a preferred operation form for producers, exporting cement is possible for businesses with a marine terminal while maintaining profitability. In other words only the markets with strong domestic sales figures and limited export levels could constitute a healthier environment for cement companies to enjoy economic sustainability. During the reporting period Turkish cement industry pursued a similar trend. In 2011 the total amount of cement exported was 11 million tons while that amount declined by 12% in 2012 and then fell to 9.6 million tons in 2013. The main driving force behind the performance enjoyed during the reporting period was the growth of the retail sector in the domestic market along with the increase in the infrastructure investments and public projects launched.

In terms of its production structure, the Turkish aggregate sector operates through many production units positioned in a scattered fashion. The total established production capacity amounts to around 250 million tons of aggregate with a concentration on the regions providing easy access to raw materials. The possible restrictions to be introduced regarding the operation of the quarries close to Istanbul, a region with a high consumption level, are likely to influence the aggregate sector in the oncoming periods.

Ready-mixed concrete sector enjoys a rising trend in parallel to the developments in the construction sector. Ready-mixed concrete production rose by 3% in 2012 when compared with the previous year and also went up by 10% in 2013, reaching 102 million $m_3$ in total. Revitalized through urban transformation projects, the sector also developed mainly thanks to the increase in public projects during the period.

The increase in world population leads to a global need for constructing further infrastructure, which is also true for Turkey. The impact on the domestic development of the cement and ready-mixed concrete sector from the investments made in developing infrastructure aspects such as highways, power plants and subways is an important indicator for the abovementioned fact. On the one hand the fact that Turkey is a country located mainly on a seismic belt requires the country to regenerate current building inventory, especially in and around Istanbul. In other respect, having a significant share in emerging greenhouse gas emissions poses risks to the environment and society at large as well as to the future of the sector. This situation underlines the need for the cement sector in Turkey to deliver innovative, efficient, functional and environmentally friendlier products and service solutions apart from meeting the need for cement and ready-mixed concrete, which is expected to rise in the oncoming periods in Turkey. Once the transformation launched by the sector for that purpose has been speeded up, the current challenges the sector faces could actually turn out to be an opportunity that supports the development of the sector in that direction. Especially the increase in green building certified projects such as LEED and BREEAM and the rise in the studies carried out by the NGOs in that area in recent years show that the demand for such environmentally friendly products in those segments is bound to increase while the sector is capable of meeting that specific developing need.

The Turkish market is yet to reach its potential in the ready-mixed concrete segment. For instance, despite the initiatives taken in the sector and various good examples set, the use of concrete in road construction is still not an alternative to the use of asphalt. However, built widely in the US and Europe, concrete highways constitute a more efficient option, are more functional in terms of maintenance and use, are more environmentally friendly in terms of raw material and implementation. Apart from contributing to the sector and country economy with the rise in the studies and sensitivity regarding this issue, concrete highways will be an important opportunity to decrease the environmental impact from the infrastructure investments. In addition to that, production and supply of higher quality and durability concrete in Turkey, a country facing a high earthquake risk, becomes more and more important every year. Boasting laboratories in all its facilities along with its mobile laboratories, Akçansa is able to continuously meet the rising need in the market for high quality concrete.

Thanks to its capacity to perceive market transformations early, Akçansa has been able to provide effective solutions on time for this development in the sector. Presenting the best innovation examples in the sector through its products, services and operational processes, Akçansa leads the way in the sector for ensuring corporate sustainability and works in cooperation with many NGOs to achieve this aim. In that respect Akçansa continued its studies in collaboration with the Environmentally Friendly Green Buildings Association, which Akçansa is a member of, and became one of the first signatories to the Declaration of Energy Efficiency in Buildings, which was issued by the Business Council for Sustainable Development Turkey to address energy efficiency risks in company buildings and draw up action plans to manage these risks. Finally Akçansa pioneered the efforts to set up Sustainability Committees in the Turkish Cement Manufacturers' Association and the Association of Turkish Construction Material Producers apart from taking on the chairmanship position for these committees during the reporting period.

Catching on with the sector growth trend thanks to its innovative and environmentally friendly solutions, Akçansa increased its sales volume in Marmara Region from 3.7 million tons in 2012 to 4.5 million tons in 2013. Hence Akçansa reached a market share of 25.1% in 2012 and 28.1% in 2013 in Marmara Region. Through the IT infrastructure established in 2013, Akçansa aims to deliver a product price level profitable for the company, fair for the market by price-profitability optimization.

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Meeting global trends and local demands at the same time, Akçansa pursues 6 strategic goals to be conducted in the short-term and medium-term with a view to maintaining its leading role in the sector. In that respect Akçansa seeks to

- Reduce the environmental impact throughout the product life cycle by means of achieving energy efficiency, alternative fuel and raw material usage practices,
- Maintain its leading role in the sector in corporate sustainability, especially in terms of environmental performance,
- Be a leader in costs through sustainable high performance,
- Improve high quality special product diversity and its share in the portfolio by focusing on products with reduced clinker ratio,
- Increase its regional market shares and reinforce its leading position in the Turkish market by developing its distribution network and implementing vertical integration strategies,
- Ensure continuity of human resources development by establishing a culture of innovation and a positive organization climate.

# Innovative Special Product Portfolio

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G4 - EN27
G4 - PR5

In parallel with its operations to create a more liveable world, Akçansa has provided high quality special ready-mixed concrete products for the Turkish market since 2003. In line with Akçansa customer demands, the special product portfolio essentially seeks to provide high performance solutions with reduced environmental impact especially in terms of greenhouse gas emissions, apart from helping the customers save on labour costs and time; offering them thermal and noise insulation as well as waterproofing and reducing risks to occupational health and safety. Thanks to the studies undertaken in collaboration with Betonsa Technology Centre and Istanbul Technical University (İTÜ) Building Materials Laboratories during the reporting period, new products were developed including "100+Beton" and "A+Beton". Thus the total number of special products by Akçansa rose from 15 in 2011 to 18 in 2013. While the share of the special products in total sales turned out to be 7.3%, the products highlighted for their reduced environmental impact enjoyed 28% share in special product sales.

**İzoşap** a light ready screed product from Betonsa, provides thermal insulation and is light, fluid and low in density thanks to high-entrained air. The product properties ensure reduction of the unnecessary burden on the structures, which contributes to earthquake resistance as far as those buildings are concerned.

**Yeşilşap**, an environmentally friendly and light ready screed product, reduces $CO_2$ emission by up to 35% through special additive blend cements used in its production process. Due to the special chemical additives used, Yeşilşap weighs 25% less when compared with conventional screed products and also contributes to thermal insulation on buildings.

**İzobeton** a light concrete product used for insulation, weighs up to 60% less compared to other concrete products, and reduces the total burden of the building hence contributing to its earthquake resistance.

**100+Beton** features superior durability and permeability qualities thanks to the special cement and various mineral additives used, and is developed for large infrastructure projects required to serve for over a century such as bridges, airports, subways and highways. High use of mineral additives instead of clinker in the product composition ensures a significant reduction in greenhouse gas emission values.

**A+Beton** is a durable and high performing concrete product with a significantly reduced $CO_2$ emission value due to the use of blast furnace slug for up to 70% in its composition, and is developed for environmentally friendly green buildings. Depending on the building type, the A+Beton product group is composed of three categories including A+Beton Basic, A+Beton Road and Coverage, A+Beton Structure.

**Viskobeton** is a self-landing concrete product developed for structures requiring strength and durability. Due to mineral additives used highly to replace clinker in its composition, the product's $CO_2$ emission value has been reduced. Its high strength and durability enhance the durability of the structures thereby reducing their maintenance costs. Since it does not require any vibration, the product is especially suitable for being used on compact and narrow section forms, areas requiring high quality smooth surfaces, downtown building sites, aesthetic form designs and sites where it is not possible to use a vibrator. The product thus reduces safety and occupational health risks, noise impact and labour costs.

**Drabeton** features steel wires and is intended for use on industrial sites. During the storage, handling and inspection stages, Drabeton therefore saves on energy and labour costs at building sites.

# Our Dialogue with Dealers and Customers

Thanks to its market and customer oriented approach, Akçansa provides value-added products and services with superior quality standards for its customers. Local and international quality standards form the basis of the product and service studies. Apart from the biannual customer satisfaction and loyalty surveys held, brand perception and customer portfolio analyses completed during the reporting period provide invaluable feedback for the company to implement new strategies focused on improving customer loyalty, adapting to local demands, increasing market share and deepening customer relations. New practices devised through those studies include special programs developed for dealers and customer groups with a high loyalty level, payment system revisions initiated as well as new practices developed for bagged and bulk cement users.

As a result of its corporate strategy, Akçansa has introduced new practices in recent years to switch to a "business partnership" model from a customer-supplier model. In that respect, it has established direct communication channels to ensure a more comprehensive communication with the dealers and customers. Training given to dealers and customers regarding the impact caused by the consumption of the products and services along with the ways for proper use of the products and services besides the production processes constitutes one of the most important channels in that sense. With a view

to informing customers on the latest standards, experiments and technical aspects, 40 on-site training activities were organized in 2012 and another 35 were held in 2013 amounting to 75 in total during the reporting period. Meanwhile technical publications and implementation programs were prepared for the customers and monthly prize quizzes were organized. During the reporting period, a customer communication line and a call center were introduced in an effort to ensure that the users could reach relevant units in the fastest and most effective fashion.

## Akçansa Loyalty Programs

Demanding that the current relations should "go beyond doing business", the customers interviewed as part of the market surveys held during the reporting period expressed their expectation from Akçansa to introduce practices that include communication channels, service types and conditions specially designed for them in line with their special requests from Akçansa. Consequently the bulk and bagged cement customers turned out to have different expectations from Akçansa, which led to the launch of Akçansa Loyalty Program to improve customer relations in that respect. Focused on the entire Marmara Region, the program is composed of subcategories that appeal to different segments. Within the scope of this plan, the following programs were initiated: "One Hundred Percent with Akçansa" for ready-mixed concrete producer customers, "Building Club" for the hardware store customers buying bagged cement, "Dealer Council" for the dealers and "Future Leaders".

"Yapı Club" is designed to provide support for hardware stores, which receive bagged cement through dealer channels, according to the amount of cement they sell. A website dedicated for that purpose, www.yapiclub.com, is available to make it easier for the members to access the application.

Ready-mixed concrete producers are supported in different categories through the "One Hundred Percent with Akçansa" practice, which was launched in line with the special service demand from ready-mixed concrete producers using only Akçansa cement. Akçansa experts periodically visit the program member companies and assess them in terms of production, quality, environment, OHS, insurance, equipment and integrated management systems. Then they issue reports for further improvements available based on these assessments. The shortcomings of the program member companies regarding their laboratories were identified and met in 2013 thanks to Akçansa support while training opportunities were provided for the companies' employees about quality, environment and OHS, and their product quality control processes were improved.

"Dealer Council" is a program launched to improve the business processes of Akçansa dealers, which are positioned as business partners. Meeting periodically, the council discusses the requests from dealers as well as their problems and suggestions. Council studies provide significant feedback for shaping Akçansa sustainability strategies.

Devised within the scope of Akçansa sustainable supply chain management studies, "Future Leaders " program is focused on the young people, especially university students, who represent the next generation Akçansa customers. Thanks to the studies held for training and creating awareness, young people get informed about the different prioritized issues in the sector, enjoy the opportunity to specialize in business processes and get to know Akçansa more closely.

In January 2013, by pioneering a first in its sector, Akçansa organized B2B Marketing Summit. The summit, the main aim of which was providing an opportunity for participant to meet with experts speakers from various fields, formed a basis for discussion and development of B2B marketing practices followed in the cement sector through different point of views. During the reporting period, Betonsa has conducted consumer awareness raising practices for concrete quality used in buildings; for this purpose a marketing competition called "Open Innovation" has been organized.

## Product Responsibility

G4 - EC9
G4 - PR3

In line with its product responsibility understanding, Akçansa provides quality reports and material safety information forms regarding the products supplied for all its customers. Bagged cement products feature information on product package labels too while the information documents regarding bulk cement product are provided for customers during the product delivery. Besides product content information, product information documents cover information and warnings regarding environment and OHS aspects as well. Akçansa exceeded the current standards in the market during the reporting period and scored a first time in the cement sector Turkey by making an environmental product declaration.

## Akçansa Launches the First Cement Product in Turkey with Environmental Performance Label

As the first company to issue a sustainability report in the sector in Turkey, Akçansa not only shares its environmental performance as well as its goals for the medium and long-term with the public in line with its principle of transparency but has also volunteered to take the initiative for getting an independent organization to examine and assess its production processes through the Environmental Product Declaration (EPD) practice. As a result of the assessments made by the German Institute Construction and Environment (IBU), Akçansa "CEM I 42.5 R" and "CEM II/A-S 42.5 R" products have received the EPD labels.

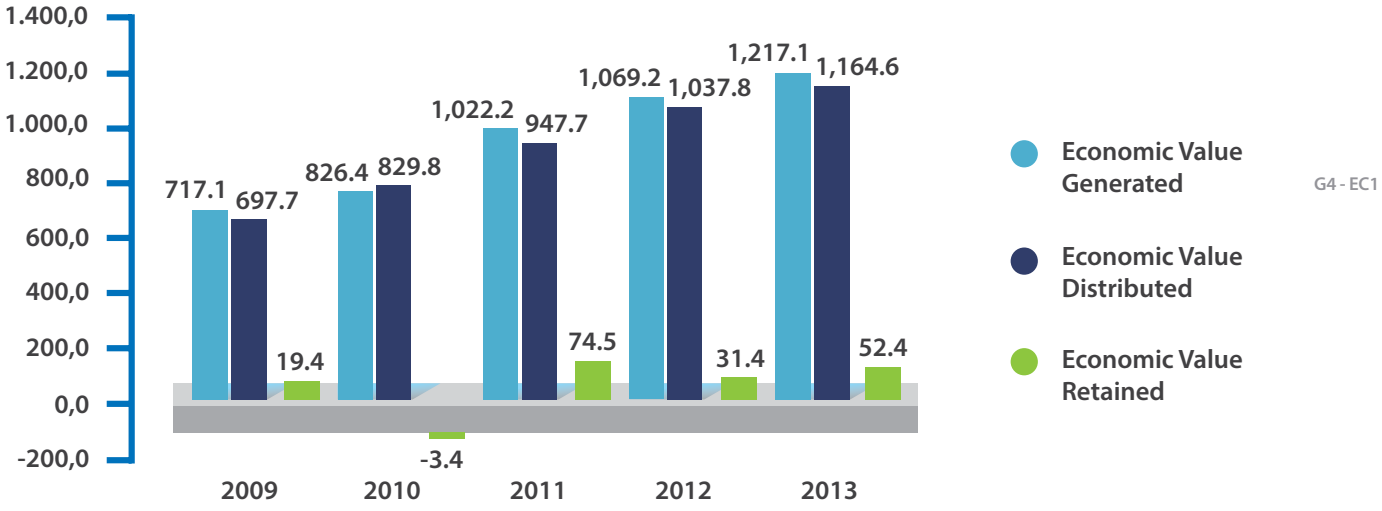
As part of the Environmental Product Declaration (EPD), Akçansa has the environmental performance of its CEM I 42.5 R and CEM II/A-S 42.5 R products independently assessed in accordance with the ISO 14040 series standards and shares the results with the public. The declaration covers the ecological and carbon footprint of the production process within the scope of the "Life Cycle Assessment (LCA)" for the products. The EPD document informs the customers and end users on the environmental performance information regarding the products. Therefore the customers on the final links of the supply chain enjoy the opportunity to accurately calculate the environmental impact of their operations, especially in terms of their projects with environmental certificates.

## Contributions to Local Economy

Boasting a value chain bearing strong local characteristics from raw material production to end users, cement and ready-mixed concrete sectors enjoy the potential to create significant impact on local economic development. The fact that production and consumption covers a certain geographic area contributes to local economies in various aspects from local employment to economic value distribution. In other words, a great portion of the economic value generated by Akçansa distributed to local stakeholder groups. In that respect, out of the 2.3 TL billion part of the economic value generated by Akçansa operations in 2012-2013, 2.2 billion TL was transferred to certain stakeholder groups.


Akçansa Launches the First Cement Product in Turkey with Environmental Performance Label

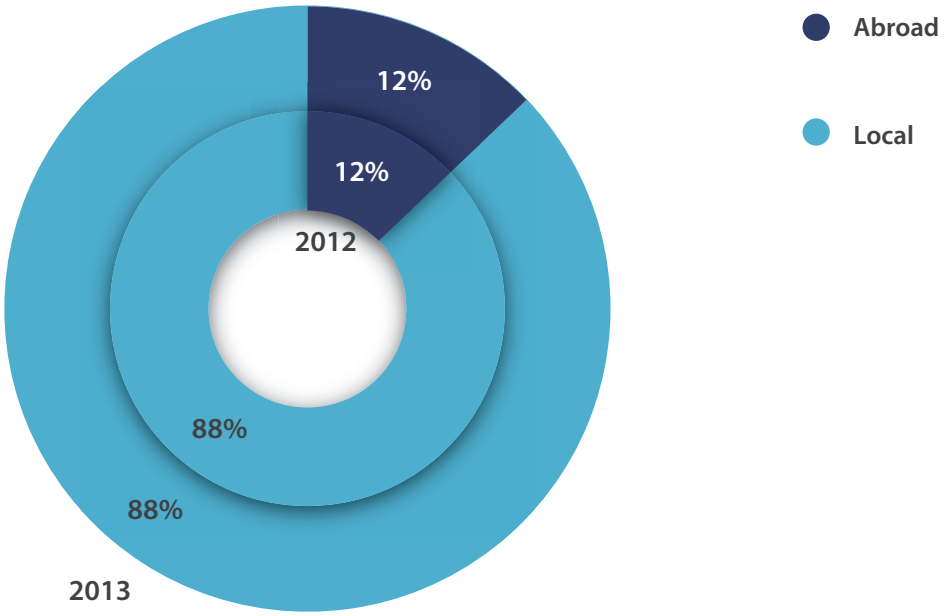
## Direct Economic Value Distribution (TL million)




G4 - EC1

A great portion of the economic value distribution completed by Akçansa takes place by means of procurement operations. Undertaken through an objective system and decision-making mechanism, the procurement operations are expected to meet the required product standards, quality as well as amount and cost conditions. Moreover local suppliers are preferred. The local suppliers meeting the related norms in the service tenders initiated by Sabancı Holding Joint Procurement Group are prioritized. In that context, local suppliers provided 85% in numbers and 88% in total sum out of the 12,797 procurement operations that were completed in 2012 and were worth 910 million TL altogether. As for 2013, out of the 13.071 procurement operations completed and were worth 1 billion TL altogether, 88% in numbers and 84% in total sum were provided through local supply channels.

## Procurement Operations by Source (%)



# Governance and Sustainability

# Governance and Sustainability

G4 - 16
G4 - 34
G4 - 35
G4 - 36
G4 - 38
G4 - 46
G4 - 47
G4 - 48
G4 - 49
G4 - 50

Governance understanding of Akçansa relies on a transparent, accountable management model that complies fully with the laws while creating high level values for the stakeholders and ensuring corporate sustainability. Within the scope of this understanding, Akçansa prioritizes establishing sustainability and stakeholder engagement management as well as a corporate governance structure in line with the international standards covering aspects such as internal audits, risk management, quality systems and business ethics so that the efficiency, continuity and constant improvement of Akçansa operations could be ensured. Supported by the best practice examples, the systems introduced in those areas are continuously improved at Akçansa.

## Corporate Governance

Equality, transparency, accountability and responsibility are the essential concepts forming the corporate governance understanding of Akçansa. Established within the framework of those concepts, the corporate governance organs seek to develop the management capabilities constantly besides providing on time and complete information for the public, ensuring equal treatment of all the stakeholders and guaranteeing their rights along with avoiding conflicts of interests. The improvement studies undertaken during the reporting period reinforced Akçansa corporate governance structure on the field.

Akçansa Board of Directors is composed of six non-executive members elected by the General Assembly among candidates with a high level of knowledge and skills as well as a qualified professional background and experience. In line with the current Capital Markets Board (CMB) regulations there are 2 independent board members, which amount to one third of the total number of board members. Chairperson and General Manager offices are conducted by different individuals. Akçansa General Manager, who has executive responsibilities, fulfils his duties in cooperation with the Executive Board, which is composed of senior managers representing various areas of expertise.

Operating under the Board of Directors, the Audit Committee is composed of two independent members and advises the Board of Directors to take necessary measures after examining the internal audit structure of the company in quarterly periods. Started in 2012, the Corporate Governance Committee comprises two independent board members and is responsible for the compliance of the Akçansa corporate governance model with the locally and internationally acclaimed corporate governance principles besides legal regulations. The Corporate Governance Committee also fulfils the duties of the Nomination Committee and the Remuneration Committee. Also composed of independent board members, the Early Risk Detection Committee, which was established in 2013, is responsible for early detection of any risks that could jeopardize the existence, development and continuity of the company along with determining, efficiently managing and monitoring of the measures to be taken for the elimination of those risks.

As an active member of the Corporate Governance Association of Turkey, Akçansa monitors developments regarding corporate governance and participates in the countrywide studies organized to develop corporate governance practices further.

Thanks to the suggestion system introduced to ensure participation of the employees in the continuous improvement of the business processes and award their participation, Akçansa employees are able to share their creative ideas and have a voice in the production and management processes. In addition to that, employees enjoy the opportunity to inform the senior managers on their suggestions and views face to face at the annual "Communication Meetings" as well as the "We Listen to You" meetings held periodically. Thus, participation of employees in the management is ensured through an interactive environment established for exchange of views.

# Internal Audit and Risk Management

Akçansa establishes mechanisms to determine and effectively manage possible risks to emerge in all business lines. Preventive approaches are developed within the scope of risk management plans, which also feature sustainability priorities as risk elements. While the most senior body responsible to the risk management function, is the Early Risk Detection Committee, a change introduced during the reporting period separated the risk management function from the internal audit unit so that the risk management function is now organized as an independent unit. Covering all risk elements including sustainability priorities, reports that are prepared in line with the ISO 30001 Standard are submitted to the Board of Directors every two months so that the senior management could monitor the related performance and preventive measures could be identified.

From business ethics to processes yielding operational and financial results, the Internal Audit Unit undertakes comprehensive periodic programmed or theme based audits in accordance with the standards set by the Institute of Internal Auditors. The audit findings are then used to plan studies for further improvement.

# Excellence and Quality

Operating within the scope of the obligations set by the professional associations it is a member of along with the related quality as well as national and international product standards, Akçansa meets the global trends and local demands in that aspect.

In general, management systems such as ISO 9001, EN 197-2 are followed in the business processes. All cement products are produced in accordance with the criteria set by the CE Certificate and TS EN 197-1 standard. While the ready-mixed concrete products comply with the TS EN 206-1 and G Practice Communiqué, the production at the aggregate facilities complies with the TS EN 12620 Standard criteria and CE Certificate requirements. Occupational Health and Safety practices at the facilities comply with the OHSAS 18001 Occupational Health and Management System criteria while the facilities comply with the ISO 14001 Environmental Management System criteria to manage their environmental resources and also comply with ISO 50001 criteria for their energy management systems. External auditing and confirmation studies are regularly undertaken for the renewal of the quality and management standard certificates in an effort to realize the goal to achieve continuous improvement, guarantee product quality and safety, manage environmental resources, and ensure human health and safety.

# Business Ethics

Akçansa adopts the business ethics principles published in 2004 by its parent company Sabancı Group under the Sabancı Group Code of Ethics (SA-Ethics). Corporate principles, ethical values and standards are defined within the scope of SA-Ethics throughout the company. SA-Ethics is a guideline for the company employees to help them fulfil their duties in line with the legal regulations, internal norms and contracts on time and fully for the benefit of the corporation and avoid acts that could harm the corporation. Business ethics principles covered by the SA-Ethics are grouped under the following titles: Integrity, Confidentiality, Conflict of Interest and Our Responsibilities. Those principles are accompanied by other related company policies such as Policy on Avoiding Conflict of Interest, Policy on Giving and Accepting Gifts, Policy on Protecting Confidential Information, Policy on Establishing and Preserving a Fair Working Environment.

G4 - 14
G4 - 56
G4 - 57
G4 - SO3

The Board of Directors, managers and employees are all expected to abide by the ethical principles. No matter in Turkey or abroad, all Akçansa operations are executed within the framework of the local legal regulations and international laws. As a publicly traded company, Akçansa operations also comply with the related communiqué issued by the Capital Markets Board (CMB). Seeking to ensure that Akçansa employees are aware of the corporate impact of their actions and attitudes, SA-Ethics creates the necessary transparent, honest and reliable communication environment for the management of the relations with the shareholders as a publicly traded company as well as in all goals, decision-making and business management processes.

The final SA-Ethics chapters are “Procedures and Methods to Be Followed While Making an Ethical Decision” and “Resolution of Unconformities” with necessary contact information provided at the end. Every new employee receives the obligatory e-learning training regarding ethical principles. In addition to that, a survey for compliance with ethical principles is held annually for all company employees so that their awareness regarding ethical principles is maintained. In an effort to make them easily accessible by all the employees, the ethical principles are available on the Akçansa Portal. The portal also features information regarding corporate principles and values, developments about the projects underway, corporate goals, regulations related to process and practices, request forms and catalogues.

# Sustainability Management

## Sustainability Management

G4 - 18
G4 - 37
G4 - 42
G4 - 43
G4 - 44
G4 - 45
G4 - 46
G4 - 47
G4 - 48
G4 - 49
G4 - 50

As the leading cement, ready-mixed concrete and aggregate producer in Turkey, Akçansa undertakes its operations creating added value in the light of tomorrow as well as today. Apart from its sector-oriented activities and its principle to create value for the community, Akçansa seeks to ensure the further development of the communities it operates within. That is why its sustainability approach, which also includes community development studies, is located in the very heart of all its business processes from raw material production, sales and marketing to after sales services. Akçansa corporate sustainability policy is conducted in line with the goals set in the HeidelbergCement Sustainability Ambitions 2020, which are valid for all HeidelbergCement affiliates. According to the Sustainability Ambitions 2020, Akçansa Sustainability Committee is responsible for the annual company practices and performance measurement. Akçansa Sustainability Committee provides direct information for the Executive Board and submits risk reports to the Board of Directors on the practices implemented, goals reached and performance developments achieved regarding sustainability priorities.

During the reporting period Akçansa allocated 46.3 million TL in total for the studies to improve its sustainability performance. 42.6 million TL of that sum was used in investments while the remaining 3.7 million TL was used to cover expenses.

The input provided through channels such as surveys and studies, satisfaction surveys, working group studies, OHS Committees, marketing communication studies, competitions, "Bridge Days" and "Neighbour Councils" are assessed in terms of the Sustainability Ambitions 2020 along with the local, international risks and opportunities. As a result of a workshop prioritization organized in the light of those assessments, a number of prioritized issues for the Akçansa Value Chain have been identified. The prioritized areas are covered within the scope of the following 5 links comprising the value chain: Raw material production, procurement, cement and ready-mixed concrete production, logistics and sales & marketing.

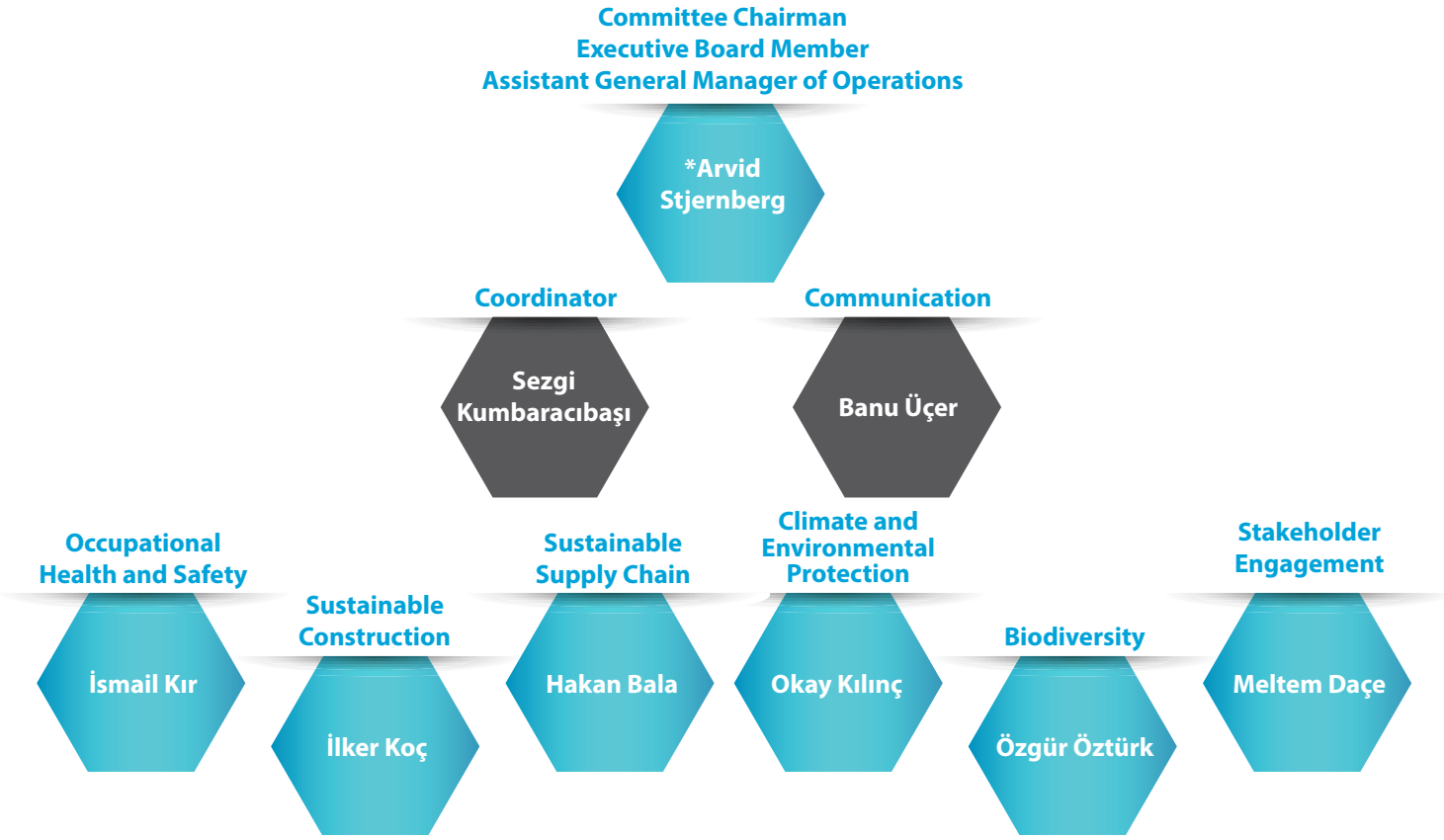
Within the scope of the Sustainability Ambitions 2020 in March 2013, the Sustainability Committee updated the committee structure in line with the sustainability priorities set and by the approval of the Executive Board. Akçansa Sustainability Committee continues to function within the framework of the 6 thematic working groups updated in 2013.

Chaired by the representative of the Akçansa Executive Board, Akçansa Sustainability Committee is composed of the members of the thematic working groups formed in parallel to the strategic goals besides a communication manager and a coordinator.

## Sustainability Committee Study Issues


A sustainability committee member, who specializes in the related issue, coordinates each of the 6 main study areas.

## Akçansa Sustainability Committee Organization Diagram




*Since 1 July 2014, the deputy general manager Ali Kipri, serves as the president of the Sustainability Commitee.

# Dialogue with Stakeholders

G4 - 24
G4 - 25
G4 - 26
G4 - 43
G4 - SO1

Having adopted a participatory management approach, Akçansa remains in constant dialogue with its stakeholders and provides transparent data regarding its environmental, social and economic performances to meet any requests, views and suggestions. Considering dialogue with the stakeholders and participatory communication models an indispensible part of its sustainability strategy, Akçansa takes a proactive approach to keep developing dialogue channels with its stakeholders further.

Akçansa defines and monitors its interaction with its stakeholders in every link of the value chain extending from the suppliers to customers, and draws up action plans to improve the aspects identified. As a result of an improvement made in the Akçansa Sustainability Ambitions 2020 during the reporting period, stakeholder engagement was added as one of the thematic working groups. Akçansa identifies different communication processes in line with the specific and distinct needs of the stakeholder groups defined in line with the social, environmental and economic impact stemming from the sustainability operations.

| Stakeholder Group | Practice Type and Frequency |
|---|---|
| **Employees** | Surveys and Research (at various intervals); Training Activities, SA-ETHICS Principles, Corporate Portal, Announcements and Postings (continuous); Suggestion and Rewarding System (instant); OHS Committees, Function Based Meetings (monthly); Working Groups and Committees (at least six times a year); Akçansa Harcı Magazine (three times a year); Performance Management and Career Development Meetings, Social Activities (at least twice a year); Management Meetings, Communication Meetings, Annual Report, Sustainability Report, Environment Day (annually); Working Life Evaluation Survey (annually); We Listen to You (periodic) |
| **Majority Shareholders** | General Meetings, Annual Report, Sustainability Report (annually); Board of Directors Meetings, Financial Performance Meetings (quarterly); Material Disclosure (upon necessity) |
| **Minority Shareholders** | Investor Presentations, One on One Interviews (upon request); General Meetings, Annual Report, Sustainability Report (annually); Financial Performance Meetings (quarterly); Material Disclosure (upon necessity) |
| **Dealers** | One on One Meetings (upon request); Abroad Dealer Meetings, Domestic Dealer Meetings, Annual Report, Sustainability Report (annually); Akçansa Harcı Magazine (twice a year) |
| **Suppliers** | One on One Meetings (upon request); OHS Committees (monthly); Annual Report, Sustainability Report (annually); Supplier Business Ethics Principles (continuous); Akçansa Harcı Magazine, Business Ethics Briefings (twice a year) |
| **Product End Users** | Product Labels, Marketing Communication Studies (continuous); Participation in Fairs, Product Information Training (several times a year); Annual Report, Sustainability Report (annually) |
| **Local Communities** | Complaint System, Social Projects, Donations and Sponsorships (upon request); Information Meetings (upon necessity); Annual Report, Sustainability Report (annually); Neighbour Council (annually); Bridge Day (annually) |
| **Sector Actors** | Meetings and Discussions, Exemplary Projects and Initiatives (upon request); Participation in Fairs (several times a year); Annual Report, Sustainability Report (annually) |
| **Local Administrations** | Meetings and Discussions, Support for Infrastructure Investments, Festival and Social Event Sponsorships (upon request); Annual Report, Sustainability Report (annually), Neighbour Council (annually) |
| **Public Organizations** | Meetings and Discussions (upon request); Informative Reports (at various intervals); Public Audits (at various intervals/instant); Annual Report, Sustainability Report (annually); Neighbour Council, Bridge Day (annually) |
| **NGOs** | Memberships (continuous); Working Groups, Committee and Board Memberships (periodic); Joint Projects and Initiatives, Meetings and Discussions (upon request); Annual Report, Sustainability Report (annually) |
| **Universities and Academics** | Scholarship and Internship Opportunities, Participation in Academic Congresses and Seminars (continuous); R&D Project Partnerships, Sponsorship and Support; Support for Academic Research and Publications; Meetings and Discussions (upon request Annual Report Sustainability Report (annually); Concrete Ideas Project Competition (annually) |
| **Employee Families** | Informative Studies (continuous); Akçansa Harcı Magazine (three times a year); Social Events (at least twice a year); Environment Day (annually) |
| **Opinion Leaders** | Meetings and Discussions (upon request); Annual Report, Sustainability Report (annually) |
| **Media** | Interviews and Talks, Neighbour Council (annually); Bridge Day (annually); Meetings and Discussions (upon request); Press Releases, Material Disclosure (upon necessity); Annual Report, Sustainability Report (annually) |

Believing firmly in the fact that sustainable development can be achieved through harmonious cooperation with the stakeholders, Akçansa has adopted the motto "Stand up, Speak up, Participate" and therefore works with its "neighbours" for a joint future. The main objective of this practice is to provide information for the local communities regarding the current as well as planned studies, to reach large masses and strengthen the communication network, to discover areas requiring development and thus provide further benefit for the community.

Akçansa annually meets its business partners, suppliers, dealers and customers along with local communities and other stakeholder groups at the "Stakeholder Meetings", "Neighbour Council", "Bridge Day" and similar practices organized. Thanks to those meetings, Akçansa seeks to devise creative solutions, make the best of its strong sides and discover the aspects it has to improve in collaboration with its stakeholders, who have contributed significantly to its success. Apart from that, Akçansa senior managers participate in those meetings, thus enabling the stakeholders to be informed on the developments and information regarding the company at first hand with transparency.

Held at Çanakkale, Samsun and Büyükçekmece Plants annually, Neighbour Council seeks to meet the local stakeholders defined as "neighbours" and brief them on the current studies, strengthen communication while learning about their demands and expectations. Plant directors, managers and employees, village headmen working in the district, representatives from environmental protection associations, school principals, municipal officials responsible for environmental planning, trade union representatives, NGO representatives and local community members participate in the Neighbour Council meetings, during which all the stakeholders convey their expectations, suggestions and complaints.

G4 - 27

First launched during the reporting period, "Bridge Day" is held to promote communication with the Akçansa employees, business partners, local administrations, NGOs and local community. The Bridge Day, first practice of which was conducted in Büyükçekmece Plant, is also planned to be held in Çanakkale and Samsun in 2014.

The most emphasized aspects in the related practices undertaken are the reduction of emissions, demands for landscaping, development of collaboration channels, sponsorship activities and local employment. As a result, such issues are reported to the Executive Board and the studies dealing with those issues are included in the action plans.

Preliminary studies were completed in 2012 to draw up a comprehensive communication plan for stakeholder relations in line with the goal set in the past reporting period and stakeholder groups were identified accordingly. The first stakeholder meeting is thus planned to be held in 2014.

# Combating the Climate Change

# Combating the Climate Change

G4 - 15
G4 - EC2
G4 - EN3
G4 - EN5
G4 - EN6

Akçansa is the leader of the cement sector in Turkey and manages its practices for combating the climate change through short and medium term goals according to the risks and opportunities defined in strategic management processes. With this regard, Akçansa's approach to climate change risk management is based on operating in compliance with low carbon strategy throughout the whole product life cycle while improving its business processes and developing new products as well as participating in local and international initiatives. Therefore, Akçansa primarily aims to increase energy efficiency in all its activities, reduce emission of pollutants, use alternative energy resources in cement production processes and reduce the product emission impact through the use of alternative raw materials in its products. Participating in national, international and sectoral initiatives focused on combating climate change, Akçansa develops practices and cooperative efforts to enhance its performance while it also invests in possibilities to benefit from the new opportunities posed by the low carbon economy. For instance, it is estimated that a new market worth around 5 billion TL will emerge in Turkey with the development of energy efficiency and sustainable construction practices in buildings. In the last 3 years, Akçansa has invested and spent approximately 100 million TL on studies such as efficient resource management, technology replacement, emission control, climate-friendly technology usage, product design and manufacturing technologies to combat climate change during the reporting period.

While establishing policies and practices to combat climate change, Akçansa takes into account Kyoto Protocol and outcomes of the International Climate Summit as well as principles followed by other parallel initiatives. In emission calculations, Energy and Carbon Dioxide Inventory Protocol prepared by WBCSD Cement Sustainability Initiative (CSI) is used. Created on the basis of sector-specific needs, the protocol is also in compliance with the Greenhouse Gas Protocol prepared by WBCSD and World Resources Institute. In 2013 Akçansa was among the leading signatories to the Declaration of Energy Efficiency in Buildings published by the Business Council for Sustainable Development Turkey. Thus, Akçansa makes a commitment about the energy efficiency practices in its buildings, and also contributes to raising awareness about environmentally friendly building practices, which Akçansa supports through its products and services. Within the framework of the commitment made as part of the Declaration, Akçansa is setting goals to bring its Head Office energy consumption, which was over 250 thousand kWh in 2013, further down by 2015.

In line with its transparency approach, Akçansa joined the Carbon Disclosure Project (CDP) Turkey in 2011 and continued its participation in the project in the reporting period. As a result of the evaluation made during the Project, thanks to which the performance regarding climate change strategy and measures taken was reported to the public as well as various international investment groups, Akçansa obtained 71 points, becoming one of the most transparent companies of Turkey in terms of climate change impacts. The reports can be found on the website www.cdp.net.

## Energy Efficiency

Cement production requires energy intense processes. Energy consumption during these processes, especially in clinker production, creates environmental impacts besides being a significant cost item. This is why Akçansa adopts an efficient energy management model based on ISO 50001 Standards in its production processes. In order to achieve its primary goal of reducing energy intensity in production, Akçansa focuses on practices such as energy-efficient equipment preferences, process improvement practices, energy recovery from waste heat, and prevention of lost and fugitive energy use during production processes. There is an Energy Management Unit in each of the three factories, holding regular meetings in order to foster development regarding compliance with the regulations and improvement issues. While similar studies are carried out in the aggregate and ready-mixed concrete production facilities, the energy consumption in these processes are incomparably low considering the high consumption levels in the cement production process.

In 2011, Akçansa consumed 3.29 GJ of energy per 1 ton of clinker production. In 2012 and 2013, in parallel to the increase in production amount, total energy consumption increased. In order to decrease specific energy consumption energy efficiency studies were conducted. As a result of these studies, energy consumption required for 1 ton of clinker production was 3.49 GJ in 2012 and 3.51 GJ in 2013.

| Total Energy Consumption | | | | | |
|---|---|---|---|---|---|
| **Cement Plants** | **2009** | **2010** | **2011** | **2012** | **2013** |
| **Direct Energy Consumption (GJ/ year)** | 19.833.710 | 22.989.364 | 21.471.819 | 22.726.868 | 23.203.940 |
| **Clinker Specific Heat Consumption (GJ/ton)** | 3,49 | 3,33 | 3,29 | 3,49 | 3,51 |
| **Indirect Energy Consumption (GJ/year)** | - | 2.688.970 | 2.570.857 | 2.371.035 | 2.467.245 |
| **Energy Production from Waste Heat (GJ/)** | - | - | 118.734 | 299.147 | 335.638 |
| | | | | | |
| **Ready-Mixed Concrete Facilities** | | | | | |
| **Indirect Energy Consumption (GJ/ year)** | 24.949 | 31.084 | 29.812 | 32.470 | 32.120 |
| **Specific Energy Consumption** | 0,006 | 0,006 | 0,006 | 0,007 | 0,007 |
| | | | | | |
| **Aggregate Facilities** | | | | | |
| **Indirect Energy Consumption (GJ/year)** | - | 915 | 1.330 | 1.455 | 1.130 |
| **Specific Energy Consumption (MJ/ton aggregate)** | - | 0,66 | 0,67 | 0,59 | 0,42 |

**R&D for Efficiency**

In order to reduce the amount of energy needed in production processes, Akçansa initiated the "Mineralizer Project" with TÜBİTAK (The Scientific and Technological Research Council of Turkey) and the "Examination of Hydration Reaction in Cement and Research into the Factors Affecting Cement Project" in cooperation with Sabancı University. "Mineralizer Project" aims to reduce energy consumption and improve product quality by reducing the amount of fuel used during clinker production. Initiated in 2013 in cooperation between Sabancı University and Akçansa, the project to examine hydration reaction in cement and research the factors affecting cement studies ways to increase energy efficiency and enhance product quality.

## Akçansa as the First Company to Acquire ISO 50001 Certificate in its Sector

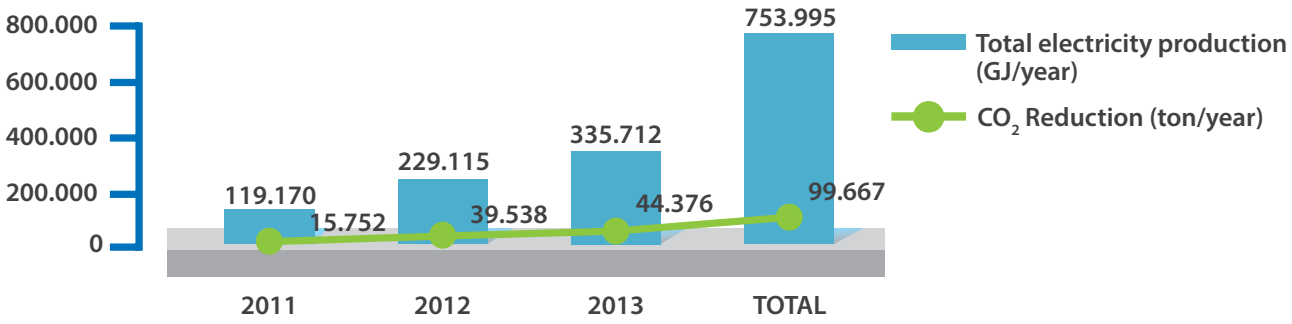
In 2012, Akçansa started documentation studies for ISO 50001 Energy Management System to develop its energy management systems and, in 2013, the 3 cement plants and Çanakkale port facility of Akçansa acquired the first ISO 50001 certificate to be given in the sector.

# Energy Saving at Cement Plants

By implementing the Energy Recovery from Waste Heat Project in 2011, Çanakkale Plant both made an important move for saving energy sources and became a pioneering figure in its sector in Turkey. The waste heat recovery facility with 15 MW capacity established enables the waste heat emitted to the atmosphere to be reused in the kilns. The amount of electrical energy produced after the waste heat recovery was 118,734 GJ in 2011. This amount rose to 299,147 GJ in 2012 and to 335,638 GJ in 2013.

### Energy Recovery from Waste Heat

G4 - EN6
G4 - EN19




In 2012, an energy study was carried out at Çanakkale Plant revealing the energy efficiency potential of the plant. As a result of the frequency converter and efficient energy lines usage practices implemented as part of this study, 67,538 GJ of energy was saved in total during 2012-2013 period. Redesigning the process flow of Çanakkale Plant led to saving 299,115 GJ on energy in 2012. The energy saved increased to 335,712.64 GJ in 2013. The amount of additional energy saving achieved thanks to the converter investment made in the previous reporting period surmounted to 61,355 GJ in 2012 and rose to 67,538.35 GJ in 2013. At Çanakkale Plant, therefore, the energy saved amounted to 360,470 GJ in 2012 and 403,251 in 2013.

With its Waste Heat Energy Recovery Facility, Akçansa was among the "Best Practices of Sustainable Development", representing Turkey at the Rio+20 United Nations Conference on Sustainable Development.
Akçansa Çanakkale Plant Waste Heat Energy Recovery Facility Project was among the best practices chosen by Republic of Turkey Ministry of Development to represent Turkey at Rio+20 United Nations Conference on Sustainable Development in June 2012. The project was cited among the "Best Practices of Sustainable Development" and received the highest points.

In the reporting period, thanks to the process improvement studies carried out at Ladik Plant, 6,500 GJ of energy was saved in 2012 and 19,500 GJ was saved in 2013. In 2012, at Büyükçekmece Plant, equipment and process improvement practices in addition to efficiency studies on compressed air systems implemented with 6 Sigma methodology were carried out, achieving energy savings of 8,280 GJ in 2012. By adding dynamic separator practice to existing energy efficiency studies saved energy amount increased to 1,381,663 GJ in 2013.

Through all these studies, generally at cement plants, 375,950 GJ of energy saved in 2012 and 1,805,013 GJ in 2013.

Raw materials are transported from the quarry to Büyükçekmece Plant via the Çatalca-Büyükçekmece Highway. Apart from the demands of stakeholders in the neighbourhood to redesign the landscape, there was a need to lighten the traffic caused by transportation trucks while they were entering the plant site in Büyükçekmece. A project was implemented to satisfy these needs and the factory entrance gate was changed. Consequently the raw material transportation distance was reduced by 2 km in total in a round trip, which leads to saving 90 thousand litres of diesel fuel annually.

# Energy Saving and Efficiency in Ready-Mixed Concrete

Akçansa seeks to achieve a vehicle age profile younger than 10 years old for all of its vehicles by 2020 within the framework of Sustainability Ambitions 2020. The aim is to reduce the emissions resulting from fuel consumption and increase the efficiency of pumps and mixers used for ready-mixed concrete transportation and placement. In this regard, vehicle replacement studies were carried out and the rate of vehicle age profiles younger than 10 years rose from 81% in 2011 to 85% in 2013.

15,555 kWh of energy was saved annually as a result of the replacement of metal-halide lighting fittings with the LED system at Garipçe and Poyrazköy Ready-Mixed Concrete Facilities.

### Energy Efficiency in Aggregate Production: CLIMB Project

Initiated by HeidelbergCement in 2011, the CLIMB Project aims to optimize the aggregate quarries in the TEAM countries. The project includes practices such as field visits, Aggregate Academy training activities, sharing of information among the TEAM countries, mentorship and process monitoring. Within the framework of the project, optimization studies were realized at Bursa and Ayazağa aggregate facilities in 2013.

# Emission Management

# Emission Management

Akçansa activities are emission-intensive processes thanks to their energy consumption and product composition. In the scope of Sustainability Ambitions 2020, the emissions occurring in all fundamental processes are calculated and monitored meticulously while studies for their reduction are undertaken. GHGs such as carbon dioxide are primarily monitored and reduced as well as dust, nitrogen oxide and sulphur dioxide in addition to other pollutant emissions found albeit sparingly. Throughout the value chain, the most significant amount of GHG is emerged during the cement production process due to the energy consumption level and the calcination effect in the production process. Meanwhile supply, sales and product logistics processes also lead to indirect GHG emissions because of raw material and product shipment processes. Although ready-mixed concrete and aggregate production processes also create indirect emissions due to electricity consumption, that type of indirect emission remains low in amount when compared with other processes. The most significant emission type observed throughout these processes is dust.

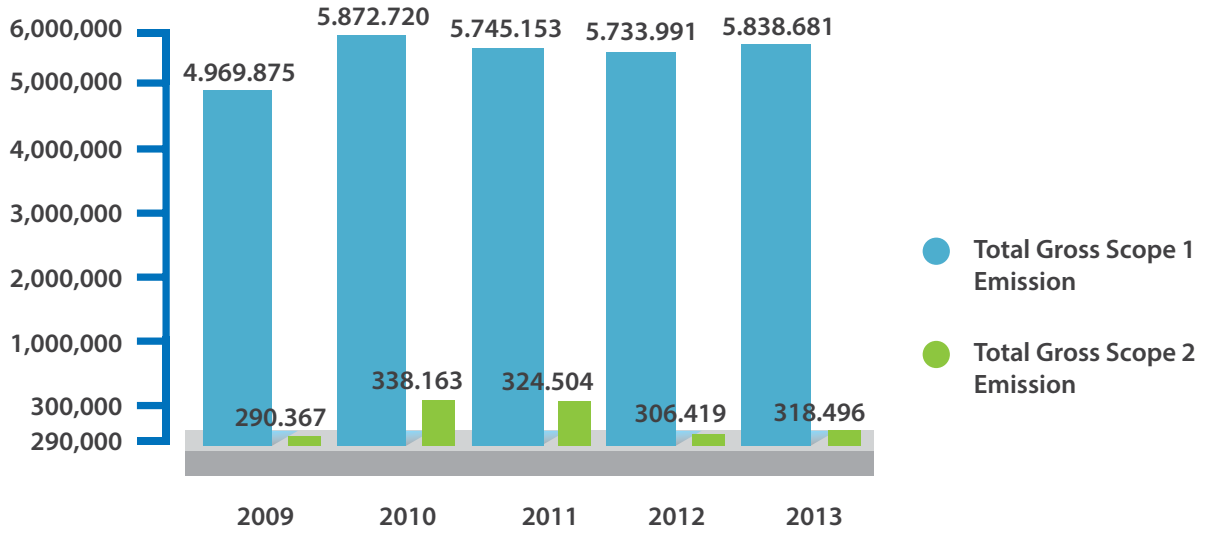
G4 - EN15
G4 - EN16

## Carbon Dioxide Emission

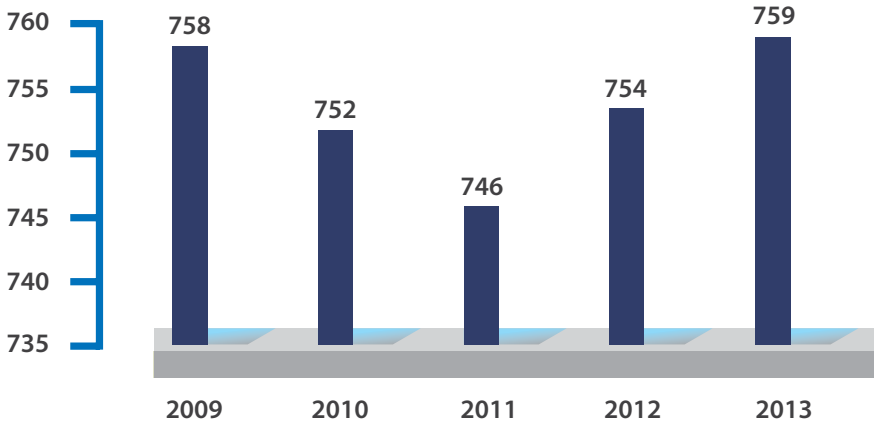
It is estimated that 10% of industry related $CO_2$ emissions in Turkey results from cement production. Acting on the awareness of this responsibility, Akçansa seeks to reduce the emission level related to production through alternative fuel and raw material usage practices. Alternative fuel consumption is the most widely accepted practice worldwide in terms of reducing energy consumption related emissions as well as eliminating dependence on foreign countries for energy consumption. Clinker production is the most emission-intensive process in cement production. Besides energy consumption, chemical reactions occurring during the process produce $CO_2$. The most effective method for diminishing this effect is to use high quality alternative raw materials and reduce the amount of clinker in cement composition. The strategy of Akçansa for reducing GHG emissions is based on alternative fuel and raw material usage besides energy efficiency.

Akçansa follows the Energy and Carbon Dioxide Inventory Protocol, published by WBCSD Cement Sustainability Initiative (CSI) and internationally accepted by the sector, in its carbon dioxide emission calculations on Scope1 and Scope2 levels.

**Gross Carbon Dioxide Emission (ton)**

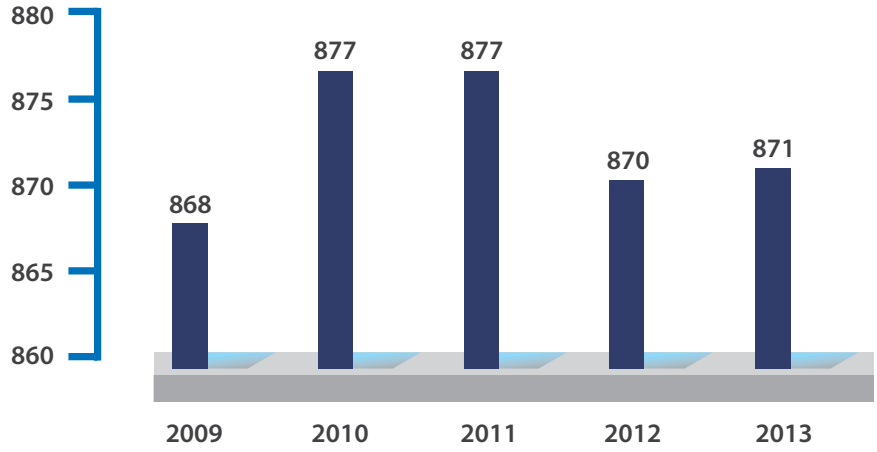


### $CO_2$ Emission from Cement Production (kg $CO_2$e/ton cement )




G4 - EN18
G4 - EN19
G4 - EN21

### $CO_2$ Emission from Clinker Production (kg $CO_2$e/ton clinker )




During the reporting period, the rise in production brought about an increase in gross $CO_2$ emissions. While a considerable reduction was achieved in $CO_2$ emissions per 1 ton of clinker production, the emission value per 1 ton of cement production increased.

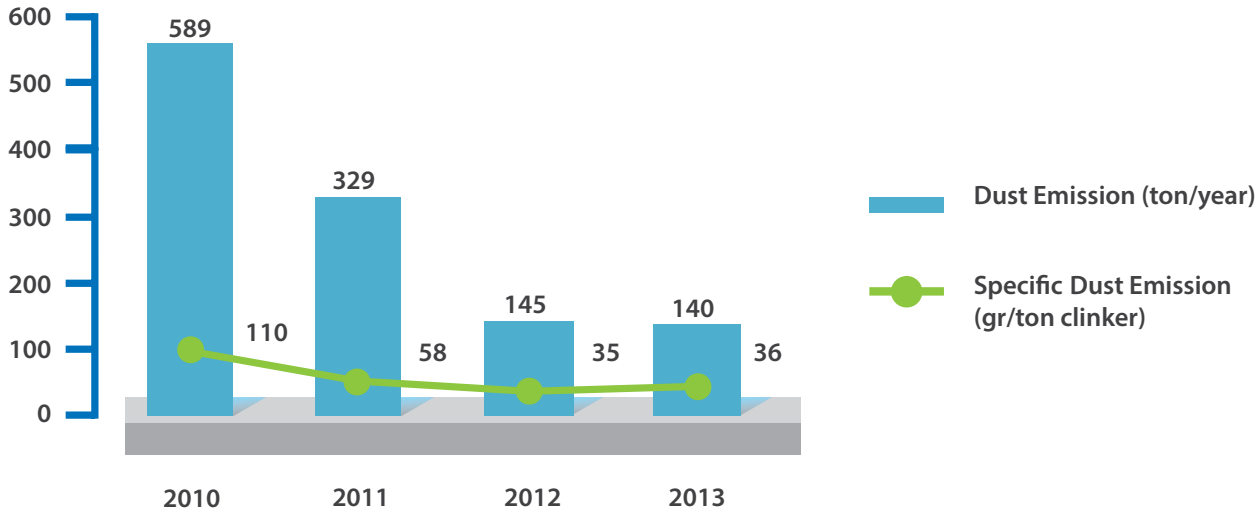
## Dust Emission

Dust emission is emerged distinctly during the processes of size reduction, preparation and storage of raw materials and fuels in cement, ready-mixed concrete and aggregate production. In the reporting period, dust emissions in cement kilns were significantly reduced thanks to the systematic improvements achieved such as the usage of modern dedusting equipments. The goal of Akçansa is to increase the bag type filter usage rate to 95% at its production facilities by 2015 through investments for replacing electro-filters with bag type filters with a view to reducing dust emissions.

# Cement Plants

In line with technological developments, there has been a transition to bag type filters and covered stokehole practices since the last reporting period. As a result of these changes, the total dust emission value of cement plants decreased from 589 tons/year in 2010 to 140 tons/year in 2013 despite the increasing production in the meantime. A similar downtrend occurred in the specific dust emissions as well.

## Dust Emission




In the last 2 years, an investment amounting to 18 million TL has been made in filters and dedusting at Büyükçekmece Plant, thus, finalizing the conversion of all rotary kiln chimney electro filters into bag type filters. Bag type filter practice is considered to be the best available technique by the whole sector, which has contributed to attaining much lower values than the legal limit specified for dust emission by the regulations. In addition to the rotary kiln chimneys, existing filters and chimneys in other units were also improved, increasing the dust retaining efficiency to a significant extent. Besides, semi-covered coal stokeholes at Büyükçekmece and Ladik Plants were replaced with fully covered coal stokeholes and wheel washing systems were set up for raw material vehicles, trailers and coal transport vehicles in order to prevent emissions created by particulates carried from the floor. The aim is to complete the transition to bag type filters at Ladik Plant in 2014.

## Ready-Mixed Concrete and Aggregate Facilities

The practices for reducing dust emissions at the ready-mixed concrete and aggregate production facilities are managed within the framework of Akçansa Sustainability Ambitions 2020. In an effort to prevent dust emission, crushers and screens were placed into a covered storage and the conveyor belts were also fully covered in Kemerburgaz and Bursa Aggregate Facilities. Thus, the rate of 50% in 2011 increased to 100%, realizing the goal set for 2020. The same practice will be adopted by default in new facilities to be established in future.

In the reporting period, pulverized water sprinkler systems complying with regulations which aim at dust reduction were installed in all ready-mixed concrete facilities for an efficient environmental impact management. The studies to cover the aggregate stokeholes in the ready-mixed concrete facilities continued in line with the Sustainability Ambitions 2020. The covered aggregate stokehole rate, which was 53% in 2011, rose to 70% in 2013.

# $NO_x$ and $SO_2$ Emissions

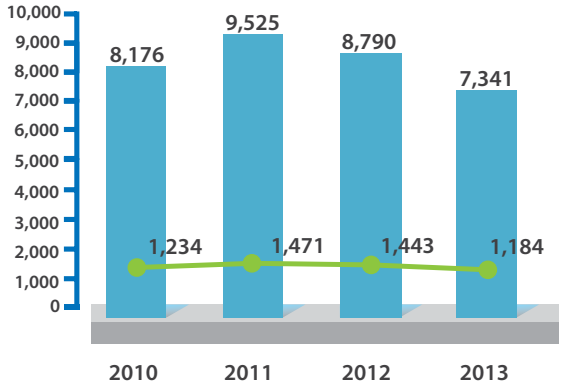
Nitrogen oxides ($NO_x$) emerge from the reaction between the oxygen in the air and the nitrogen in the fuels at high temperatures reached during the clinker production process. As a result of kiln combustion processes, sulphur oxide ($SO_x$) emissions come about as 99% $SO_2$. In the reporting period, there was a noticeable decrease in total $NO_x$ emission. Total amount of $NO_x$ emission for the year 2012 was 8,790 tons, which declined to 7,341 tons in 2013. Various studies are underway to make investments for further reducing the $NO_x$ emissions from the cement plants in the future.

G4 - EN16

**$NO_x$ Emission**

Total $NO_x$ Emission (ton)

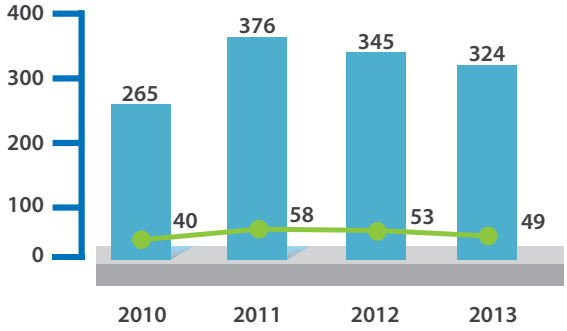
Specific $NO_x$ Emission (g/ton clinker)




**$SO_x$ Emission**

Total $SO_x$ Emission(ton)

Specific $SO_2$ Emission (g/ton clinker)



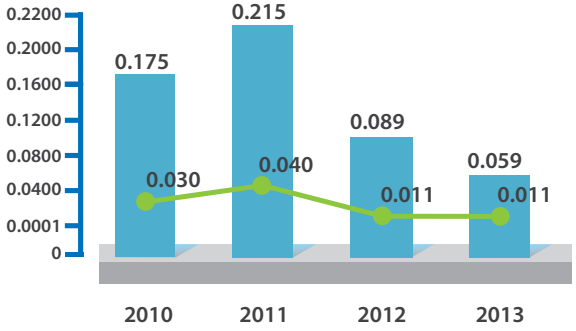

# Other Pollutants

Pollutants such as volatile organic compounds, metals, hydrogen fluoride (HF), hydrogen chloride (HCl), dioxin and furan appear depending on the types of fossil fuel, alternative fuel and raw materials used in the cement production process. These emissions appear in small amounts and are measured periodically in line with the related regulations. In the reporting period, all pollutant emission types demonstrated a significant downtrend.

**Metal, Dioxin and Furan Emissions**

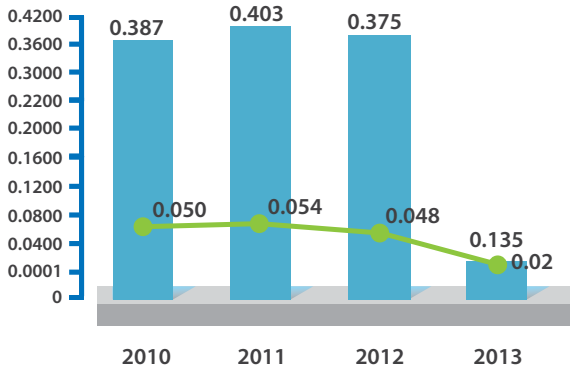
Pollutant Metal Emission (ton)

Pollutant Metal Emission (g/ton clinker)

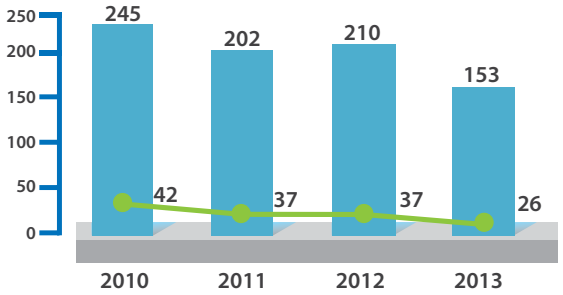



Dioxin ve Furan Emissons (g)

Dioksin ve Furan Emissons (µ/ton clinker)




**Volatile Organic Compounds Emissions**




VOC Emissions (ton)

VOC Emissions (g/ton clinker)

# Alternative Fuel Usage

# Alternative Fuel Usage

G4 - EN7

Cement industry has traditionally met its high thermal energy need through fossil fuel usage. However, fossil fuel consumption poses risks such as the extinction of finite resources, apart from the climate change problem stemming from their high emission values. Moreover in Turkey, the fossil fuel usage also increases economic dependence on imports. Faced with this situation, the cement sector opts for waste usage as an alternative energy resource. This solution not only makes it possible for the cement sector to create a relatively lower environmental impact to meet its energy needs but also provides a very efficient solution for solid waste disposal, which is the most prominent problem for sustainable city management today.

In Turkey, especially in the Marmara Region and İstanbul, the waste disposal problem has larger scale consequences. In addition to capacity problems regarding the disposal of great amounts of waste through sustainable methods, the methane gas emerging from the waste at landfill sites is a much more dangerous GHG than $CO_2$. Meanwhile the waste usage as a fuel resource at cement plants creates an alternative even environmentally friendlier than incineration plants. Because the ash generated after incineration is used as a raw material at cement plants and returned back to the economy whereas it becomes waste at disposal facilities. These facts indicate that energy recovery from waste, which has an important potential in Turkey, is a significant solution for sustainable cities. If 4.5 million tons of waste produced in the Marmara Region is used at cement plants instead of being moved to landfill sites, it will potentially meet 64% of the energy need of the cement kilns in the Marmara Region.

Using scrap tyres, plastics, sewage sludge and other kinds of waste as an energy resource in its production processes, Akçansa succeeds in turning the waste disposal problem, which is an obstacle for sustainable city management, into an opportunity.

There are various difficulties faced while trying to get industrial and municipal wastes that can be used as alternative fuel resources. Despite the difficulties, Büyükçekmece Plant establishes exemplary partnerships with local authorities as its alternative fuel usage rate increases every year. That rate for the plant rate rose from 14.61% in 2012 to 14.75% in 2013. The specially designed waste preparation and feeding system commissioned at Büyükçekmece Plant is the first of its kind in Turkey and largely contributes to the plant's success for fuel substitution.

Implemented at Büyükçekmece Plant, the Project for the Reduction of Coal Usage by RDF and the Industrial Plastics Incineration in the SLC Type Calciner Project enabled the incineration of the domestic waste, garbage and industrial plastics in a calciner designed separately from the kiln for the first time in Turkey and worldwide, thereby decreasing the amount of fossil coal imports and reducing the costs. Apart from the economic benefits the process has introduced, the project also cleans the environment by consuming the garbage produced in the heavily populated city of İstanbul, and enhances the waste incineration capacity of Büyükçekmece Plant to a great extent. The 4 tons/hour incineration capacity at the two other kilns of the plant is increased to 10 tons/hour through the use of a doser enabling an additional 6 tons/hour capacity. As a result, 47,500 tons of domestic garbage is disposed annually, creating economic and environmental benefits.

**Comparison of Cement Facilities and Incineration Plants**

| Cement Facilities | Incineration Plants |
|---|---|
| Investment: The current incineration capacity of the cement facilities can be used for waste disposal purposes. | Investment: A significant amount of new investments are needed for incineration plants. |
| Ash: The ash from the waste incinerated is added to the composition of clinker. As the waste is turned into cement products, there is no waste output from the cement facility. | Ash: 15-20% ash is created as a result of waste incineration. That hazardous ash needs to be stored on special sites. |
| Emission: Cement facilities replace the fossil fuels they consume with waste, reducing total $CO_2$ emission and energy imports. | Emission: The incineration plants established despite the existing cement facilities lead to extra $CO_2$ emission. |
| Incineration temperature: Since high incineration temperatures are needed for clinker production, the emissions generated are lower in comparison to incineration plants. | Incineration temperature: Emission rates are higher at the incineration plants as the temperatures for incineration at these plants are lower than the incineration temperatures at cement facilities. |
| Waste priority pyramid: Cement facilities are placed above incineration plants. | Waste priority pyramid: They should be used when there are no cement facilities already available. |

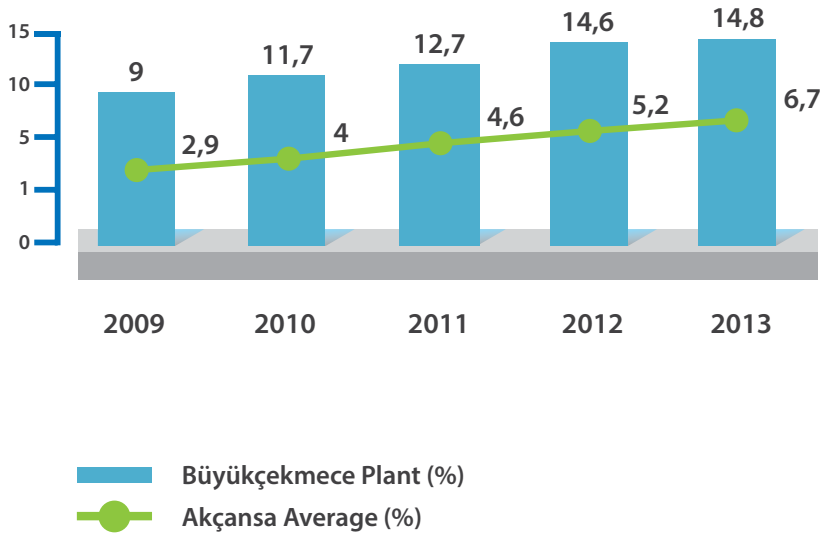
In the last 5 years, 340,000 tons of waste has been used as alternative fuel, making it possible to save up to 310,000 tons of coal mined in Turkey. Through the long-term waste agreements and investments made, Akçansa continues to be a solution partner for dealing with the municipal waste.

During the reporting period, Akçansa increased its alternative fuel and biomass usage at cement plants and made an investment of 16 million TL with the aim to decrease its $CO_2$ emission and improve energy recovery. The goal of this investment was to use 65,000 tons of RDF (refuse derived fuel) and 30,000 tons of imported tyres at Çanakkale Plant per annum in addition to 35,000 tons of RDF at Büyükçekmece Plant annually. In line with the permission given to import tyre strips, Çanakkale Plant signed supply agreements to increase its waste usage. The dried sewage sludge coming out of the Ataköy, Ambarlı, Paşaköy and Tuzla wastewater treatment plants started to be used as alternative fuel at Büyükçekmece Plant.

In 2012, 56,300 tons of alternative fuel was used while in 2013 101,476 tons of waste was utilized as alternative fuel. This amount equals 6.67% of the thermal value of the fuel used. The alternative fuel usage rate was 79,221 tons (15%) at Büyükçekmece Plant, 17,666 tons (4%) at Çanakkale Plant and 1,568 tons (2%) at Ladik Plant. The large difference regarding alternative fuel consumption usage rate among the facilities stems from the difference in the ease of access to wastes that can be used as fuel.

In 2012, 2 important agreements were signed regarding the disposal of 150 thousand tons of municipal solid waste and urban sewage sludge in İstanbul in a manner that does not harm the environment. After the 5-year-agreement signed with Hereko Waste Processing Facility, Büyükçekmece Plant started to procure 80-100 thousand tons of waste from the facility annually. In the framework of the agreement signed with Ambarlı Advanced Biological Wastewater Treatment Facility, on the other hand, it is planned to purchase dried sludge from the facility. The plans relate to a purchase of 40-45 tons of dried sludge per annum.

**Akçansa Alternative Fuel Substitution Rate**



# Alternative Raw Material Usage

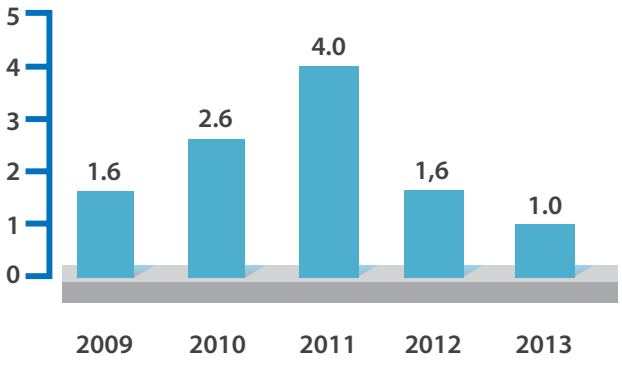
# Alternative Raw Material Usage

G4 - EN1
G4 - EN2
G4 - EN7

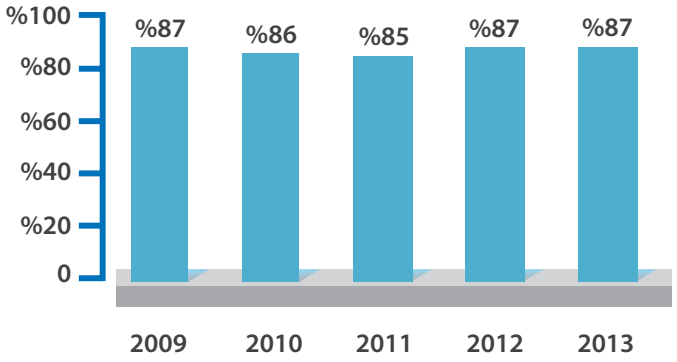
Clinker found in the composition of cement plays a primary role in the increase of environmental impact. However, substitution of clinker with alternative raw material additives including minerals such as blast-furnace slag, volatile ash, marble waste, foundry sand, iron powder, grid and pyrite ash could considerably reduce the environmental impact, primarily composed of the energy use and emission generated, from cement. Moreover, mineral additives have an important role in enhancing cement quality and add high durability qualities to cement. By including this practice in the Sustainability Ambitions 2020, Akçansa has therefore reinforced its will to continue this practice, which is an important value regarding its industrial waste management. In that respect, Akçansa aims to decrease the clinker rate to 81% in 2015 and to 79% in 2020.

During the reporting period, the usage of CEM I type cement with high clinker percentage rose due to consumption habits. Thanks to the increase in the need for high durability grade ready-mixed concrete, blended cement usage rate also rose. Nevertheless, it has not been possible to achieve the expected trend for blended cement usage yet. Akçansa performs detailed R&D activities on alternative raw materials, develops innovative products, and implements studies to raise its dealers' and customers' knowledge and awareness about these new products.

Alternative Raw Material Usage Rate (%)




Clinker / Cement (%)

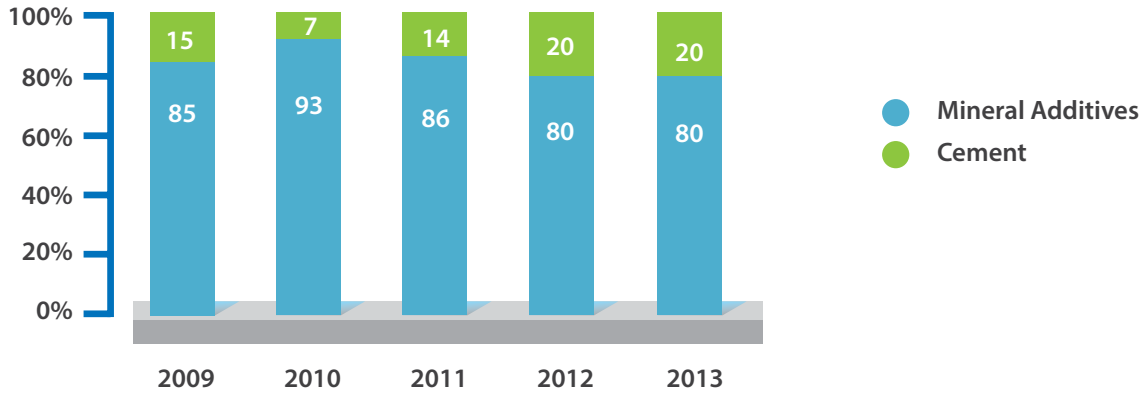



Some natural raw materials in cement production can be substituted with secondary materials (alternative raw materials) derived from other sectors. For instance, silica sand can be replaced by sand derived from the foundry sector, iron core can be replaced by grid from the shipyards and gypsum can be replaced by phosphogypsum coming from fertilizer plants. As long as the quality is suitable, cement plants use the rocks derived during the foundation excavations of constructions around the plant site as substitution for clay/limestone. The amount of alternative raw materials used at 3 plants was 173.3 thousand tons in 2012 and 115.3 thousand tons in 2013. This number also includes blast-furnace slag derived from the iron and steel sector and used as a cement additive. Due to the reduction in the usage of excavation rocks and difficulties faced in access to alternative raw materials, alternative raw material usage rate remained lower than previous years.

## Mineral Additive Rate

There has been a steady increase in the mineral additive rate used per 1m$^3$ concrete since 2010. Slag and volatile ash were used as mineral additives in production at ready-mixed concrete facilities. Besides, mineral additives such as limestone, trass and slag joined the production process as cement types such as CEM II B L 32.5N, CEM II B P 32.5N and CEM II A LL 42.5R were used in ready-mixed concrete production.

### Cement and Mineral Additive Ratio in 1m$^3$ Binder (%)




## Reduction of the Impacts Stemming from Raw Material Transportation

Availability of local supplies for concrete production shortens transport distance, decreasing $CO_2$ emissions thanks to the reduction obtained in fuel consumption. In the reporting period, Akçansa broke new ground in Turkey by transporting RDF from the municipal garbage facility to the cement plant via special vehicles named WalkingFloor. Besides, Akçansa opted for railways rather than land roads, transporting slag from Karabük to Zonguldak in containers, thereby, increasing road safety and reducing logistics related environmental impacts at the same time.

# Biodiversity

# Biodiversity

G4 - EN9
G4 - EN12

The raw materials used in cement product are provided directly from natural resources. Factors such as natural resource consumption through cement production, the use of land and operation of quarries, water consumption as well as waste and noise generation all create an impact on biodiversity. The issue of avoiding any permanent negative impact on biodiversity, and in fact how to contribute positively to biodiversity, which is crucial to maintaining Akçansa operations apart from the natural life and society at large, is defined as a strategic priority by Akçansa and is covered by Sustainability Ambitions 2020.

In the light of the strategies and goals set by the senior management, the Raw Materials and Environment Directorate is responsible for the Biodiversity management at raw material sites in coordination with the Plant Production Directorates. The main legislation determining the legal framework of raw material production is the Law on Mining and the regulations for its implementation. The aforementioned law and legislations and all the other related legal provisions regulate the environmental management, occupational safety processes, and disclosures to the state besides other liabilities in detail as well as obligations in all the production stages. The operations undertaken on the entire quarry sites in relation to Akçansa operations comply with the related regulations and norms quoted on the licenses and permits issued. The related environmental permits and licenses for the operationally active quarry sites were renewed in 2013 in accordance with the latest changes introduced to the Law on Environment.

As for the practices regarding biodiversity at production facilities, they are implemented in line with the environmental policies, legal regulations and environmental management system. The Executive Board manages biodiversity, one of the prioritized aspects of environmental sustainability performance for Akçansa. Performance indicators regarding biodiversity management and period goals are identified and assessed as part of individual performance evaluations of the related employees.

## Biodiversity Competition

Due to the issues prioritized regarding corporate sustainability, Akçansa attaches great importance to returning the raw material sites used back to nature after rehabilitating them in an effort to reduce the impact imposed on the nature due to natural resource consumption. In order to cooperate with students, who are one of the most valuable stakeholder groups for enhancing biodiversity, and benefit from their creativity while increasing their awareness regarding the matter at hand, Akçansa has organized a competition. Open for applications from all the countries where HeidelbergCement operates as one of the major shareholders of Akçansa, the "Quarry Life Award" competition will be organized in Turkey for the first time. Face to face meetings have been held with students attending biology, ecology, landscaping, environment and mining departments of universities apart from promotion activities organized on social media to announce the competition. The competition is to be organized for the first time in Turkey in 2014 with the theme "Enhance biodiversity, add value to natural life". Once the national jury has completed its preliminary selections, the project suggestions provided by the contestants for improving biodiversity at mining sites will be implemented at the two sites providing raw materials for Akçansa in İstanbul and Çanakkale while the top 3 projects will be eligible to run in the international competition. The details of the competition are available on www.quarrylifeaward.com.

"BIODIVERSITY PROJECT CONTEST"

Improve Biodiversity ,
Add Value to Natural Life

**Turkey's leading cement producer Akçansa brings "Biodiversity" project contest to Turkey in order to increase the biological value of mining areas.**

# Impact Management at Raw Material Sites

The first production stage is producing the raw material required from the quarries. Limestone, clay, schist and marl constitute the main natural resources in the raw material composition and approximately comprise 95% of the raw material composition. Depending on the process and the cement type to be produced, a little bit of silica sand, kaolin, bauxite and iron ore could be used too.

Raw material production stages include processes such as drilling, blasting, loading and transportation. The raw material for cement is taken to plants without going through any processes such as crushing, screening or washing in the quarry site. The related units from the plant and company supervise the production processes on site as well as implementation of and compliance with the legal obligations besides occupational health and safety practices. The measures taken depending on the potential impact from the production processes on the environment are:

G4 - EN1
G4 - EN13
G4 - SO2

| Process | Drilling | Blasting | Loading | Transportation |
|---|---|---|---|---|
| **Impact** | Dust Emission | Dust and Vibration | Dust Emission | Dust Emission |
| **Measure** | State-of-the-art drilling machinery is used to minimize dust emission. | Optimum amount of explosives used minimizes not only dust but also vibration. Since delayed capsules are used, vibration levels are considerably low. | Thanks to use of excavators, dust emission is prevented. | The roads on the site are watered to minimize dust. |

Continuity and quality of raw material supply are two strategic aspects in terms of production. At this point the reserve amounts and quality distribution in the raw material sites are the critical aspects. In parallel to the strategic business plans and goals identified by the senior management, the Raw Materials and Environment Directorate undertakes raw material explorations for the plants in coordination with the Plant Production Directorates. Licensing and permit processes are also implemented in a coordinated fashion if suitable sites are discovered. In line with the current regulations, an Environmental Impact Assessment (EIA) study, which takes into account all the environmental and social risks, is completed for the mining sites before any operations begin on these sites. Moreover a reserve study, a rehabilitation plan and an operation plan are drawn up before production begins on site. A plan for returning the site to nature is prepared and submitted for the approval of the related public institutions. These plans focus on the use of the site with minimum environmental impact during operations as well as the criteria for rehabilitation and improvement of the site afterwards and a schedule.

In 2012, 9.2 million tons of all-in raw materials (limestone, clay and schist) for cement were produced from the 18 quarries and delivered to plants while that amount rose to 9.4 million tons in 2013.

In terms of aggregate production operations, the essential processes are crushing and screening. At this point the raw materials from the mining site are taken to the crushing-screening facility located on site and aggregate is produced. The aggregate is then placed into silos and later on delivered to customers by trucks. As a measure against the dust emission generated during the crushing-screening process, all the crusher units, conveyor belts and conveyor belt flow points are covered while sprinkling water systems are installed as well. The water used is recycled at the facilities where washing takes place.

## Rehabilitation

Apart from production in raw material sites, the issue of rehabilitation is also crucial and critical. Once the reserves have been consumed, rehabilitating the raw material site in accordance with the natural characteristics is within the scope of Akçansa's environmental sustainability responsibility and goals above and beyond the legal requirements demanded. Rehabilitation in essence is preparing the site for another use. The slopes formed especially on the forest and public lands during the production are suitably bevelled while plants and trees with suitable features for the region and rocks are planted on the steps created. Assistance from the local Forestry Operation Directorates is sought while selecting the suitable trees and plants for the sites. 600 cedar trees were planted on the Kovukdere Istanbul site, 1,500 scotch pines were planted on the Ladik limestone site, 400 larch trees were planted on the Bozalan Çanakkale limestone site while an area of 2 hectares on the Bozalan Çanakkale clay site were bevelled and topsoil was placed. The site in Bozalan will be transformed into a pasture for the small cattle in the nearby Bozalan village once the area has been reforested and seeds of the plants in the surrounding region are sown along with grass. As for the 3.5 hectares on the aggregate site in Kemerburgaz İstanbul, the area has been prepared for reforestation and is now ready for being turned over to the related Forestry Directorate. The rehabilitation of 11.4 ha of mining sites was completed as of late 2013. Annual planning studies are underway within the scope of 2015 and 2020 goals set.

Akçansa spares rehabilitation provision to be spent for the rehabilitation of the quarry sites where production has begun. As of 2012 and late 2013, 2,661,453 TL and 3,160,391 TL were reserved as provision for the rehabilitation of raw material and aggregate sites respectively.

# Environmental Impact Management at Production Facilities

G4 - SO1

In accordance with the company's preventive approach, the environmental impact of the production operations undertaken by Akçansa in cement, aggregate and ready-mixed concrete business lines is managed in a risk-based fashion. Akçansa conducts a risk assessment regarding the aspects identified as water use, wastewater controls, waste management and noise. None of Akçansa production facilities are located on sites under protection for their biological diversity while environmental management and improvement studies conducted to prevent land, air, water and noise pollution and resource extinction.

Environmental management at Akçansa is conducted in the light of the environmental policy and ISO 14001 environmental management standard. The Raw Materials and Environment Directorate implements the environmental management centrally. 5 environmental engineers work in total including an environmental manager, an environmental engineer responsible for every plant, and an environmental engineer coordinating ready-mixed concrete and aggregate operations. The environmental management is periodically revisited through the Environmental Boards established.

With a view to achieving effective monitoring and control, there are constant, as well as, periodic measuring and monitoring of the related values at all the facilities as required by the Environmental Law. Critical environmental indicators are reported to the management monthly. Moreover, audits are regarded as a crucial instrument for constant improvement and enhancement. Employee participation is ensured for environmental system and environmental site performance analyses. Only the employees that have the related qualifications and that have received the suitable training implement the aforementioned audits. In addition to the analyses performed during all the training processes, all the employees are encouraged to report any nonconformity they may notice at the plants over the web-based environmental management system. They are able to identify the findings as well as the corrective and preventive measures over the system.

Like any other critical issues for the company, environmental management is regarded as an indispensable factor for making employee participation culture more widespread throughout the company as well as achieving operational excellence. The effectiveness of this element is in direct proportion to their knowledge and awareness level. In an effort to constantly improve that level, Akçansa Environmental Engineers provide environmental training for all the employees regarding environmental awareness, sustainability perspectives, legislations, waste management and site practice examples. The tests given at the end of the training measure the competence levels employees reach in that aspect. In order to maintain continuity of the awareness raising messages, poster applications implemented after the trainings.

Since 2010 the "Green Tip" practice has been carried out to encourage the employees to implement what they have attained from the training activities in their daily lives. As part of the "Green Tip", various questions are posed in a periodic fashion to all the employees to increase their environmental awareness and the winners receive gifts made from recycled materials. In addition to all these studies for raising awareness, the "Green Bulletin" issued as an internal publication to announce environmental developments, news and innovations in the world and at Akçansa.

## Environmental Suggestion System and Complaints

Supporting the views from stakeholders, the Suggestion System welcomes any suggestions for environmental improvement from employees. Once the related coordinators and people have assessed the suggestions made, the suggestions that have been deemed suitable are implemented.

Following up environmental complaints is considered important in terms of stakeholder management and operational excellence. The complaints are processed in accordance with the ISO 14001 Standard as well as communication and information exchange procedures. Negative reactions expressing any dissatisfaction by the customers and third parties in relation to Environmental, Energy and Occupational Health Safety aspects are conveyed to Environmental, Energy and OHS Management Representatives. Environmental, Energy and OHS Management Representatives manage the verbal or written complaints received in the light of the Procedure for Non-Conformity and Corrective Preventive Operations.

**Akçansa Environmentally Friendly Plant/ Facility Award**

Organized for the first time in 2012 to provide encouragement within the company, the rewarding system now features an environment awards category for further developing plant environmental management practices and encourage improvement practices in that respect. On the communication night held in 2013, 3 cement factories received the award for encouragement. In 2013 Büyükçekmece Cement Plant won the Akçansa Environmental Award thanks to its effective environmental management success and investments. In 2014 ready-mixed concrete and aggregate facilities will be covered by the rewarding system in addition to cement plants.

# Water Management

In order to supply water demand of Akçansa production facilities, underground and municipal water is employed. The facilities use the water for cooling, de-dusting, washing and watering. Since a significant portion of the water is used for cooling and in a closed cycle, it is re-used. Akçansa gives importance to increase efficient use and recycling of water which is a finite source.

In cement production, the wastewater stemming from processes such as washing, watering is not discharged. The wastewater at Büyükçekmece, Çanakkale and Ladik plants are collected in pools, precipitated, filtered and thus recovered. The total amount of water used mainly in de-dusting processes and then recovered and reused turned out to be 154,449 litres in 2012 and 122,150 litres in 2013. Technical reports were prepared regarding surface water management at the same 3 cement factories in 2013 while they also joined in the Water Management Project undertaken by HeidelbergCement on a global scale. Within the scope of the project, the water performance is assessed according to the parameters set in line with the Water Reporting Protocol published by the WBCSD Cement Sustainability Initiative (CSI). As of 2014 those values will be reported to CSI through HeidelbergCement.

## Cement Trailer Washing Unit Wastewater

The wastewater from the washing of cement trailers is collected in the pools by these units. Once the wastewater has been precipitated and filtered, it is pumped back to the cement trailer washing system for reuse.

## Coal Site Precipitation Pool Wastewater

Concrete and a metal sheet curtain surround the coal storage areas. The rainwater collected on the storage area eventually flows into the surface water drainage channels, which then pours into a surface water collection pool. The water recovered at the pools is reused.

When viewed in terms of production processes, water management and wastewater discharge directly concern ready-mixed concrete business line. The wastewater generated at the facilities is discharged in line with the limit values set by the related laws and regulations. During the reporting period, 8 additional new type spiral treatment systems were installed apart from the 2 filter press units introduced. An efficient recycling practice by employing recycling systems for water and wastes is also aimed for ready-mixed concrete facilities.

**Saray Aggregate Filter Press System:** Reusing Water in Production and Washing Limestone

Saray Aggregate Facility uses 100 tons of water per 100 tons/hour crusher dust washing. Mainly used by the marble production industry, Material Precipitation and Filtration System through Flocculent Support System is used for the first time in Turkey here, which eliminates the mud spreading to the surroundings and the water is recovered by 80%. What is more, the quality of the product washed is enhanced thanks to the entry of clean water into the system. Through the introduction of the aforementioned practice, the number of the breakdowns that the vehicles used to suffer because of the muddy roads has also declined.

G4 - 15
G4 - EN1
G4 - EN2
G4 - EN8
G4 - EN10
G4 - EN22
G4 - EN26

## Landscaping Studies and Visual Impacts

Implementing visual improvement projects at all its plants within the scope of its environmental impact reduction studies, Akçansa plants trees at all its facilities. During the reporting period a significant level of attention was paid for the visual improvement, especially of Büyükçekmece Plant. Cement silos and chimneys were coloured while the silos were lid by means of colourful LED lights. 12 crape myrtles, 14 hill cherries, 14 lime and 14 judas trees were planted on the site. The studies for ensuring visual harmony with the environment will go on in 2014.

| Total water withdrawal by source ($m^3$) | Büyükçekmece Cement Plant | | Çanakkale Cement Plant | | Ladik Cement Plant | | Marine Terminals | |
|---|---|---|---|---|---|---|---|---|
| | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 |
| Underground Source | 135.756 | 103.500 | 1.339.374 | 1.410.674 | 245.267 | 168.491 | - | - |
| Municipal / Purchased Water | 43.394 | 186.304 | 228 | 228 | - | - | 4.806 | 6.390 |

## Waste Management

G4 - EN28
G4 - EN31

Akçansa uses the waste management hierarchy regarding the management of the waste generated by the raw material production, logistics, aggregate, cement, ready-mixed concrete production and marine terminal services. The waste oil, electronic waste and domestic waste generated during the production operations are used in the recycling system. Meanwhile all the 3 cement plants have the licenses for using the construction excavation waste stored on the dumpsites designated by the legal regulations. Consequently when suitable materials are found, the plants use those resources from the dumpsites too. Launched by the Scientific and Technological Research Council of Turkey (TÜBİTAK) in cooperation with the Ministry of Environment and Forestry, the Project for the Construction and Demolition Debris Waste Recovery is currently underway. Akçansa provides technical and implementation support for the project by testing the demolition debris waste in an industrial environment. The goal is to identify the criteria for using the recovered material as raw material in cement production.

A significant portion of the wastes at the plants is recovered for energy generation. Moreover, 2,195 tons of packaging was used in 2012 for cement production while 922 tons of that was recovered. Meanwhile the packaging used rose to 2,450 tons in 2013 because of the increase in production. In parallel with that development, the amount of packaging recovered went up to 1,078 tons.

## Ready-Mixed Concrete Facilities

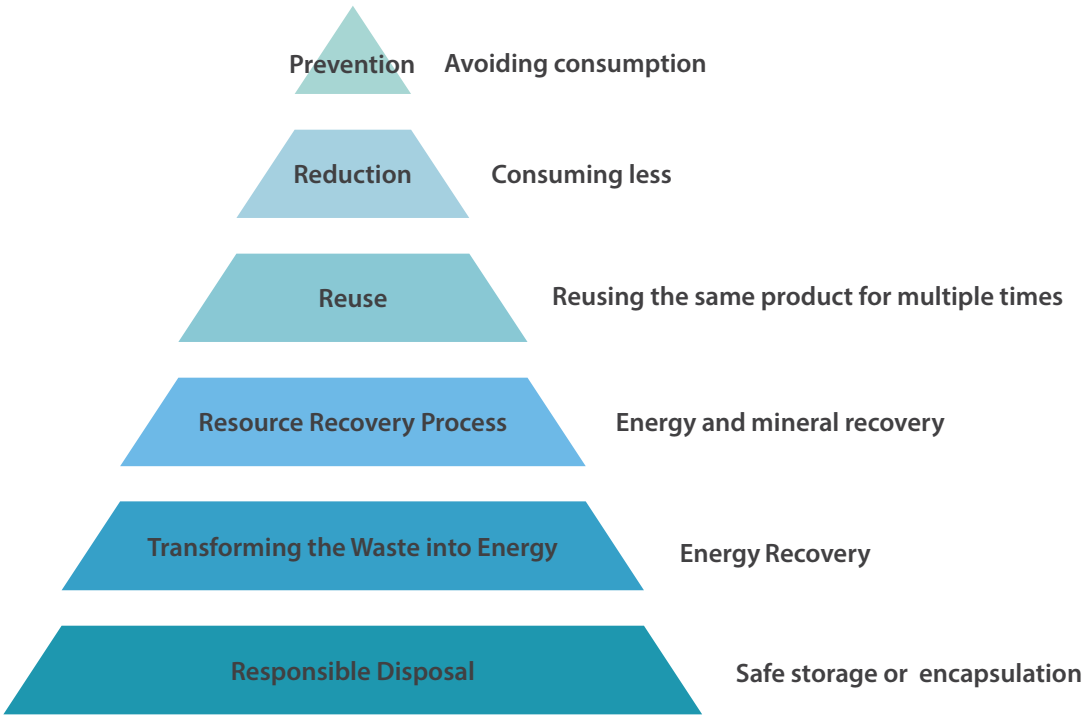
Significant investments were also made in ready-mixed concrete and aggregate facilities hence reaching an exemplary level in terms of environmental compliance. In an effort to achieve an active environmental impact management, hazardous waste sites complying fully with the regulations were constructed at all the ready-mixed concrete facilities, the filters were periodically replaced at the silos, improvements were introduced to appearances and sprinkle systems were installed for dust reduction. The total environmental spending made for the ready-mixed concrete facilities in 2013 alone amounts to 852,664 TL.

Moreover in an effort to ensure efficient management of the concrete sludge from the facilities and apart from the 2 filter press units introduced, 8 additional new type spiral treatment systems were installed so that the sludge could be dewatered enabling the recovery of the waste and water.

## Marine Terminals and Ports

Environmental management at the terminals and ports are covered with aspects including air, soil and sea pollution. With a view to combating sea pollution, "Emergency Response to Sea Pollution Exercises" are planned and held annually. Hazardous and non-hazardous waste sites complying fully with the regulations are built for ensuring effective waste management. Disposed through water treatment and septic tank methods, the wastewater is thus removed and prevented from being discharged to the sea.

### The Waste Hierarchy



**Mobile Waste Container for the Ready-Mixed Concrete Project Facilities**

A first time was scored in 2013 and the mobile hazardous waste container practice was introduced for the use of ready-mixed concrete project facilities. The first example was implemented at the Garipçe Ready-Mixed Concrete Facility.

**Green Point Environmental Awards**

21 ready-mixed concrete facilities, 4 from Akçansa, ran in the "Green Point Environmental Awards" held in 2012 by the Turkish Ready-Mixed Concrete Association while Akçansa Samsun Ready-Mixed Concrete Facility won the top prize. Moreover, the Samsun Ready-Mixed Concrete Facility also received the "International Representation Award" along with the other facilities making to the top three.

## Waste Disposal at Cement Plants

G4 - EN23

| Total Waste Amount by Disposal Method (ton) | | |
|---|---|---|
| | **2012** | **2013** |
| Recovery for Energy | 46.6 | 197.9 |
| Recovery | 190.8 | 624.8 |
| Waste Landfill | 0.9 | 33.1 |
| Waste Incineration | 0.4 | 0.01 |
| Total | 238.7 | 855.7 |

# Occupational Health and Safety

# Occupational Health and Safety

Akçansa manages the health and safety risks, threatening its employees and all its stakeholders, prompted by and throughout the business processes such as raw material production, procurement, cement, aggregate and ready-mixed concrete production, logistics, sales and marketing. Occupational health and safety is a common priority for all the stages of the value chain. Different measures are taken for each of the stakeholders in order to reduce health and safety risks regarding working conditions to a minimum. The aim of these measures and practices is to create a healthy and safe environment at the workplace. Employees are provided with training opportunities, practices or behavioural audits while training programs composed of training events, awareness-raising activities and simulation practices are organized for suppliers or customers. This safe environment ensures that health and safety risks are reduced to a minimum, also establishing an efficient work environment. The amount of OHS training provided for Akçansa and contractor employees was 15,219 person x hours in 2012, and rose to 21,638 person x hours in 2013.

The "Occupational Health and Safety at Quarries" training is given every year in order to underline the importance Akçansa attaches to occupational health and safety, and to remind contractor employees working in raw material production as well as the employees working in the production processes at Akçansa plants of risks related to drilling, blasting, loading and transportation processes. Since 2013, aggregate sites have also been included in the scope of this training.

Akçansa adopts high standards at its operational sites. Akçansa Occupational Health and Safety (OHS) processes are implemented pursuant to the Quality, Environment, Energy Policies. The Occupational Health and Safety Policy of Akçansa is in line with the OHS Act No. 6331, the requirements of the OHSAS 18001 standard and the ILO agreements. Occupational Health and Safety is organized under a separate directorship at the company. Managers working at the head quarters and the experts from production facilities give direction to OHS policies and practices. According to the Akçansa Performance Evaluation System, the OHS performance accounts for 25% of the individual performance goals of all employees at all levels.

# Occupational Safety

Cement production involves processes entailing accident risks in its value chain. 26.5% of the employees serving in Akçansa operations are working in the processes which potentially contain high accident or occupational disease risks. Therefore, occupational safety is considered to be an indispensible priority by Akçansa. The most widespread accident types witnessed at plants are foreign object in the eye apart from accidents while working with hand tools and falls. The collective labour agreement includes articles pertinent to occupational accidents, occupational diseases, disease and accident notifications, occupational safety rules, the protective equipment to be used and the precautions to be taken for occupational safety.

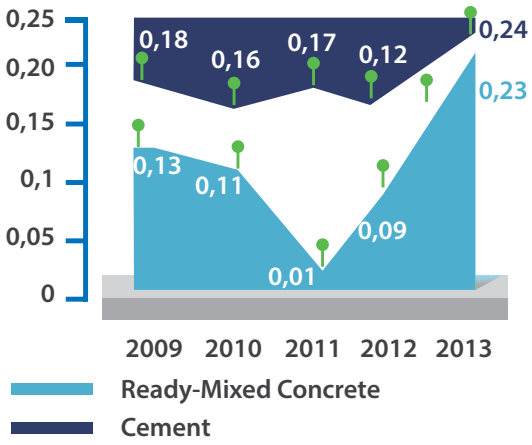
In 2012 and 2013, the number of fatal accidents occurring during cement operations was '0'. Apart from preserving this achievement, Akçansa sought to develop procedures with an eye to minimizing the number of major accidents and shortening the lost time periods due to accidents. Akçansa continues its studies with its stakeholders to ensure that not even a single accident occurs during cement production. Through these measures, Akçansa pursues to achieve its goal of "0 accidents" in 2015 as well.

G4 - LA6
G4 - LA7
G4 - LA8

One of the main procedures developed authorizes the stakeholders to stop the work processes that they consider unsafe. Established in order to develop OHS culture and increase engagement in the operations, this system is monitored by the Area Responsibility System.

Various emergency situations occur due to improper use of electrical, mechanical, chemical, hydraulic and pneumatic energy. "Tag, Lock, Secure and Try" TLST System was put into practice as a safety procedure against such incidents of emergency.

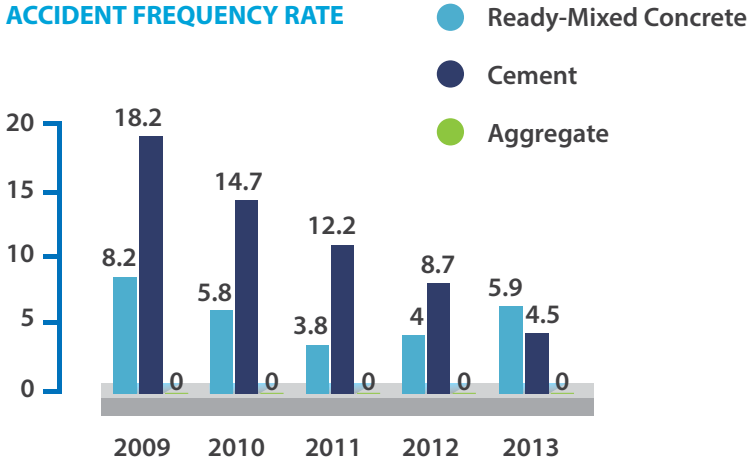
### ACCIDENT SEVERITY RATE




In 2012, the OHS Council of Cement Industry Employers' Union carried out an assessment on the Cement Production Facilities in Turkey to determine the facilities displaying the highest occupational health and safety performance. As a result of the evaluation, Akçansa Büyükçekmece Plant was merited with the "Cement Sector Occupational Health and Safety Performance Award".

In 2013, in the 2nd Blue Helmet Competition organized by Turkish Ready-Mixed Concrete Association, Büyükçekmece, Kemerburgaz and Samsun Ready-Mixed Concrete Facilities received Occupational Safety Awards.

### ACCIDENT FREQUENCY RATE




Periodic drills are carried out in an attempt to ease the implementation of procedures to be followed in case of emergency situations. Safety warnings and periodic drills make sure that health and safety practices are followed in the daily workflow. In addition to all the health and safety measures taken, it is necessary for the employees and stakeholders to individually participate in occupational health and safety practices in an effective manner. The OHS performance does not only depend on periodic practices to determine the risks in the work environment and take related protective measures but also an employees' assessment of a situation constituting a health and safety risk and the decisions they make have an influence on the general OHS performance. Therefore, the company's OHS performance will develop in parallel with the employees' awareness level. The higher the awareness level becomes, the better the performance is. In order to raise awareness about the OHS principles and practices, 36,857 person x hours of OHS trainings were given in total during the reporting period. The training covered issues such as driving vehicles, personal protective equipment usage and how to act in emergency situations. Akçansa also implemented the R5 practice in the reporting period. The purpose of the R5 practice is the step-by-step calculation of the risks by the employees during the daily work processes. Enabling our employees to identify the dangers concerning work before each different operation and to minimize their risks by taking the necessary measures within the scope of this practice, we hereby encourage them to give the most important contribution to the safe working culture and do their work with a high level of awareness, following the principles of think, plan, secure, review and work.

G4 - LA5

In parallel with this practice, all our employees are urged to report about any near misses, dangerous occurrences and behaviour. The aim is to encourage them to "expect the unexpected" regarding dangers at every moment, avoid indifference and take responsibility in the face of any improper situation or behaviour, give a warning and finally adopt the approach of becoming a role model.

International statistics demonstrate that 88% of accidents occur as a result of improper attitude. This is why Akçansa Occupational Safety Management System places the greatest importance on behaviour-oriented training activities, practices and audits. Each of the all mid-level and senior managers participates in 6 behaviour-oriented audits implemented in all Akçansa facilities annually. Thus, Akçansa does not only support management visibility on site but also carries out one-on-one awareness-raising studies concerning safe behaviour and safety culture as an indication of the value we attribute to our employees.

Safe working conditions of Akçansa employees and contractors on site are controlled and secured by the "Work Permission System" managed by the Site Supervisors.

**5 Minutes for My Risks!**

The R5 Practice enables all employees to carry out their own risk assessment before each activity during the work process and record it with the motto "5 Minutes for my Risks". The goal hereby is to secure effective individual participation in the OHS practices and urge the employees to define work-related dangers, assess the risks and develop measures against these dangers through the Occupational Safety perspective before they start to work. If the risk assessment detects a piece of work to be dangerous, the employee does not start the work, instead, notifies the managers so that additional measures can be taken.

## OHS Committees

In the OHS Committees, company management, labour union representatives and employee representatives are represented separately. Employees are represented by those elected by the employees and, if any, labour union representatives. Believing that the representation of the employees' views at the OHS committees will contribute to the development of the OHS Culture, Akçansa encourages employee participation.

The number of OHS Committees, which was 9 in 2012, rose to 11 with the addition of the committees at Ladik Plant and Ready-Made Concrete Facility in 2013. There were 9 employee representatives serving in the OHS Committees in 2013.


AKÇANSA
BÜYÜKÇEKMECE
DIKKAT !

# Road Safety

In order to provide timely and better quality service to its customers, Akçansa introduced a new implementation named "Traffic Density Information Project" in 2013. The project aims to save time by informing cement trailer and truck drivers going out or coming in to the factory about the traffic density and alternative routes. This practice improves road safety and transforms the time lost in the traffic into service, ensuring that the customers receive their products in time and the drivers endure less stress in their work environments.

**Akçansa OHS Academy**

Striving to be a pioneer not only with its business volume but also its sustainability priorities, Akçansa initiates practices in order to lead its sector in that regard. Akçansa OHS Academy was another one of the pioneering practices started in the reporting period for the transfer of knowledge/experience and the development of the OHS culture in behalf of Akçansa employees and operational stakeholders such as business partners and suppliers.

Akçansa OHS Academy provides both theoretical and practical service to all Akçansa employees and operational stakeholders in a steady and innovative manner in line with Akçansa OHS Golden Rules. These rules meet the requirements of the best international practices and standards concerning occupational health and safety apart from the requirements of the new Occupational Safety Act. The first Akçansa OHS Academy was founded at Büyükçekmece Plant in 2013, and it is planned to establish another one at Çanakkale Plant in 2014 to be followed by yet another academy at Ladik Plant in the oncoming periods. Akçansa OHS Academies set the goal of providing a minimum of 80,000 man x hours of training for 5,000 people on average annually by OHS Experts, technical staff and medical personnel.

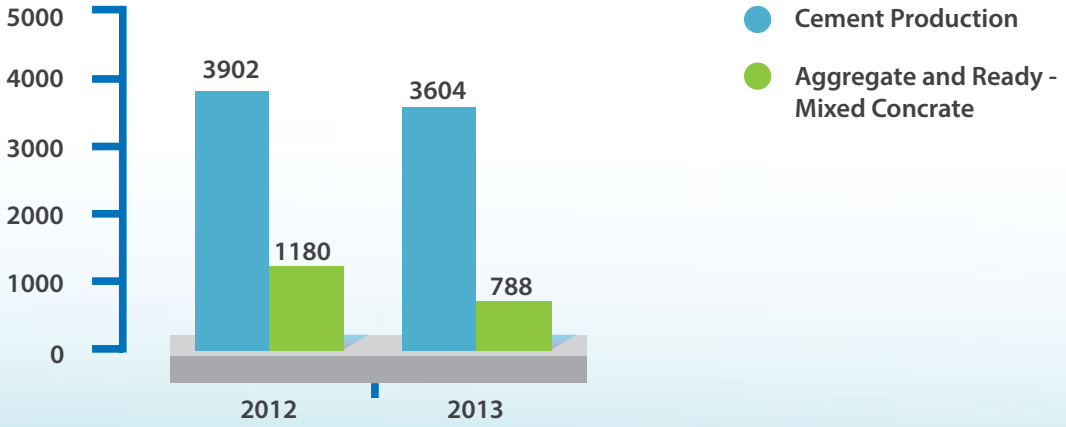
# Employee Health

Akçansa monitors the health risks in all the stages of its value chain according to operational environments and types. Follow-up health checks are carried out periodically on the basis of these risks. Depending on the type of the operations, the health checks are held either every six months or annually.

Health risks are identified in line with the analyses performed at all Akçansa operational sites where activities such as raw material production, raw material transport and production take place. By considering the production processes in the cement sector, workplace doctors provide further periodical trainings on healthcare issues such as ergonomics, musculoskeletal disorders, hearing loss, lung diseases and fighting ticks.

G4 - LA6

## Absentee Rate




# Work Life

# Work Life

G4 - 11
G4 - 58
G4 - LA1
G4 - LA12
G4 - HR4
G4 - HR5
G4 - HR6
G4 - SO3

Proud to be considered the most admired company in its sector for the last 12 years, Akçansa has built its work life on the foundation of a positive organizational climate giving possibilities of personal growth to its employees. Employees are provided with the working conditions they deserve pursuant to Labour Law provisions as well as international agreements and declarations such as the ILO Conventions and the UN Universal Declaration of Human Rights.

Cement production is a technology -and machinery-intensive, automated heavy industry sector. Compared to other industry types, it is possible to produce a large amount of products with relatively less number of employees during cement production. By the end of 2013, 1,087 employees were serving in Akçansa operations, constituting an important share of the active workforce in the sector.

The goals set for the work life are spread from the senior management to the rest of the company while objective indicators are used in the performance process. Performance indicators are monitored by Human Resources Deputy General Management and are reported periodically on the Executive Committee level.

## Fair Work Environment

Thanks to the high business standards Akçansa puts into practice, fair and participatory work environment it created as well as the values, respectability and credibility it possesses as a corporation. Its employees and business partners have been proud to work with Akçansa since its establishment. In order to ensure continuity of these qualities under rapidly changing social and economical conditions, Ethical Code of Sabancı Holding (SA-Ethics), which is amongst the major shareholders of Akçansa, was adopted, thus fundemental rights and responsibilities of employees were defined. All employees receive informative trainings on the ethical codes and also have direct access to the Akçansa Ethics Committee Consultant.

Akçansa employees become acquainted with the equitable work environment since the recruitment process. Recruitment process is conducted through criteria based on competence, skill, multi-observation and objective factors according to the equal opportunity principle isolated from candidate's religion, language, race, sect, gender, physical particularities or life-style preferences. Child labour, forced or compulsory labour is not allowed in Akçansa operations. The same principle is upheld for the subcontractor employees as well. Moreover, the multinational partnership structure of Akçansa with its expat employees brings an element of "diversity" into the corporation, strengthening Akçansa even further.

In order to control sustainability impacts, primarily respect to the human rights, throughout the supply chain, work principles that all active product and service suppliers must adopt were defined. By these principles, management of social, environmental and economic impacts in line with Akçansa's approach is ensured in the supply process of the product life cycle. Full compliance to these norms identified in Akçansa's Supplier Code of Ethics which are also a part of subcontractor service contracts, is an obligation for all suppliers. This way, Akçansa ensures prevention of child labor, forced or compulsory labor, discrimination, bribery and corruption; respecting union rights of employees; compliance with OHS principles, general norms related to the activities, ILO Conventions and legal regulations in its supply operations.

### Employee Demographics

| | Gender | 2012 | 2013 |
|---|---|---|---|
| **Covered by Collective Bargaining Agreement** | Female | 4 | 4 |
| | Male | 590 | 593 |
| **Not Covered by Collective Bargaining Agreement** | Female | 54 | 62 |
| | Male | 433 | 428 |
| **Total** | | 1.081 | 1.087 |

### Employee Breakdown by Age

| Age Groups | 2012 | 2013 |
|---|---|---|
| **18 - 30** | 285 | 257 |
| **31- 40** | 475 | 470 |
| **41 - 50** | 294 | 331 |
| **51 - 60** | 27 | 29 |

During the procurement processes, delivery of products and services in line with environmental and labor criteria is monitored; regulatory articles related to environmental, labour and human rights are included to procurement contracts. In all 600 procurement contracts concluded in 2012 and 2013, articles regulating the compliance of suppliers with human rights were included. Beside annual compliance controls, documents regarding all contractor employees who perform in Akçansa operations are controlled before starting to work. Contractor employees with missing document or in an unsuitable condition are not allowed to work until this situation is compensated. During the service period, contractor companies should submit these documents whenever demanded.

Committed to providing a fair and equitable work environment to its employees, Akçansa participated in the "Equality at Work Platform" established under the auspices of the World Economic Forum and the Ministry of Family and Social Policies, and signed the Declaration of Equality at Work in 2013. The declaration entails voluntary compliance with principles regarding the elimination of gender-based discrimination in work life as well as a commitment to establishing reliable systems to spread these principles and preparing reports.

Thanks to the rising number of female employees working at Akçansa in 2013, indicating a higher than sector average rate for female employees with a bachelor's degree, Akçansa assumes a pioneering role regarding the issue of gender equality in its sector as well.

Since Akçansa sees the right to associate among fundamental rights, Akçansa employees have the freedom to take part in unionization activities and defend their rights. All employees covered by Collective Bargaining Agreement working in cement plants are trade union members. Akçansa aims to establish a strong communication channel based on coordination and mutual understanding with the unions, considering them to be representative of the employees and including the union representatives' views in decision-making processes. In this context, the Group Collective Labour Agreements between the Cement, Ceramic, Soil and Glass Industry Workers' Union of Turkey and the Cement Industry Employers' Association for the period from 01.01.2013 to 31.12.2015 were signed through mutual agreement on 25.03.2013.

# Employee Development

G4 - LA10

In line with its vision, "growing beyond all limits", Akçansa adopts principle of creating training and development opportunities for all its employees. These opportunities are shaped around organizational, strategic, individual needs and expectations, and have utmost importance for a sustainable human resources.

Training and development needs of employees are supported with personal, professional or managerial programs in line with responsibilities they assume or will assume in future. Customized continuous development programs (such as coaching, mentoring, development centres, 360 degrees evaluation) are conducted and personal development plans are generated regarding defined areas. Training and development practices are also important in terms of leading to new environments of interaction and enhancing communication among employees and contributing to employee motivation positively.

Training and development activities can be outlined under these titles depending on their aims and contents:

Apart from the training possibilities offered by Akçansa, employees can also benefit from the training events organized by main shareholders in various platforms (such as HeidelbergCement and Sabancı Holding e-Learning Trainings, Sabancı University).

Akçansa also gives financial support to its employees, encouraging them to continue their academic education and improve their foreign languages in line with the requirements for their positions and their career development needs for the future.

## Training And Development

### I - GENERAL COMPANY TRAININGS

Activities and trainings to be planned in improvement areas defined as company priority such as Company Specific Group Trainings, OHS Trainings.

### II - FUNCTIONAL TRAININGS

Job-specific activities and trainings for developing knowledge and skills of employees regarding their areas of expertise such as Technical or Expert Trainings, Congresses and Conferences.

### III - PERSONAL DEVELOPMENT TRAININGS

Activities and trainings planned in line with individual improvement areas such as Coaching, Personal Trainings.

## Performance Management

Performance management is one of the constituents of human resources management. It involves a process whereby company goals are integrated by setting them as individual and team goals, and individual goals and competencies are managed in an efficient and objective manner throughout the whole year in order to fulfil this objective. The core of the performance management system guided by the "Management through Goals" principle which relies on mutual and systematic performance feedback. This system allows recognizing, appreciating and rewarding Akçansa employees' strong qualities institutionally, whereby they also get guidance in terms of development areas and their personal development is reinforced by training and development programs. Thanks to the performance management system operating in an integrated manner with various human resources sub-processes, it is possible to manage employees' expectations regarding training and development, communication, participation to management and career in a proactive manner.

G4 - 44
G4 - LA11

In 2013, the "mozaİK", which Akçansa uses as the fundamental HR infrastructure and practice, was launched in order to reinforce the system infrastructure for increasing the strength and efficiency of the performance evaluation process pertaining to employees not covered by collective bargaining agreement, and enhance the integration of the evaluation process with other HR practices.

## Work-Personal Life Balance

G4 - 51
G4 - EC3
G4 - LA2

Besides occupational and personal development opportunities, employees are provided with possibilities to benefit from social areas and facilities where they can spend time together with their families. In an attempt to realize this objective, various sports, cultural and social activities are carried out to reinforce work-personal life balance. "The Clubs World", initiated in this framework in 2013, offers social and personal development opportunities to our employees in various branches such as photography, travelling, cycling and diving.

"Mom, Bring me Milk" project was implemented to encourage working mothers with infants to establish a better work-personal life balance. Another project realized was the "Ladik Glass Workshop" project in which the spouses of Ladik Plant employees and the housewives living in Ladik were trained in glass production, transforming their labour into economic value.

## Talent Management


In line with Akçansa's medium and long-term strategic goals and needs, the organizational structure of the corporation is regularly reviewed, and the needs and expectations of the employees and the organization are evaluated and managed. Talent groups are given special care in terms of their training and development as talent management practices are supported with the company's human resources performance indicators. Seeking to contribute to developing leaders of today and tomorrow, Akçansa implements several different programs simultaneously.

In the talent management process, the development of both behavioural/administrative competence and technical/occupational knowledge is deemed important and tailor-made special programs are organized every year according to the priority areas identified. The employees in the talent group with high potentials and performance levels are provided with various career development opportunities, their development is supported through mentorship practices and rotation opportunities within Turkey and abroad in line with the framework of "life-long learning".

## Remuneration, Rewarding, Appreciation and Recognition Practices

Akçansa pays a fair and competitive basic salary to its employees depending on their roles, accountabilities, knowledge, skills, experience and competencies within the scope of the determined remuneration policy. Although employees' total income packages vary depending on the premiums given for personal performance or the incentive premiums based on seniority status, the remuneration policy does not allow any different or unfair practices according to religion, language, race, gender or other personal qualities under any circumstances. Akçansa offers its employees various supplementary benefits such as personal pension, private health insurance and life insurance; and provides personal accident insurance for all of its employees as a standard with the same purpose.

As a supplementary benefit, Akçansa offers employees not covered by collective bargaining agreement the possibility of personal pension coverage depending on their responsibility levels. 3% of the gross basic salaries of the employees is paid to their pension funds and Akçansa remits the same amount for its employees' pension funds as well.

With the aim to preserve the competitive quality of its remuneration policy, Akçansa carries out benchmarking studies on the basis of internationally acknowledged job evaluation methodologies and peer company practices. Akçansa adopts a fair and competitive approach in its remuneration policy, which rewards high performance and is in line with the general wage levels nationwide.

Akçansa encourages its employees to take part in administrative processes and have a say in the organization through their opinions and initiatives seeking to enhance corporate processes and practices. In that regard, successful employees and teams are additionally awarded with the help of appreciation and recognition practices such as "A Night from Akçansa", "Team Performance Special Award", "Executive Committee Special Appreciation Award", "OHS Pioneers of the Year Award" and "Suggestion Stars of the Year Award". As stipulated by the remuneration policy also covering senior managers, remuneration and supplementary benefits management is organized and implemented in line with the main goal of upholding fair, objective, competitive, rewarding and motivating standards that also appreciate high performance.

"Fringe benefits" are handled as an important part of the whole reward management in an attempt to support remuneration management with additional benefits. The fringe benefits offered by Akçansa essentially comply with the market conditions, and are competitive and fair. Remuneration of the senior managers, on the other hand, is composed of two components as fixed and performance-based.

The Work Family Model implemented within the company defines the roles, accountabilities, performance indicators, knowledge, skills, experience and competencies in the organization. Also the remuneration policy of the company relies on an objective system based on the "Work Family Model". The aim of the variable remuneration management practice followed by Akçansa is to help to achieve the company budget targets and attain business results beyond these targets while strengthening the goal-oriented performance culture through rewarding success and encouraging the employees to deliver an outstanding performance. In that respect, institutions that are internationally acknowledged for their independence and experience provide consultancy services for Akçansa.

## Satisfaction – Working Life Evaluation Survey

Continuous enhancement priorities are the main reasons why Akçansa has been selected as the most admired company in the sector for the last 12 years. The Working Life Evaluation Survey, which is held periodically, enables the company to see itself through the eyes of its employees in terms of employee satisfaction. The satisfaction level is evaluated under different sub-topics. In a transparent manner, the survey reflects the employees' satisfaction levels and evaluations of various subjects regarding the company. Development areas are identified and related practices are initiated in line with the results of the survey.

Besides, Akçansa won the first prize in the "Investment in People" category of the "Sabancı Golden Collar Awards" with its Human Resources Practices in 2013.

# Corporate Citizenship

# Corporate Citizenship

G4 - 26
G4 - 27
G4 - EC7
G4 - EC8
G4 - SO1

Akçansa creates added value in behalf of all its social stakeholders through a corporate culture devoted to social, environmental, legal and ethical principles; and pursues its activities with the mission of being a leading building materials producer, assuming an active role in order to raise the quality of life in the community. In this regard, as the pioneer player in the Turkish cement sector, Akçansa acts on the awareness of the responsibility of going further than creating economic added value. Akçansa is a responsible corporate citizen and consequently allocated 3.1 million TL in 2012 and 3.2 million TL in 2013 for donations, sponsorships and social projects in order to produce added value in areas such as health, culture, arts, education, sports and environment.

## Concrete Ideas

Organized annually by Akçansa, the leading cement producer in Turkey, "Concrete Ideas Project Competition", drew a great deal of interest in the reporting period. With this competition, Akçansa seeks to create acquaintance between the sector and young talents, fostering students' creativity to create new values. Akçansa calls university students to produce new generation, different and creative products, practices and marketing ideas, which will raise awareness about the alternative areas of concrete usage in the sector.

Organized under the motto "Alternative Use of Cement and Concrete for Energy Efficiency in Buildings", "ENERGYCoNcReTeHome" project conducted by "Enerjibtn" project group found by students of İTÜ Architecture Department entitled for the first place in Concrete Ideas Project Competition held in 2012. With "Nature in Concrete, Concrete in Nature" project, "Branda" project group of Uludağ University Architecture Department student took the second place, while "Eaves of the City" project of "Archbeton" project group composed of Yıldız Technical University Architecture Department student and "Concretent" project of "ETC" project group of İstanbul University Architecture Department students shared the third place.

In 2013 the competition took place with the motto "Create Awareness in Concrete, Add Value to Life", inviting project teams composed of undergraduate and postgraduate students from all the relevant university departments. The students from the faculties of management, economics, communication and fine arts participated in the competition for the first time apart from the students from the departments of civil engineering and architecture. The first prize was given to "Interactive Concrete Museum" project of "Grup Brüt" composed of students from the METU Architecture Department. The second prize was given to "Advertisement Video and Filtering by Concrete Type Application on Real Estate Websites" project of "Bi'Ton Fikir" project group from Boğaziçi University and the third prize was given to "Grup Shke" for their project "If Our Home is Made of Concrete".

## Akçansa is in the GRI Conference in 2013

As the most important global meeting held on sustainability, GRI Conference on Sustainability and Reporting brought thousands of sustainability leaders together from various parts of the world in 2013. Turkey was included in the Regional Meetings sessions, reserved to promising strategic geographical regions, for the first time in 2013. The Turkey Session was organized under the leadership of Global Compact Turkey and Kıymet-i Harbiye Management Consultancy the GRI Regional Database Partner in Turkey. While the moderator of the session was Mr. André van Heemstra, Chairman of Global Compact Network Netherlands and Former Member of the Board of Directors of Unilever, the speakers included Mr. Hakan Gürdal, Akçansa General Manager, Ms. Marjolein Baghuis, GRI Director of Communications and Network Relations and Mr. Atilla Yerlikaya, External Affairs Director of CCİ. During the session, Mr. Hakan Gürdal shared his views on the sustainability reporting practice in the Turkish business world and the effects of participation in international initiatives on corporate sustainability performance.

## Seminars and Symposiums

Mr. Hakan Gürdal, General Manager of Akçansa, participated as a speaker to the seminar titled as "Sustainability as a Competitive Edge" organized in 2012 by Government of the Netherlands in which best practices from Turkish and Dutch corporations pioneering sustainability practices. During the year, Mr. Hakan Gürdal also shared his views on outcomes of 18th Climate Change Conference for Turkey and Turkish businesses during the panel meeting "Competitive Power in Low Carbon Economy: Expectations for 2012 and Beyond" organized by TÜSİAD.

Akçansa sponsored the Concrete Maintenance and Developments in Ready-Mixed Concrete Technology Seminar organized by the Construction Products Producers' Association at Çanakkale 18 Mart University in 2013. Akçansa managers made a presentation on Special Ready-Mixed Concrete Products and Practices in the seminar attended by the Turkish Cement Manufacturers' Association, the Turkish Ready Mixed Concrete Association, the Additive Manufacturers' Association, the Aggregate Producers' Association, the Çanakkale Chamber of Civil Engineers, ready-mixed concrete producers, construction supervision companies and university students. Akçansa also supported the 2nd Building Materials Symposium organized at Kastamonu University with its presentations titled Concrete Components and Technology, and Special Ready-Mixed Concrete Products and Practices.

Akçansa business partners and employees as well as interested parties from the sector participated in the Concrete Symposium organized through a cooperation of Akçansa and Bekaert at İzmir Sabancı Kültür Sarayı in 2013. Prof. Dr. Mehmet Ali Taşdemir attended the seminar as a speaker and the event hosted presentations on cement, concrete, fibre reinforced concretes and special ready-mixed concrete products.

Mr. Halil Etyemez, Vice-minister of Labor and Social Security, Prof. Dr. İsmail Yüksek, Rector of Yıldız Technical University (YTÜ) and Mr. Hakan Gürdal, General Manager of Akçansa have made opening speeches in Occupational Health and Safety Conference organized by Akçansa in cooperation with YTÜ and Cement Industry Employers' Union. A large number of representatives such as authorities from the Ministry, academicians, OHS specialists, trade union and NGO members participated to the Conference.

## Congress and Publications

Akçansa carries out national and international scientific publication studies together with various universities. Akçansa provided materials as a support to MA and PhD theses written in the Department of Building Materials at İstanbul Technical University. Since 1996, Betonsa Technology Centre has published 19 international and 27 national conference papers in cooperation with İstanbul Technical University. Received with interest by the sector, these publications especially cover the issues of mechanical qualities, durability, optimum designs in terms of costs and special innovative ready-mixed concrete products.

Akçansa attended the "Concrete 2013 Congress" organized by the Turkish Ready-Mixed Concrete Association in 2013 with 6 papers. The papers published were primarily on the topics of sustainability in the cement industry, ecological cement optimization, environmentally sensitive concrete, the role of nanotechnology in the future of concrete, the curing conditions of concrete, heavyweight concretes and the mechanical behaviour of concretes produced with aggregates having different mineral compositions.

## Training Activities

Technical visit programs for university students were continued in the reporting period. Information about the production processes and automation systems at the facilities were shared with the visitors in the scope of the technical visits organized to Büyükçekmece Cement Plant and Ready-Mixed Concrete Facility, Menemen Ready-Mixed Concrete Facility in the Aegean Region, Çorlu Ready-Mixed Concrete Facility in the Thracian Region, and Tokat Ready-Mixed Concrete Facility in the Black Sea Region. During the technical visits, standard tests performed at cement and ready-mixed concrete laboratories were explained and model tests were carried out in addition to the seminars organized on cement technology, concrete technology and special ready-mixed concrete products. In context of university seminars, Mr. Hakan Gürdal, General Manager of Akçansa shared Akçansa's marketing strategies and activities.

## Volunteering Activities

Considering the concept of sustainability as the most important tool for shaping the future and spreading this concept in every area, Akçansa initiated the "There is Environment All Around Me" campaign with the purpose of giving environmental training to children whom Akçansa aspires to prepare a better future for.

## Voluntary Training Activities to Raise Environmental Awareness in Elementary Education

With the aim to raise a generation acquiring environmental awareness at an early age, 8 elementary schools were taken on a trip to Büyükçekmece Plant in cooperation with the Environmental Protection and Control Department of Büyükçekmece Municipality. The students visiting the plant received information on the issues of waste management, cement processes and environmental investments. Since 2011, Akçansa's volunteering environmental experts have been meeting with the students of Büyükçekmece Mimar Sinan Elementary School, Tayyar Paşa Elementary School and Ladik Atatürk Elementary School, informing them about the problems stemming from global warming, the things to do to protect the future of our world, how to dispose of wastes, the measures that can be taken against environmental pollution, and the environmentally friendly practices of Akçansa as an industrial company. An informative booklet is given to each student as a gift at the end of the activities.

The volunteers from Akçansa Büyükçekmece Plant cooperated with the Neighbourhood Disaster Volunteers Foundation in order to give basic disaster awareness training to the employees working at Çanakkale and Ladik Plant. Akçansa employees who were entitled to become trainers at the end of the project continue to take part in voluntary activities and carry out practices to induce disaster awareness in the local people.

## $CO_2$ One Carbon Two Oxygen Project www.atiginizibizegonderin.com

Collecting waste and investing in this area for the first time with an eye to sustainable growth after fulfilling the legal requirements regarding waste recovery in the cement sector, Akçansa carries out the $CO_2$ One Carbon Two Oxygen Project on the basis of the idea that "real value can be created not only through the collection of waste but also through its recovery in a proper manner".

In the scope of the project, Akçansa has become a solution partner to all the companies, local public agencies and organizations as well as municipalities which possess waste in the cities where Akçansa plants operate. Akçansa plays an active role in reducing the carbon footprints of these organizations through providing an efficient, safe and more environmentally friendly method of waste disposal. After the collected wastes are evaluated at Akçansa Environment and Quality Laboratory, one of the most developed AFR labs in Turkey, they can be returned back to the economy.

Corporate Social Responsibility Association of Turkey awarded the $CO_2$ One Carbon Two Oxygen Project prepared by Akçansa in the Sustainable Waste Management and Communication category.

Akçansa supports various projects oriented to raise awareness in society concerning the climate change issues via the sponsorships it provides. The events supported as part of the sponsorship activities included the First Quarter of 2013 Evaluation and Urban Transformation Meeting held by the Association of Turkish Construction Material Producers, the International Conference on Peace and Resolution of Disagreements organized on 15-16 June 2013; the 2013 Ladik Highland Festival and the 14th International Büyükçekmece Culture and Arts Festival, 18th March Çanakkale Naval Victory Commemoration Day and Büyükçekmece Mimarsinan Sports Club's sport events.

## Understanding Sustainability 2013 Seminar Series

The Understanding Sustainability Seminars organized by MEC Management and Economy Club of Bilkent University was implemented in November 2013 with the sponsorship of Akçansa. Many names from public organizations and the business world, who are experts in their fields, attended the sessions as speakers throughout November, covering several topics such as sustainability in the supply chain, leadership in sustainability, energy problems, climate change, and corporate responsibility projects.

While Akçansa made a presentation in the Energy and Climate Change Management session, Akçansa General Manager Hakan Gürdal shared his views and knowledge about personal and corporate leadership in sustainability in the main speaker session. In the workshop organized with the participation of Bilkent students as part of the seminar, Akçansa's sustainability practices and reporting study were evaluated and the feedback received from the students were used as a resource in the planning of reporting communications.

# Performance Data

| Performance Charts | | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| *Operational Performance* | | | | |
| **Number of Plants** | | | | |
| | **Cement Plants** | 3 | 3 | 3 |
| | **Aggregate Facilities** | 4 | 4 | 4 |
| | **RMC Facilities** | 40 | 40 | 41 |
| **Production Capacity (million ton)** | | | | |
| | **Cement** | 9 | 9 | 9 |
| | **Clinker** | 6,5 | 6,5 | 6,5 |
| **Total Production (million ton)** | | | | |
| | **Cement** | 6,6 | 6,1 | 6,6 |
| | **Clinker** | 6,47 | 6,5 | 6,6 |
| **Production Capacity Use** | | | | |
| **Cement** | | 75 | 70 | 76 |
| **Clinker** | | 92 | 92 | 95 |
| **Sales (million ton)** | | | | |
| | **Cement - Domestic** | 5,3 | 5,1 | 5,8 |
| | **Cement - International** | 1,5 | 1,2 | 0,9 |
| | **Clinker - Domestic** | 0,1 | 0,1 | 0 |
| | **Clinker- International** | 0,8 | 1,1 | 0,9 |
| | **Ready Mixed Concrete (million m³)** | 5,2 | 5 | 4,9 |
| | **Aggregate** | 1,9 | 2,9 | 3 |
| **Financial Performance** | | | | |
| **Net Sales (TL million )** | | 1.010 | 1.055,9 | 1.202,2 |
| **EBITDA (TL million)** | | 192,7 | 214,8 | 270,2 |
| **EBITDA (%)** | | 19,1 | 20,4 | 22,48 |
| **Net Profit (TL million)** | | 100,3 | 120 | 157,9 |
| **Earnings per Share** | | 0,52 | 0,63 | 0,82 |
| **Net Financial Dept (TL million)** | | 133,3 | 210.8 | 163.5 |
| **Equity Capital (TL million)** | | 862,9 | 911.5 | 987.6 |
| **Total Assets (TL million)** | | 1.278,5 | 1.388,6 | 1.477,2 |
| **Total Economic Value Created (TL million)** | | 1.022,19 | 1.069,22 | 1.217,05 |
| | **Economic Value Distributed (TL million)** | 947,72 | 1.037,85 | 1.164,63 |
| | **Economic Value Retained (TL million)** | 74,47 | 31,38 | 52,42 |
| **Procurement Operations (TL million)** | | 883 | 910 | 1.000 |
| **Local Procurement Rate (%)** | | 78 | 88 | 88 |
| **Environmental Performance** | | | | |
| **Total Raw Material Consumption (ton)** | | 14.268.557,97 | 10.879.023,68 | 11.472.342,76 |
| | **Raw Material Produced in Quarries** | 12.692.424,97 | 9.544.195,93 | 10.111.669,64 |
| | **Raw Material Purchaised from Suppliers** | 1.174.401 | 1.161.566,15 | 1.245.345,56 |
| | **Alternative Raw Materials** | 401.732 | 173.261,6 | 115.327,56 |
| **Percentage of Recycled Raw Material (%)** | | 4 | 1,6 | 1 |
| **Clinker Rate (%)** | | 85 | 86,8 | 87,1 |
| **Mineral Additive Ratio in 1 m³ Binder (%)** | | 14 | 20 | 20 |
| **Total water withdrawal (million m³)** | | 1,36 | 1,769 | 1,876 |
| | **Ground Water (million m³)** | 0,343 | 1,72 | 1,682 |
| | **Municipal water supplies (million m³)** | 1,018 | 0,048 | 0,193 |
| | **Rainwater (million m³)** | 0,002 | 0 | 0 |
| **Volume of water recycled and reused (m³)** | | - | 154.449 | 123.806 |
| **Rehabilitated Areas After Decommissioning (ha)** | | 1,3 | 5,8 | 4,3 |
| **Total Energy Consumption (GJ)** | | 24.220.418,22 | 25.465.484,07 | 26.084.271,72 |
| **Direct Energy Consumption in Cement Production (GJ)** | | 21.471.819 | 22.726.868 | 23.203.940 |
| | **Coal** | 17.621.859,76 | 21.468.584,36 | 21.572.748,85 |
| | **Natural Gas** | 17.606,33 | 24.576,43 | 26.542,43 |
| | **Fuel-oil** | 85.183,94 | 51.617,23 | 55.870,12 |
| | **Alternative Fuels** | 1.047.795,12 | 1.182.090,29 | 1.548.778,77 |

G4 - 9
G4 - EC1
G4 - EN1
G4 - EN2
G4 - EN3
G4 - EN8
G4 - EN10
G4 - EN13

| Performance Charts | 2011 | 2012 | 2013 |
|---|---|---|---|
| *Indirect Energy Consumption - Electricity (GJ)* | 2.748.599,22 | 2.738.616,07 | 2.880.331,72 |
| Cement Production (GJ) | 2.689.590,83 | 2.670.181,97 | 2.802.882,96 |
| Agregate Production (GJ) | 17.239 | 18.856 | 18.658 |
| RMC Production (GJ) | 29.812 | 32.470 | 32.120 |
| Total Energy Reduction (GJ) | - | 375.950,1 | 1.805.013,99 |
| Specific Energy Consumption in Clinker Production (GJ/ton clinker) | 3,29 | 3,49 | 3,51 |
| Specific Energy Consumption in Aggregate Production(MJ/ton aggregate) | 0,67 | 0,59 | 0,42 |
| Specific Energy Consumption in RMC Production(GJ/$m^3$ RMC) | 0,006 | 0,007 | 0,007 |
| Thermal Energy Substitution Rate by Using Alternative Fuels (%) | 4,58 | 5,2 | 6,67 |
| Gross Direct and Indirect $CO_2$ Emission in Cement Production (million ton) | 6,07 | 6,04 | 6,16 |
| Specific Gross $CO_2$ Emission in Clinker Production (kg $CO_2$ /ton clinker) | 887,4 | 881,04 | 882,79 |
| Specific Net $CO_2$ Emission in Clinker Production (kg $CO_2$ /ton clinker) | 877,33 | 869,68 | 870,86 |
| Specific Gross $CO_2$ Emission in Cement Production (kg $CO_2$ /ton cement) | 754,41 | 764,32 | 769,1 |
| Specific Net $CO_2$ Emission in Cement Production (kg $CO_2$ /ton cement) | 745,85 | 754,46 | 758,7 |
| Dust Emission (ton) | 329 | 145 | 140 |
| Spesific Dust Emissions (g/ton clinker) | 58 | 35 | 36 |
| $NO_x$ Emissions (ton) | 9.525,42 | 8.790 | 7.341 |
| Spesific $NO_x$ Emissions (g/ton clinker) | 1471,3 | 1443 | 1.184 |
| $SO_2$ Emissions (ton) | 376,34 | 345 | 324 |
| Spesific $SO_2$ Emmissions (g/ton clinker) | 58 | 53 | 49 |
| Metal Emissions (ton) | 0,22 | 0,09 | 0,06 |
| Spesific Metal Emmissions (g/ton clinker) | 0,0403 | 0,0114 | 0,0112 |
| *VOC Emmissions (ton)* | 202 | 210 | 153 |
| Specific VOC Emmissions (g/ton clinker) | 37 | 37 | 26 |
| Dioxin and Furan Emmissions (g/year) | 0,4 | 0,38 | 0,14 |
| Specific Dioxin and Furan Emmissions (µg ton klinker) | 0,054 | 0,048 | 0,02 |
| Total Hazardous Wastes by Disposal Method (ton) | | | |
| Energy Recovery | 87,39 | 46,64 | 197,86 |
| Recycling | 145,82 | 190,78 | 683,1 |
| Landfill | 0,3 | 0,9 | 33,3 |
| Incineration | 2,1 | 0,36 | 0,01 |
| Total Non-Hazardous Wastes by Disposal Method (ton) | | | |
| Energy Recovery | 0 | 0,11 | 15 |
| Recycling | 1.405,65 | 1.369,6 | 2.098,88 |
| Landfill | 295,02 | 313,42 | 264,3 |
| Total Packaging Material Used (ton) | - | 2.195 | 2.450 |
| Packaging Materials Recycled (ton) | - | 922 | 1.078 |
| Packaging Material Recycling Rate (%) | - | 42 | 44 |
| Environmental Investments and Expenditures (TL) | 87.355.557 | 23.634.695 | 23.150.101 |
| | | | |
| *Social Performance* | | | |
| Employee Trainings (person x hours) | 27291 | 35.975 | 31.870 |
| Employees Covered by Collective Agreements | - | 25.326 | 19.587 |
| Employees Not Covered by Collective Agreements | - | 10.649 | 12.283 |
| Female | - | 1.778 | 1.903 |
| Male | - | 34.197 | 29.966 |
| Employee Trainings Participants (persons) | - | 786 | 881 |
| Employees Covered by Collective Agreements | - | 449 | 466 |
| Employees Not Covered by Collective Agreements | - | 337 | 415 |
| Female | - | 35 | 59 |
| Male | - | 751 | 822 |
| Accident Frequency Rate | | | |
| Cement Plants | 12,15 | 8,7 | 4,5 |
| Aggregate Facilities | 0 | 0 | 0 |
| RMC Facilities | 3,82 | 3,97 | 5,94 |

G4 - EN15
G4 - EN16
G4 - EN18
G4 - EN21
G4 - EN23
G4 - EN28
G4 - EN31
G4 - LA6
G4 - LA9

| Performance Charts | 2011 | 2012 | 2013 | |
|---|---|---|---|---|
| *Accident Severity Rate* | | | | |
| Cement Plants | 0,17 | 0,12 | 0,24 | |
| Aggregate Facilities | 0 | 0 | 0 | |
| RMC Facilities | 0,01 | 0,09 | 0,23 | |
| **Occupational Disease Rate** | | | | |
| Cement Plants | 0 | 0 | 0 | |
| Aggregate Facilities | 0 | 0 | 0 | |
| RMC Facilities | 0 | 0 | 0 | |
| **Absentee Rate** | | | | |
| Cement Plants | 2.073 | 3.902 | 3.604 | |
| Aggregate and RMC Facilities | - | 1.180 | 788 | |
| **Fatalities** | | | | |
| Cement Plants | 2 | 0 | 0 | |
| Aggregate Facilities | 0 | 0 | 0 | |
| RMC Facilities | 3 | 0 | 0 | |
| **Employees in Charge of Tasks with High Injury or Occupational Disease Risks (number)** | - | 203 | 288 | |
| **Total Attandace to OHS Trainings (persons)** | - | 5.047 | 10.704 | |
| **Total Hours of OHS Trainings (person x hours)** | - | 15.219 | 21.638 | |
| **Number of OHS Committees** | - | 9 | 11 | |
| **Total Number of OHS Committee Members** | - | 102 | 131 | |
| **Total Attandace to Environmental Trainings (persons)** | | | | |
| Company Employees | - | 142 | 181 | |
| Contractor Employees | - | 5 | 19 | |
| **Total Hours of Environmental Trainings (person x hours)** | | | | |
| Company Employees | - | 668 | 273 | |
| Contractor Employees | - | 3 | 19 | |
| **Contracts and Agreements with Human Rights Articles (number)** | - | 300 | 300 | |
| **Investment Contracts and Agreements with Human Rights Articles (%)** | - | 100 | 100 | |
| **Executives Undertaken Human Rights Trainings on Company Operations (number)** | - | - | 505 | |
| **Percentage of Executives Undertaken Human Rights Trainings on Company Operations (%)** | - | - | 100 | |
| **Hours of human rights trainings on company operations to employees (person x hours)** | - | - | 186 | |
| **Training and Communication Studies on Corruption Risks** | | | | |
| Number and Percentage of Senior Executives Briefed (number-%) | - | - | 6 | 100% |
| Total Number and Percentage of Executives Briefed (number-%) | - | - | 505 | 100% |
| Number and Percentage of Senior Executives Trained (number-%) | - | - | 6 | 100% |
| Number and Percentage of Executives Trained (number-%) | - | - | 505 | 100% |
| *Employer Contribution to Pension Plan (TL)* | 452.970 | 454.612 | 461.635 | |

G4 - EC3
G4 - LA3
G4 - LA7
G4 - HR1
G4 - HR2
G4 - SO4

| | Headquarters | | | | Cement Plants & Quarries | | | | RMC & Aggregate | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2012 | | 2013 | | 2012 | | 2013 | | 2012 | | 2013 | | 2012 | | 2013 | |
| Company Employees | 82 | | 69 | | 818 | | 837 | | 181 | | 181 | | 1.081 | | 1.087 | |
| Female | 28 | | 26 | | 28 | | 38 | | 2 | | 2 | | 58 | | 66 | |
| Male | 54 | | 43 | | 790 | | 799 | | 179 | | 179 | | 1.023 | | 1.021 | |
| Contractor Employees | - | | - | | - | | - | | - | | - | | 515 | | 524 | |
| Employees by Category | | | | | | | | | | | | | | | | |
| Employees Covered by Collective Agreements (number-%) | 0 | 0% | 0 | 0% | 594 | 72,6% | 597 | 71,3% | 0 | 0% | 0 | 0% | 594 | 55% | 597 | 55% |
| Female | 0 | 0% | 0 | 0% | 4 | 14,3% | 4 | 10,5% | 0 | 0% | 0 | 0% | 4 | | 4 | |
| Male | 0 | 0% | 0 | 0% | 590 | 74,7% | 593 | 74,2% | 0 | 0% | 0 | 0% | 590 | 57,7% | 593 | 58,1% |
| Employees Not Covered by Collective Agreements | 82 | 100% | 69 | 100% | 224 | 27,4% | 240 | 28,7% | 181 | 100% | 181 | 100% | 487 | 45% | 490 | 45% |
| Female | 28 | 100% | 26 | 100% | 24 | 85,7% | 34 | 89,5% | 2 | 100% | 2 | 100% | 54 | 93,1% | 62 | 93,9% |
| Male | 54 | 100% | 43 | 100% | 200 | 25,3% | 206 | 25,8% | 179 | 100% | 179 | 100% | 433 | 42,3% | 428 | 41,9% |
| Employees by Education (number-%) | | | | | | | | | | | | | | | | |
| Unschooled | 0 | 0% | 0 | 0% | 1 | 0,1% | 1 | 0,1% | 0 | 0% | 0 | 0% | 1 | 0.0% | 1 | 0,09% |
| Primary School | 2 | 2,43% | 2 | 2,89% | 158 | 19,3% | 144 | 17,2% | 19 | 10,4% | 18 | 9,9% | 179 | 16,5% | 164 | 15,0% |
| Secondary | 6 | 7,31% | 2 | 2,89% | 421 | 51,4% | 431 | 51,4% | 73 | 40,3% | 68 | 37,5% | 500 | 46,2% | 501 | 46,0% |
| University and Above | 74 | 90,24% | 65 | 94,2% | 238 | 29,0% | 261 | 31,1% | 89 | 49,1% | 95 | 52,4% | 401 | 37,0% | 421 | 38,7% |
| Employees by Age Group (number-%) | | | | | | | | | | | | | | | | |
| 18-30 | 16 | 19,51% | 20 | 28,98% | 212 | 25,9% | 189 | 22.58% | 57 | 31,4% | 48 | 26,5% | 285 | 26,3% | 257 | 23,6% |
| 31-40 | 30 | 36,58% | 26 | 37,68% | 370 | 45,2% | 370 | 44.2% | 75 | 41,4% | 74 | 40,8% | 475 | 43,9% | 470 | 43,2% |
| 41-50 | 28 | 34,14% | 19 | 27,53% | 219 | 26,7% | 254 | 30.3% | 47 | 25,9% | 58 | 32,0% | 294 | 27,1% | 331 | 30,4% |
| 51-60 | 8 | 9,75% | 4 | 5,79% | 17 | 2,0% | 24 | 2.8% | 2 | 1,1% | 1 | 0,5% | 27 | 2,4% | 29 | 2,6% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Senior Executives (number) | | | | | | | | |
| by Gender | | | | | | | | |
| Female | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Male | 5 | 5 | 4 | 4 | 1 | 1 | 10 | 10 |
| by Age Group | | | | | | | | |
| 18-30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31-40 | 2 | 3 | 0 | 1 | 0 | 0 | 2 | 4 |
| 41-50 | 0 | 3 | 2 | 2 | 0 | 0 | 2 | 5 |
| 51-60 | 4 | 0 | 1 | 1 | 0 | 0 | 5 | 1 |
| by Nationality | | | | | | | | |
| Local | 4 | 4 | 3 | 3 | 1 | 1 | 8 | 8 |
| Expat | 1 | 1 | 1 | 1 | 0 | 0 | 2 | 2 |
| Mid-level Executives (number) | | | | | | | | |
| by Gender | | | | | | | | |
| Female | 2 | 2 | 1 | 1 | 0 | 0 | 3 | 3 |
| Male | 9 | 8 | 18 | 17 | 7 | 8 | 34 | 33 |
| by Age Group | | | | | | | | |
| 18-30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31-40 | 6 | 5 | 7 | 3 | 2 | 2 | 15 | 10 |
| 41-50 | 2 | 2 | 10 | 12 | 5 | 6 | 17 | 20 |
| 51-60 | 3 | 3 | 2 | 3 | 0 | 0 | 5 | 6 |

G4 - 9
G4 - 10
G4 - 11
G4 - 38
G4 - EC6
G4 - LA1
G4 - LA12

G4-3
G4-5
G4-31
G4-32
G4-33

| | Headquarters | | | | Cement Plants & Quarries | | | | RMC & Aggregate | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2012 | | 2013 | | 2012 | | 2013 | | 2012 | | 2013 | | 2012 | | 2013 | |
| **Company Employees** | 82 | | 69 | | 818 | | 837 | | 181 | | 181 | | 1,081 | | 1,087 | |
| **New Employees Hires (number - %)** | 5 | 6,1% | 12 | 17,4% | 71 | 8,7% | 59 | 7,1% | 11 | 6,1% | 14 | 7,7% | 87 | 8,1% | 85 | 7,8% |
| **by Gender** | | | | | | | | | | | | | | | | |
| **Female** | 2 | 7,1% | 7 | 26,9% | 2 | 7,1% | 6 | 15,8% | 1 | 50% | 1 | 50% | 5 | 8,6% | 14 | 21,2% |
| **Male** | 3 | 5,6% | 5 | 11,6% | 69 | 0,9% | 53 | 6,6% | 10 | 5,6% | 13 | 7,3% | 82 | 8% | 71 | 6,9% |
| **by Age Group** | | | | | | | | | | | | | | | | |
| **18-30** | 1 | 6,3% | 8 | 40% | 48 | 22,6% | 40 | 21,2% | 8 | 14% | 10 | 20,8% | 57 | 20,0% | 58 | 22,6% |
| **31-40** | 3 | 10% | 4 | 15,4% | 20 | 5,4% | 18 | 4,9% | 3 | 4% | 3 | 4,1% | 26 | 5,5% | 25 | 5,3% |
| **41-50** | 1 | 3,6% | 0 | 0% | 3 | 1,4% | 1 | 0,4% | 0 | 0% | 1 | 1,7% | 4 | 1,4% | 2 | 0,6% |
| **51-60** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Lay-offs (number - %)** | 13 | 15,8% | 9 | 13% | 58 | 7,1% | 53 | 6,3% | 14 | 7,7% | 17 | 9,4% | 85 | 7,9% | 79 | 7,3% |
| **by Gender** | | | | | | | | | | | | | | | | |
| **Female** | 5 | 17,8% | 4 | 15,4% | 2 | 7,1% | 3 | 7,9% | 1 | 50% | 0 | 0% | 8 | 13,8% | 7 | 10,6% |
| **Male** | 8 | 14,8% | 5 | 11,6% | 56 | 7,1% | 50 | 6,2% | 13 | 7,3% | 17 | 9,5% | 77 | 7,5% | 72 | 7% |
| **by Age Group** | | | | | | | | | | | | | | | | |
| **18-30** | 1 | 6,3% | 3 | 15% | 9 | 4,2% | 4 | 2,1% | 3 | 5,3% | 4 | 8,3% | 13 | 4,6% | 11 | 4,3% |
| **31-40** | 6 | 20,0% | 5 | 19,2% | 7 | 1,9% | 12 | 3,2% | 4 | 5,3% | 8 | 10,8% | 17 | 3,6% | 25 | 5,3% |
| **41-50** | 6 | 21,4% | 1 | 5,3% | 27 | 12,3% | 27 | 10,6% | 7 | 14,9% | 4 | 6,9% | 40 | 13,6% | 32 | 9,7% |
| **51-60** | 0 | 0% | 0 | 0% | 15 | 88,3% | 10 | 41,7% | 0 | 0% | 1 | 100% | 15 | 55,6% | 11 | 37,9% |

## GRI CONTENT INDEX

| DMA and Indicators | GRI Content Index | External Assurance |
|---|---|---|
| G4-1 | Joint Statement of the Chairperson and the General Manager (p.4) | Not Assured |
| G4-2 | Joint Statement of the Chairperson and the General Manager (p.4); Corporate Profile (p.10); 2020 Ambitions Progress Chart (p.14-15) | Not Assured |
| G4-3 | Contacts (p.95) | Not Assured |
| G4-4 | Corporate Profile (p.6-8); Akçansa Annual Report 2013 (p.30); Corporate Website http://www.akcansa.com.tr/products-services/cement | Not Assured |
| G4-5 | Contacts (p.95) | Not Assured |
| G4-6 | Corporate Profile (p.8) | Not Assured |
| G4-7 | Corporate Profile (p.6) | Not Assured |
| G4-8 | Cement Sector, Local Economy and Akçansa (p.18-19) | Not Assured |
| G4-9 | Corporate Profile (p.6-7); Performance Data (p.84-87) | Not Assured |
| G4-10 | Performance Data (p.87); No significant employment variation is observed in Akçansa operations. | Not Assured |
| G4-11 | Work Life (p.70); Performance Data (p.87) | Not Assured |
| G4-12 | Corporate Profile (p.10); Cement Sector, Local Economy and Akçansa (p.20-21) | Not Assured |
| G4-13 | Corporate Website http://www.akcansa.com.tr/investor-center/announcement | Not Assured |
| G4-14 | Governance and Sustainability (p.27-28); Akçansa Annual Report 2013 (p.57-58) | Not Assured |
| G4-15 | Joint Statement of the Chairperson and the General Manager (p.4); Combating the Climate Change (p.34); Biodiversity (p.57); Corporate Website http://www.akcansa.com.tr/corporate/our-integrated-management-systems | Not Assured |
| G4-16 | Cement Sector, Local Economy and Akçansa (p.19); Governance and Sustainability (p.26) | Not Assured |
| G4-17 | About The Report (p.3); Corporate Profile (p.6) | Not Assured |
| G4-18 | About The Report (p.3); Governance and Sustainability (p.28)<br>During the process of definition of material issues regarding Akçansa's sustainability performance, principles formulated by GRI G4 Guidelines, such as completeness, sustainability context, materiality and stakeholder inclusiveness, were mainly based on. Material issues and aspect boundries were defined as a result of 3 stage process. As the first process, in every operational location, we have conducted a series of workshops with company managers representing company branches. Following that practice we have conducted a similar practice together with senior management incuding CEO of Akçansa. In this practice possible material issue universe and stakeholder groups as well are evaluated basicaly in terms of relevance to business and stakeholder expectations. As the second input of the process, we have included feedbacks received both in terms of sustainability management performance and reporting practices from Akçansa's stakeholder engagement practices such as Neighbour Councils, Bridge Days, employee, executive and stakeholder meetings. In 2013 we have also conducted a dedicated workshop in Bilkent University providing an open environment through which students from management and engineering faculties may submit their feedbacks on Akçansa's reporting practices including the content. Later issues which found material were evaluated in terms of most appropriate aspect boundries for every supply chain process by Akçansa Sustainability Committee and material issue list was finalised upon approval of the senior management. | Not Assured |
| G4-19 | Corporate Profile (p.10) | Not Assured |
| G4-20-21 | As a result of materiality process, Greenhouse Gases and other Pollutants, Dust Emissions, Energy Efficiency, Alternative Raw Materials, Alternative Fuels, Quarry Management and Biodiversity, Water Use, Occupational Health & Safety, Sustainable, Innovative Products, Product Pricing, Dialogue with Stakeholders were defined as most material aspects. Indicator scope and boundries were also defined by process and related entities. Hereby;<br>**GHG and other Pollutants:** This aspect defined as material for processes such as supply, production and logistics with relation to Akçansa (cement production) but not to Betonsa (RMC production), Agregasa (aggregate production) due to the insignificance. Due to the outsourced transportation operations logistics supliers' performance was also found relevant for this aspect.<br>**Dust Emissions:** This aspect defined as material for processes such as raw material production, production and logistics with relation to the entities such as Akçansa (cement production), Betonsa (RMC production), Agregasa (aggregate production). No entity outside the company operations found relevant for this aspect.<br>**Energy Efficiency:** This aspect defined as material for processes such as production and logistics with relation to the entities such as Akçansa (cement production), Betonsa (RMC production), Agregasa (aggregate production) with an exception to direct energy use in RMC and aggregate production which is insignificant for these processes. Due to the outsourced transportation operations logistics supliers' performance was also found relevant for this aspect.<br>**Alternative Fuels:** This aspect defined as material for production process with relation to Akçansa (cement production), but not to Betonsa (RMC production), Agregasa (aggregate production). No entity outside the company operations found relevant for this aspect.<br>**Alternative Raw Materials:** This aspect defined as material for production process with relation to Akçansa (cement production) and Betonsa (RMC production), but not to Agregasa (aggregate production) due to the inapplicability. No entity outside the company operations found relevant for this aspect.<br>**Quarry Management & Biodiversity:** This aspect defined as material for raw material production process with relation to Akçansa (cement production) but not to Betonsa (RMC production) and Agregasa (aggregate production) due to the inapplicability. No entity outside the company operations found relevant for this aspect.<br>**Water Use:** This aspect defined as material for production process with relation to Akçansa (cement production) but not to Betonsa (RMC production) and Agregasa (aggregate production) due to the inapplicability. No entity outside the company operations found relevant for this aspect.<br>**OHS:** This aspect defined as material for processes such as raw material production, supply, production and logistics with relation to the entities such as Akçansa (cement production), Betonsa (RMC production), Agregasa (aggregate production). Performance regarding the entities outside the company such as contractors and logistics suppliers is also found relevant for this aspect.<br>**Sustainable, Innovative Products:** This aspect defined as material for sales & marketing process with relation to the entities such as Akçansa (cement production) and Betonsa (RMC production) but not to Agregasa (aggregate production) due to the inapplicability. No entity outside the company operations found relevant for this aspect.<br>**Product Pricing:** This aspect defined as material for sales & marketing process with relation to the entities such as Akçansa (cement production) and Betonsa (RMC production) but not to Agregasa (aggregate production) due to the inapplicability. No entity outside the company operations found relevant for this aspect.<br>**Dialogue with Stakeholder:** This aspect defined as material for raw material production, production and logistics processes with relation to the entities such as Akçansa (cement production), Betonsa (RMC production) and Agregasa (aggregate production). No entity outside the company operations found relevant for this aspect.<br>In some cases, performance indicators which are not directly referencing to the defined material aspects but somehow related to the same; or reported in previous practices and the data set regarding which is already in place were also disclosed for sharing a broader information or continuity of already disclosed data to enable benchmarking. | Not Assured |

| DMA and Indicators | Page Number or Link | External Assurance |
|---|---|---|
| G4-22 | About The Report (p.3) | Not Assured |
| G4-23 | About The Report (p.3) | Not Assured |
| G4-24 | Governance and Sustainability (p.30) | Not Assured |
| G4-25 | About The Report (p.3); Governance and Sustainability (p.30-31); Corporate Website http://www.akcansa.com.tr/sustainability/about | Not Assured |
| G4-26 | Cement Sector, Local Economy and Akçansa (20-21); Governance and Sustainability (p.30-31); Corporate Citizenship (p.78-81); Akçansa Annual Report 2013 (p.52); Corporate Website http://www.akcansa.com.tr/sustainability/about | Not Assured |
| G4-27 | Cement Sector, Local Economy and Akçansa (20-21); Governance and Sustainability (p.31); Corporate Citizenship (p.78-81) | Not Assured |
| Report Profile | | |
| G4-28 | About The Report (p.3) | Not Assured |
| G4-29 | About The Report (p.3) | Not Assured |
| G4-30 | About The Report (p.3) | Not Assured |
| G4-31 | Contacts (p.95) | Not Assured |
| G4-32 | About The Report (p.3); GRI Index (p.89-93); Legal Disclaimer (p.95) | Not Assured |
| G4-33 | Legal Disclaimer (p.95) | Not Assured |
| G4-34 | Governance and Sustainability (p.26-29); Akçansa Annual Report 2013 (p.53-54) | Not Assured |
| G4-35 | Governance and Sustainability (p.26-29) | Not Assured |
| G4-36 | Governance and Sustainability (p.26-29) | Not Assured |
| G4-37 | Governance and Sustainability (p.28-31) | Not Assured |
| G4-38 | Governance and Sustainability (p.26); Performance Data (p.87); Akçansa Annual Report 2013 (p.54-55; 61-62) | Not Assured |
| G4-39 | Joint Statement of the Chairperson and the General Manager (p.4) | Not Assured |
| G4-40 | Akçansa Annual Report 2013 (p.54-55, 61-62); Corporate Website: http://www.akcansa.com.tr/investor-center/corporate-governance | Not Assured |
| G4-41 | Akçansa Annual Report 2013 (p.55); Audit Committee Charter (p.2-4) Corporate Website: http://www.akcansa.com.tr/docs/20120605135437_20110802113016_audit-committee-charter.pdf | Not Assured |
| G4-42 | Governance and Sustainability (p.28) | Not Assured |
| G4-43 | Governance and Sustainability (p.28, 30-31) | Not Assured |
| G4-44 | Governance and Sustainability (p.28-29); Work Life (p.73-75) | Not Assured |
| G4-45 | Governance and Sustainability (p.28-31) | Not Assured |
| G4-46 | Governance and Sustainability (p.26, 28-29) | Not Assured |
| G4-47 | Governance and Sustainability (p.26, 28-29) | Not Assured |
| G4-48 | Governance and Sustainability (p.26, 28-29); Sustainability reports are reviewed by Akçansa Sustainability Committee and the General Manager respectively. | Not Assured |
| G4-49 | Governance and Sustainability (p.26, 28-29) | Not Assured |
| G4-50 | Governance and Sustainability (p.26, 28-29) | Not Assured |
| G4-51 | Work Life (p.74-75) | Not Assured |
| G4-56 | Corporate Profile (p.8); Governance and Sustainability (p.27); Akçansa Annual Report 2013 (p.53-54) | Not Assured |
| G4-57 | Governance and Sustainability (p.27) | Not Assured |
| G4-58 | Work Life (p.70-71) | Not Assured |

| Specific Standart Disclosures | Page Number or Link | External Assurance | Omissions |
|---|---|---|---|
| CATEGORY: ECONOMIC | | | |
| Material Aspect: | ECONOMIC PERFORMANCE | | |
| G4-DMA | Cement Sector; Local Economy and Akçansa (p.18-19) | | |
| G4-EC1 | Cement Sector; Local Economy and Akçansa (p.23); Performance Data (p.84) | Not Assured | |
| G4-EC2 | Joint Statement of the Chairperson and the General Manager (p.4); Combating the Climate Change (p.34) | Not Assured | |
| G4-EC3 | Work Life (p.74); Performance Data (p.86) | Not Assured | |
| G4-EC4 | Akçansa Annual Report 2012 (p.55); Akçansa Annual Report 2013 (p.70) | Not Assured | |
| Material Aspect: | MARKET PRESENCE | | |
| G4- DMA | Not material | | |
| G4-EC6 | Cement Sector, Local Economy and Akçansa (p.18-19); Performance Data (p.87) | Not Assured | |
| Material Aspect: | INDIRECT ECONOMIC IMPACTS | | |
| G4-DMA | Cement Sector, Local Economy and Akçansa (p.23); Governance and Sustainability (p.28); Performance Data (p.84) | Not Assured | |
| G4-EC7 | Corporate Citizenship (p.78-81); Cement Sector, Local Economy and Akçansa (p.20-21) | Not Assured | |
| G4-EC8 | Corporate Citizenship (p.78-81); Cement Sector, Local Economy and Akçansa (p.20-21) | Not Assured | |

| Specific Standart Disclosures | Page Number or Link | External Assurance | Omissions |
|---|---|---|---|
| **CATEGORY: ECONOMIC** | | | |
| **Material Aspect:** | **PROCUREMENT PRACTICES** | | |
| **G4-DMA** | Not material | | |
| **G4-EC9** | Cement Sector, Local Economy and Akçansa (p.18-19,22-23) | Not Assured | |
| **CATEGORY: ENVIRONMENTAL** | | | |
| **Material Aspect:** | **MATERIALS** | | |
| **G4-DMA** | Joint Statement of the Chairperson and the General Manager (p.4); Cement Sector, Local Economy and Akçansa (p.18-19) | Not Assured | |
| **G4-EN1** | Alternative Raw Material Usage (p.50-51); Biodiversity (p.55,57); Performance Data (p.84) | Not Assured | |
| **G4-EN2** | Alternative Raw Material Usage (p.50-51); Biodiversity (p.57-58); Performance Data (p.84) | Not Assured | |
| **Material Aspect:** | **ENERGY** | | |
| **G4-DMA** | Joint Statement of the Chairperson and the General Manager (p.4); 2020 Ambitions Progress Chart (p.14); Combating the Climate Change (p.34-36) | Not Assured | |
| **G4-EN3** | Combating the Climate Change (p.34-35); Performance Data (p.84-85) | Not Assured | |
| **G4-EN4** | Not reported | Not Assured | Data regarding logistics suppliers The information is subject to specific confidentiality constraints. Logistics suppliers firms classify their energy consumption as priviledged information and avoid disclosing these data |
| **G4-EN5** | Combating the Climate Change (p.34-35) | Not Assured | |
| **G4-EN6** | Combating the Climate Change (p.34-36); 2020 Ambitions Progress Chart (p.14-15) | Not Assured | |
| **G4-EN7** | Cement Sector, Local Economy and Akçansa (p.20-22); Alternative Fuel Usage (p.46-47); Alternative Raw Material Usage (p.50-51) | Not Assured | |
| **Material Aspect:** | **WATER** | | |
| **G4-DMA** | Joint Statement of the Chairperson and General Manager (p.4); Biodiversity (p.54-57) | Not Assured | |
| **G4-EN8** | Biodiversity (p.57); Performance Data (p.84) | Not Assured | |
| **G4-EN9** | Biodiversity (p. 54-57) | Not Assured | |
| **G4-EN10** | Biodiversity (p.57); Performance Data (p.84) | Not Assured | |
| **Material Aspect:** | **BIODIVERSITY** | | |
| **G4-DMA** | Joint Statement of the Chairperson and General Manager (p.4); Biodiversity (p.54-56) | Not Assured | |
| **G4-EN12** | Biodiversity (p.54-56) | Not Assured | |
| **G4-EN13** | Biodiversity (p.55); Performace Data (p.84) | Not Assured | |
| **Material Aspect:** | **EMISSIONS** | | |
| **G4-DMA** | Joint Statement of the Chairperson and General Manager (p.4); 2020 Ambitions Progress Chart (p.14-15); Combating the Climate Change (p.34); Emissions Management (p.40) | Not Assured | |
| **G4-EN15** | Emission Management (p.40); Performance Data (p.85) | Not Assured | |
| **G4-EN16** | Emission Management (p.40-43); Performance Data (p.85) | Not Assured | |
| **G4-EN17** | Not reported | Not Assured | Data regarding logistics suppliers The information is subject to specific confidentiality constraints. Since logistics supplier firms classify their energy consumption as priviledged information and avoid disclosing these data; calculation of GHG gases regarding these operations also become impossible. |
| **G4-EN18** | 2020 Ambitions Progress Chart (p.14-15); Emissions Management (p.41-42); Performance Data (p.85) | Not Assured | |
| **G4-EN19** | 2020 Ambitions Progress Chart (p.14-15); Combating the Climate Change (p.36); Emissions Management (p.41-42) | Not Assured | |
| **G4-EN21** | Emission Management (p.41-43); Performance Data (p.85) | Not Assured | |
| **Material Aspect:** | **EFFLUENTS AND WASTE** | | |
| **G4-DMA** | Not material | | |
| **G4-EN22** | Biodiversity (p.57) | | |
| **G4-EN23** | Biodiversity (p.59); Performance Data (p.85) | | |
| **G4-EN26** | Biodiversity (p.57) | | |

| Specific Standart Disclosures | Page Number or Link | External Assurance | Omissions |
|---|---|---|---|
| **Material Aspect:** | **PRODUCTS AND SERVICES** | | |
| G4-DMA | Joint Statement of the Chairperson and General Manager (p.4); 2020 Ambitions Progress Chart (p.14-15); Cement Sector, Local Economy and Akçansa (p.20-21) | Not Assured | |
| G4-EN27 | Cement Sector, Local Economy and Akçansa (p.20-21) | Not Assured | |
| G4-EN28 | Biodiversity (p.58); Performance Data (p.85) | Not Assured | |
| **Material Aspect:** | **OVERALL** | | |
| G4-DMA | Not material | Not Assured | |
| G4-EN31 | Biodiversity (p.58); Performance Data (p.85) | | |
| **"CATEGORY: SOCIAL "** | | | |
| **Material Aspect:** | **EMPLOYMENT** | | |
| G4-DMA | Not material | | |
| G4-LA1 | Work Life (p.70); Performance Data (p.87) | Not Assured | |
| G4-LA2 | Work Life (p.74) | Not Assured | |
| G4-LA3 | Performance Data (p.86) | Not Assured | |
| **Material Aspect:** | **OCCUPATIONAL HEALTH AND SAFETY** | | |
| G4-DMA | Governance and Sustainability (p.27); Occupational Health and Safety (p.62-67) | Not Assured | |
| G4-LA5 | Occupational Health and Safety (p.64) | Not Assured | |
| G4-LA6 | Occupational Health and Safety (p.63,67); Performance Data (p.85-86) | Not Assured | Data regarding logistics suppliers. The information is currently unavailable. For completing data composition, we will work together with logistics suppliers to obtain related data next reporting period and, if necessary, a recording system to trace supplier performance by 2015. |
| G4-LA7 | Performance Data (p.86) | Not Assured | |
| G4-LA8 | Occupational Health and Safety (p.63) | Not Assured | |
| **Material Aspect:** | **TRAINING AND EDUCATION** | | |
| G4-DMA | Not material | | |
| G4-LA9 | Performance Data (p.85) | Not Assured | |
| G4-LA10 | Work Life (p.72-74) | Not Assured | |
| G4-LA11 | Work Life (p.73) | Not Assured | |
| **Material Aspect:** | **DIVERSITY AND EQUAL OPPORTUNITY** | | |
| G4-DMA | Work Life (p.70) | | |
| G4-LA12 | Work Life (p.70); Performance Data (p.87) | Not Assured | |
| **Material Aspect:** | **INVESTMENT** | | |
| G4-DMA | Not Material | | |
| G4-HR1 | Performance Data (p.86) | Not Assured | |
| G4-HR2 | Performance Data (p.86) | Not Assured | |
| **Material Aspect:** | **NON-DISCRIMINATION** | | |
| G4-DMA | Not Material | | |
| G4-HR3 | No such case occured during the reporting period. | Not Assured | |
| **Material Aspect:** | **FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING** | | |
| G4-DMA | Not material | | |
| G4-HR4 | Work Life (p.70-71) | Not Assured | |
| **Material Aspect:** | **CHILD LABOR** | | |
| G4-DMA | Not material | | |
| G4-HR5 | Work Life (p.70-71) | Not Assured | |
| **Material Aspect:** | **FORCED AND COMPULSATORY LABOR** | | |
| G4-DMA | Not material | | |
| G4-HR6 | Work Life (p.70-71) | Not Assured | |

| Specific Standart Disclosures | Page Number or Link | External Assurance | Omissions |
|---|---|---|---|
| **Material Aspect:** | **LOCAL COMMUNITIES** | | |
| **G4-DMA** | Governance and Sustainability (p.30-31); Biodiversity (p.56); Corporate Citizenship (p.78-81) | | |
| **G4-SO1** | Governance and Sustainability (p.30-31); Biodiversity (p.56); Corporate Citizenship (p.78-81); Community development proragrams are implemented in all facility neighborhoods. Type of the program differs in line with local needs. | Not Assured | |
| **G4-SO2** | Biodiversity (p.55-56) | Not Assured | |
| **Material Aspect:** | **ANTI-CORRUPTION** | | |
| **G4-DMA** | Not material | | |
| **G4-SO3** | Governance and Sustainability (p.27); Work Life (p.70) | Not Assured | |
| **G4-SO4** | Performance Data (p.86) | Not Assured | |
| **Material Aspect:** | **CUSTOMER HEALTH AND SAFETY** | | |
| **G4-DMA** | Not material | | |
| **G4-PR2** | No such case occured during the reporting period. | Not Assured | |
| **Material Aspect:** | **PRODUCT AND SERVICE LABELING** | | |
| **G4-DMA** | Not material | | |
| **G4-PR3** | Cement Sector, Local Economy and Akçansa (p.22) | Not Assured | |
| **G4-PR4** | No such case occured during the reporting period. | | |
| **G4-PR5** | Cement Sector, Local Economy and Akçansa (p.20); Cement Sector, Local Economy and Akçansa (p.21) | Not Assured | |
| **Material Aspect:** | **MARKETING COMMUNICATION** | | |
| **G4-DMA** | Not material | | |
| **G4-PR7** | No such case occured during the reporting period. | Not Assured | |
| **Material Aspect:** | **PRODUCT PRICING** | | |
| | Cement Sector, Local Economy and Akçansa (p.19) | Not Assured | |
| **Material Aspect:** | **SUSTAINABLE, INNOVATIVE PRODUCTS** | | |
| | Innovative, Special Product Portfolio (p.20) | Not Assured | |

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**Fax:** 0 (216) 571 31 11

**Cement ve Ready-mix Concrete Facilities:**

**ÇANAKKALE PLANT**
Mahmudiye Beldesi
17640 Ezine / ÇANAKKALE

**BÜYÜKÇEKMECE PLANT**
PK.1 Mimarsinan Beldesi
34900 Büyükçekmece / İSTANBUL

**SAMSUN LADİK PLANT**
İskaniye mah.Akpınar Mevkii
Ladik / SAMSUN

**İZMİR SALES OFFICE**
Ali Çetinkaya Bulvarı No.34/1
K.4 D.402 Alsancak / İZMİR

**ÇORLU READY-MIXED CONCRETE PLANT**
Şehsinan Mah.Kadıderesi Mevkii
Çorlu / TEKİRDAĞ

**ALİAĞA READY-MIXED CONCRETE PLANT**
Horozgediği Köyü Hayıtlıdere Mevkii
Aliağa / İZMİR

**KEŞAN READY-MIXED CONCRETE PLANT**
Yeni Muhacır Beldesi E - 27 Asfaltı Üzeri
Keşan / EDİRNE

**MENEMEN READY-MIXED CONCRETE PLANT**
Kazımpaşa Mah. Ormanbeşli Mevkii
Menemen / İZMİR

**KARAMÜRSEL/YALOVA TERMINAL**
Balcı Mevkii SCA Fabrikası içi
Kaytazdere-Altınova / YALOVA

**ALİAĞA TERMINAL**
Horozgediği Köyü,Nemrut Körfezi
Çukurova Çelik Limanı Aliağa / İZMİR

**YENİBOSNA READY-MIXED CONCRETE PLANT**
Tem - Havaalanı yanyolu Dereboyu Mevkii
Sefaköy/ İSTANBUL

**AYAZAĞA CRUSHED STONE PLANT**
Cendere Yolu Önerler Petrol Karşısı
Kemerburgaz-Eyüp / İSTANBUL

**TEKİRDAĞ READY-MIXED CONCRETE PLANT**
Muratlı Yolu Üzeri 4.km TEKİRDAĞ

**SİLİVRİ (KENTAŞ) READY-MIXED CONCRETE PLANT**
Mimar Sinan mah.Eski Çanta Köyü üzeri
Maksi Market arkası Silivri / İSTANBUL

**MERZİFON READY-MIXED CONCRETE PLANT**
İstanbul Yolu 1.km Alıcık yolu üzeri
(26.27.H Pafta-291 Ada-5 nolu Parsel)
Merzifon / AMASYA

**BURSA AGGREGATE PLANT**
Eski Kemalpaşa Yolu üzeri Kayapa Beldesi
Nilüfer / BURSA

**MANİSA READY-MIXED CONCRETE PLANT**
İnönü mah.Meriç sokak No:16
Muradiye / MANİSA

**YARIMCA SALES OFFICE**
Rota Limanı Körfez / KOCAELİ

**SAMSUN 2 READY-MIXED CONCRETE PLANT**
Mobil Santral Yolu Selyeri Mevkii
SAMSUN

**TOKAT READY-MIXED CONCRETE PLANT**
Tombulkaya Mevkii Tokat Sivas
Karayolu 10.km. TOKAT

**ÇERKEZKÖY READY-MIXED CONCRETE PLANT**
Beylikçayır Mevkii
Veliköy-Çerkezköy / TEKİRDAĞ

**KEMERBURGAZ READY-MIXED CONCRETE PLANT**
Cendere yolu Alkanat Rest.karşısı
Kemerburgaz-EYÜP / İSTANBUL

**BORNOVA READY-MIXED CONCRETE PLANT**
Ankara Yolu Üzeri No:194 Bornova / İZMİR

**BÜYÜKÇEKMECE READY-MIXED CONCRETE PLANT**
Sultan Murat Cad. No: 8 Mimarsinan
34900 - Büyükçekmece / İSTANBUL

**BÜYÜKKARIŞTIRAN READY-MIXED CONCRETE PLANT**
Kınalı Köprü Mevkii
Büyükkarıştıran / LÜLEBURGAZ

**EDREMİT READY-MIXED CONCRETE PLANT**
Akçay Asfaltı Üzeri Kuruçay Mevkii
Edremit / BALIKESİR

**ESENYURT READY-MIXED CONCRETE PLANT**
Hoşdere Köyü Harmanlık Mevkii
Bahçeşehir / İSTANBUL

**GEBZE READY-MIXED CONCRETE PLANT**
Sultan Orhan Mah.Taşocakları Mevkii
Gebze / KOCAELİ

**GÜZELBAHÇE READY-MIXED CONCRETE PLANT**
Çamlı Köyü. Kırlar Mevkii.
Güzelbahçe / İZMİR

**AMBARLI TERMINAL**
Yakuplu Köyü Reşitpaşa Çiftliği Mevkii
Ambarlı /İSTANBUL

**AYAZAĞA READY-MIXED CONCRETE PLANT**
Cendere Yolu Çakırlar Mah.
Ayazağa-Şişli / İSTANBUL

**AGREGA SARAY PLANT**
Kavacık köyü Mevkii
Saray / TEKİRDAĞ

**BAŞKÖY READY-MIXED CONCRETE PLANT**
Başköy Köyü Taşocakları Mevkii
Nilüfer / BURSA

**BEYLİKDÜZÜ READY-MIXED CONCRETE PLANT**
2945 Ada 20 Parsel Mehter
Çeşme mah.Nazım Hikmet Bulvarı İnovia
2.Etap Karşısı Esenyurt / İSTANBUL

**ARNAVUTKÖY READY-MIXED CONCRETE PLANT**
Eski Edirne Asfaltı Habibler Çıkışı
Derbent Mevkii Arnavutköy/İSTANBUL

**GÜMÜLDÜR READY-MIXED CONCRETE PLANT**
Yukarı ovacık Mevkii PK 10 Gümüldür
Menderes/İZMİR

**HOPA TERMINAL**
Orta Hopa Mahallesi Liman Caddesi
08600 Hopa/ARTVİN

**ÇORUM READY-MIXED CONCRETE PLANT**
Ankara Yolu Üzeri Yaydiğin
Mahallesi/ÇORUM

**NİLÜFER READY-MIXED CONCRETE PLANT**
Eski Kamelpaşa Yolu üzeri Kayapa Mah.
Nilüfer/BURSA

**SAMSUN TERMINAL**
Organize sanayi bölgesi,
Devlet demir yolları lojistik köyü yanı,
yeşilyurt liman tesisleri içi
Tekkeköy / SAMSUN

**KAVAK READY-MIXED CONCRETE PLANT**
Kavak - Samsun karayolu Emirli
Taş ocakları yolu 1. km Kavak/SAMSUN

**DANAMANDIRA AGGREGATE PLANT**
Danamandıra Köyü Silivri/İSTANBUL

**AYVALIK READY-MIXED CONCRETE PLANT**
Tellikavak Mevkii 39. Sokak No:8/2
Küçükköy Ayvalık /BALIKESİR

**SAMSUN SALES OFFICE**
Güzelyalı Mah. 3003 Sok. No:2
Çamkoru Sitesi Atakum/SAMSUN

**YENİBOSNA CEMENT SALES DEPOT**
Köyaltı Mevkii Yenibosna Merkez Mh.
Değirmenbahçe Sk. No.12
Yenibosna/İSTANBUL

**SAMSUN III READY-MIXED CONCRETE PLANT**
Derecik Mahallesi Ovalar Caddesi 204
Sokak No: 2 İlkadım/SAMSUN

**KIRKLARELİ READY-MIXED CONCRETE PLANT**
Kocahıdır Mahallesi Pınarhisar Yolu
Şeytan Deresi Mevkii Tolga
Madencilik şantiyesi Kırklareli

**ZEYTİNBURNU READY-MIXED CONCRETE PLANT**
Yurt-Kur Atatürk Öğrenci Sitesi Merkez
Efendi Mah. Sabri Ülker Sok. No:37
Cevizlibağ Zeytinburnu/İstanbul

**SAMSUN AGGREGATE PLANT**
Çamlıyazı Köyü mevkii
Atakum/SAMSUN

**TUZLA PLANT**
Koray İnşaat E5 karayolu Üzeri
Paşabahçe Fabrikası Arkası
Piri Reis cad. Tuzla/İstanbul

**POYRAZKÖY READY-MIXED CONCRETE PLANT**
3. Köprü Asya Ayağı Yaros Kalesi Mevkii
Poyrazköy/İstanbul

**ÇATALCA MURATBEY READY-MIXED CONCRETE PLANT**
Muratbey Mahallesi 805. Parsel
Büyükçekmece/İstanbul

**GARİPÇE READY-MIXED CONCRETE PLANT**
Garipçe Köyü 3. Köprü Ayağı
Sarıyer/İstanbul

**EYÜP READY-MIXED CONCRETE PLANT**
İçtaş Odayeri Otoyol Şantiyesi
Odayeri Köyü Eyüp/İstanbul

**ÇEKMEKÖY READY-MIXED CONCRETE PLANT**
Üsküdar Metro Projesi Araç Depo
Sahası İstanbul Şile Otoyolu Aquacity
Yanı Parseler Mah. Ümraniye/İstanbul

**İÇTAŞ USKUMRUKÖY READY-MIXED CONCRETE PLANT**
Kuzey Marmara Otoyol Şantiyesi
Uskumruköy Sarıyer /İstanbul

**ÇANAKKALE SALES OFFICE**
İnönü Caddesi ÇTSO İş Merkezi
No:141 Daire 14-15 Çanakkale

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