We are committed to creating sustainable value for our shareholders by generating synergies among the Taiheiyo Cement Group of companies.

We aim to manage the environmental impact of our operations while supporting the development of a recycling-based society.

We will act in an ethical manner and abide by the laws and regulations of those countries in which we operate.

We will openly communicate with our stakeholders and proactively report on our business activities in a transparent manner.

We are committed to the ongoing development and application of innovative technologies in order to provide products and services that benefit our customers and society.

We are committed to maintaining an international outlook and conducting our business in accordance with global standards.

We will strive to anticipate the changing business environment to assess new opportunities for growth.

We are committed to achieving our full potential through training and self-development.

We are devoted to providing a safe and healthy working environment where our employees are valued and the human rights of all individuals involved in our business are respected.
Mission of the Taiheiyo Cement Group

Our mission is to contribute to social infrastructure development by providing solutions that are environmentally efficient, enhance our competitive position and bring value to our stakeholders.

Business Principles | Governing the way the company conducts business.

- We are committed to creating sustainable value for our shareholders by generating synergies among the Taiheiyo Cement Group of companies.
- We aim to manage the environmental impact of our operations while supporting the development of a recycling-based society.
- We will act in an ethical manner and abide by the laws and regulations of those countries in which we operate.
- We will openly communicate with our stakeholders and proactively report on our business activities in a transparent manner.
- We are committed to the ongoing development and application of innovative technologies in order to provide products and services that benefit our customers and society.
- We are committed to maintaining an international outlook and conducting our business in accordance with global standards.
- We will strive to anticipate the changing business environment to assess new opportunities for growth.
- We are committed to achieving our full potential through training and self-development.
- We are devoted to providing a safe and healthy working environment where our employees are valued and the human rights of all individuals involved in our business are respected.
Editorial Policy

We have been publishing CSR reports since 2005 to share information about our group’s CSR activities as widely and clearly as possible to our stakeholders.

For CSR Report 2010, the sixth of our CSR reports, we selected priority issues considering both stakeholder expectations and our own perception of our level of contribution to sustainability (see pp. 18–19). Detailed reports on the selected three priority issues are provided on the Focus Page (see pp. 20–25).

| Focus 1: Contribution to social capital through cement (see pp. 20–21) |
| Focus 2: Creation of a recycling-based society (see pp. 22–23) |
| Focus 3: Creation of a low-carbon society (see pp. 24–25) |

To create a report aligned with global standards, we considered items required by the GRI Sustainability Reporting Guidelines 2006 to enhance information disclosure. We will continue to improve our information disclosure to ensure the overall reliability of this report.

Selection of Information for Publication

The information to include was discussed by our CSR report editing task force and approved by the board director responsible for CSR.

Guidelines used for reference:
GRI Sustainability Reporting Guidelines 2006 (GRI)

Publication Dates

September 2010
Previous report: September 2009
Next report: September 2011

This is an English translation of the Japanese report.

Precautions on Forward-looking Statements

Plans and prospects included in this report are predictions based on information available at the time of publication and are subject to unpredictable risks and uncertainties. Consequently, there are no explicit or implied guarantees as to actual results, which may materially vary from the projected figures or measures cited in this report.

Scope of This Report

Period Covered

This report covers results from fiscal 2009 (April 1, 2009 to March 31, 2010). We have also included results from after this period when we deemed them of importance. In such cases, this is clearly stated.

Organizations Covered

The report focuses on Taiheiyo Cement Corporation (non-consolidated) and includes our group companies. The words "we," "us" and "our" refer to Taiheiyo Cement Corporation (non-consolidated); when information pertains to one of our group companies, that company's name is stated explicitly.

The scope of data collected for material balance and environmental accounting of our business activities includes our (non-consolidated) quarries, plants (including power stations) and service stations, and business sites of domestic subsidiaries* having close links to our businesses.

* Business sites of domestic subsidiaries within the scope of the data collected:

1. Quarries of subsidiaries that supply material to us (9 quarries of 8 companies)
   - Ryushin Mining Co., Ltd. (Shin-Tsukumi Quarry (Oita Prefecture))
   - Boku Mining Co., Ltd. (Boku Quarry (Saitama Prefecture))
   - Chichibu Mining Co., Ltd. (Mido Quarry (Saitama Prefecture))
   - Ishizaki Co., Ltd. (Fujisawa Quarry (Mie Prefecture))
   - Oita Taiheiyo Mining Corporation (Oita Prefecture)
   - Kawanakajima Mining Co., Ltd. (Kawara Quarry (Fukuoka Prefecture))
   - Mysyo Cement Co., Ltd. (Toumi Quarry (Niigata Prefecture))
   - Chichibu Taiheiyo Cement Corporation (Miwa Quarry (Saitama Prefecture))
   - Chichibu Taiheiyo Cement Corporation (Kanouyama Quarry (Gunma Prefecture))

2. Plant of spin-off subsidiary (1 plant of 1 company)
   - Chichibu Taiheiyo Cement Corporation (Chichibu Plant (Saitama Prefecture))

Data for material balance of our business activities is categorized into four business segments: cement, mineral resources, environment and power generation.

All data outside the above scope and changes in calculation method, if any, are indicated clearly.

There is no change in the scope of activities from last year’s report.

For inquiries concerning content contact

TAIHEIYO CEMENT CORPORATION
Corporate Social Responsibility Group, General Affairs Department
Tel: +81-3-5531-7335 Fax: +81-3-5531-7552
E-mail: webmaster@taiheiyo-cement.co.jp

http://www.taiheiyo-cement.co.jp/english/
Commitment of Top Management

Transforming into a steadfast enterprise that weather the storm with a deep sense of mission.

Implementing Business Restructuring without Exceptions as a Starting Point for Our Transformation

While the Japanese cement market has matured and gradually receded over recent years, the dramatic decline in domestic demand for cement in fiscal 2009 of about 15% from the previous fiscal year was staggering. It was as if we had experienced the meteor collision that caused the extinction of dinosaurs at the end of the Cretaceous period.

Our company boasts a hundred and thirty years of history and we are convinced society will always need cement. However, we recognize that what the cement market has experienced in recent years is not the result of the cyclical nature of the economy, but the reflection of structural change. The state of the industry we had before this recent adversity will never return. Therefore, we decided to implement business restructuring without exceptions, which includes the discontinuation of cement production at three plants and a reduced workforce. We must change ourselves and revive as a company with a new structure at any cost. We cannot otherwise survive. To this end, we must force the structural reform of the entire company. I am confident that this dramatic change is essential for the future wellbeing of the company and for us to meet our corporate social responsibility.

Identifying New Value in the Cement Production Process and Entering into Growth Business Areas

Cement continues to be our core business under the new company structure.

Since Japan is poorly endowed with natural resources, it must continue to both trade and manufacture products. To do so, our country must further strengthen its infrastructure to improve competitiveness in international markets. Given the risk of climate change, more robust infrastructure will also become increasingly important for responding to natural disasters caused by unusual weather patterns. The key, however, is to exercise moderation in the conduct of our business. That is, we must create and maintain a flexible business structure that coexists with the needs of society.

On the other hand, with the aim of creating new added value, we will drive the transformation of our business by identifying new value in the cement production process beyond cement.

In practical terms, we will focus on the environmental business as a new pillar. The cement industry has established a model for recycling through the use of waste and by-products as raw material and fuel. While continuing to reliably supply cement, the cement industry’s new mission to recycle waste and by-products generated in society is even stronger than before.

We have already established a system for receiving not only industrial waste and by-products, but ordinary household garbage, incineration ash and sludge generated at wastewater treatment facilities to be used as raw materials for cement. Although the volume of waste and by-products generated may decline due to future economic stagnation, we will expand our environmental business by applying new technologies for recycling materials that have, up to now, been difficult to recycle.

Applying Our Environmental Engineering to Protect the Environment around the World

We observe solid growth in the demand for cement in emerging countries. While the United States is a developed country, its demand for cement is expected to rise along with its growing population. The total volume of cement produced abroad by the Taiheiyo Cement Group is greater than that produced in Japan.

We will therefore further promote investments in growing markets such as the United States, China and Southeast Asia. In the course of international activities, such as WBCSD-CSI (the World Business Council for Sustainable Development, Cement Sustainability Initiative) and APP (the Asia-Pacific Partnership on Clean Development & Climate), there has been a notion that cement manufacturers in developed countries should contribute to reducing CO2 emissions and saving energy by introducing their technologies into emerging countries.

In line with these initiatives, we have pursued opportunities for providing our environmental technologies to Chinese companies and in 2009 we successfully introduced two technologies (a chlorine bypass system and a system for recycling incineration ash from municipal waste as a raw material for cement).

An incredible total of 1.6 billion tons of cement is currently produced in China, forty times the volume of cement produced in Japan. Since CO2 emissions are unavoidable in the cement production process, it is vital for the industry to minimize direct
and indirect CO₂ emissions through energy efficiency and the application of innovative environmental technologies to enable the utilization of recycled resources as alternative raw materials and fuels. Having successfully started this environmental engineering business on a modest level with the introduction of environmental technologies at two locations in China, we intend to expand it to the wider market.

**Every Employee Should Express Their Own Viewpoint and Change Their Mindset**

Over the past two years, we have worked hard to dramatically reduce costs, and as a result, our operations have maintained a level of sustainability. To express my gratitude to all our employees I began sharing words of encouragement through my email magazine in February 2010.

With the belief that, despite the current difficulties we face, the future will be bright if we work hard, we should set our targets for the next two- and five-year periods and re-energize our work. As we think through what we must do now to achieve our targets, we can take full advantage of the wisdom of humankind and act to eliminate what is unnecessary. I believe this mindset will improve our safety and product quality and enhance our technological development. I will continue to share these thoughts with employees.

Another purpose for starting my email magazine is that I wanted to directly listen to the opinions of employees. Every employee should be able to reveal their own character and points of view at any company. In this light, I want to cultivate a corporate culture in which each employee has their own opinion and is able to discuss it freely. I will take the lead and use my email magazine as a tool for proactively guiding our corporate culture in that direction.

**Continuing to Be a Company that Supports Society**

With regard to CSR management, our company must be an enterprise that positively influences society through its business activities and is widely recognized in the market.

In its history of more than one hundred years, the company has played an important role in the local community. However, times have changed and whilst we may no longer play a central role, it is important that we adapt and identify the role we must play. New opportunities for contributing to local communities in this new world have arisen. For example, we are implementing a program to support university students and scholarships in the Philippines. In Vietnam we operate a kindergarten for employees’ children.

We will carefully review what we have done in the past, from a positive, not negative, perspective, and achieve business restructuring without exceptions, changing our focus from cement to the environment and new businesses in emerging countries. Through this approach we will develop into a company that supports society through its business.
Business Activities and CSR of the Taiheiyo Cement Group

We are committed to being a leading company in the Pacific Rim. The Taiheiyo Cement Group operates globally, focusing on cement, mineral resources, environmental and overseas businesses. We take advantage of the unique features of cement plants and the recycling technologies we have developed over many years to help protect the global environment and create a recycling-based society.

Taiheiyo Cement Profile

Company name: TAIHEIYO CEMENT CORPORATION
Established: May 3, 1881
Capital: 69.5 billion yen
Head office: Daiba Garden City Building, 2-3-5, Daiba, Minato-Ku, Tokyo
Net sales: 278.8 billion yen
Number of employees: 2,133
Business base: Cement plants 7 (Japan)/Branches 8 (Japan) /

Group

Subsidiaries: 300 (including 167 consolidated subsidiaries and 16 equity-method subsidiaries)
Affiliates: 135 (including 48 equity-method affiliates)
Consolidated net sales: 728.6 billion yen
Consolidated number of employees: 16,909
Cement plants: 6 (Japan)/3 (U.S.A.)/3 (China)/1 (Vietnam)/1 (Philippines)/2 (South Korea)

(As of March 31, 2010. As of April 1, 2010 for cement plants.)
**Results of Operations**

During the term under review, the Japanese economy performed poorly with weak investment in the public, business and housing sectors, although there were signs of recovery in consumer spending and exports. Consequently, the group faced an adverse business environment. In the United States, while there was a sign of improvement in some sectors, the overall performance of the economy was unfavorable, particularly for employment, income and the housing market. In China, fixed asset investment achieved a solid growth and there was a strong recovery in exports. In other Asian countries, domestic demand continued to expand while exports to China and other regions marked a strong growth.

As a result, our consolidated net sales for fiscal 2009 (fiscal year ending March 2010) were 728.6 billion yen. Consolidated ordinary income was 0.1 billion yen. We reported consolidated net loss of 37.0 billion yen due primarily to the inclusion of restructuring costs, etc. of 46.4 billion yen as an extraordinary loss.

**Cement Business Company**


In the process of production, we contribute to protecting the global environment and creating a recycling-based society through the use of waste and by-products as raw materials and fuels for cement. We conduct environmental impact assessments of these materials before accepting them and strictly manage their use. Through these measures we strive to ensure the stable operation of our plants and avoid discharging pollutants. Quality control is conducted in accordance with ISO 9001 and we maintain a system for guaranteeing the reliable quality of our product. We continuously strive to increase the volumes of waste and by-products we use as raw materials and fuels for cement, including those that are difficult to recycle in other industries. Recognizing our plant as a member of the local community, we also promote close communications with local stakeholders by holding briefings for members of the community, worksite tours and support for career experience.

In logistics, we, as a specified consigner, focus on reducing CO₂ emissions through the installation of energy efficient equipment on ships and trucks and increased use of cargo loading on return trips. In sales, we place the highest priority on customer satisfaction, regularly disseminate information among business units, and quickly and effectively respond to feedback on customer requirements. In our technical divisions we conduct a wide range of activities, such as technical support related to concrete, as well as quality assurance actions.

“Safety is always a top priority” is our motto. We are thus conducting a program to re-focus on safety that includes Taiheiyo Cement as well as our group and partner companies. We are also focused on training people with multifaceted skills relating to cement, from sales to technical knowledge.
Mineral Resources Business Company

Leveraging our abundant, high-quality limestone resources, the Mineral Resources Business Company not only supplies raw materials for cement, but also provides limestone products for the construction, steel and chemical industries. We operate a quicklime business to increase our added value. We also seek ventures overseas, capitalizing on our own business model. Furthermore, we intend to expand our construction soil recycling business.

In quarry operations, representing our core business, we strive to ensure safety and reduce environmental impact during all stages, from development to closure. Specific efforts vary by quarry, depending on site locations. In consideration of the environment we endeavor to prevent pollution associated with quarry operations, such as air and water pollution, noise and vibration. We also promote the greening of quarries by soil dressing and tree planting. For support and advice on quarry safety we set up a working group that includes outside experts and continue to maintain stable conditions at old quarry sites, deposited soil sites and quarry slopes. In addition to these efforts, we leave the perimeter of the quarry intact, which effectively works as a raised embankment to protect the scenery at some locations. We have been quick to address the issue of conserving biodiversity, even before it attracted public attention in recent years, and have applied biotechnology to achieve results in the preservation and growing of rare plant species.

In the soil environmental business, we strive to provide products and services that meet growing environmental needs, such as the recycling of construction soil as raw material for cement, a method for chemically removing cadmium contained in soil, and DENITE, a material that performs well for immobilizing heavy metals contained in soil.

Environmental Business Company

In recent years, constraining the consumption of natural resources and reducing environmental impact have become critical social concerns. In this situation, the general public has become very conscious of the need to create a recycling-based society that minimizes the amount of waste generated and the need for safe treatment of the waste that is generated. Applying the technologies we have developed for producing cement and using the characteristic features of the cement production process, the Environmental Business Company focuses on providing sophisticated waste treatment services (recycled-waste-to-cement system) and the development and sale of environmental products that utilize the resources we hold.

Our recycled-waste-to-cement system enables us to safely recycle large volumes of various wastes and by-products generated in other industries. By recycling waste and by-products as resources, we not only extend the lifetime of landfills, but help reduce environmental impacts, such as natural resource depletion.

In the environmental product business, we established a recycling system in which we not only sell limestone to thermal power stations as a flue-gas desulfurization material, but also receive the gypsum generated by the power stations as a by-product, which we use as raw material for cement. These are some of the ways in which we are contributing to the creation of a recycling-based society.

As a company engaged in the environmental business we also strive for good relationships with vendors and local communities and securing their trust by focusing on compliance and managing risk and safety matters. In order to safely handle waste, we have developed a manual for its acceptance and use. We only conduct business after having confirmed that the utilization of the waste will not affect the production process or quality of cement. Appropriate measures are taken to prevent accidents and protect the environment.
International Business Company

Our International Business Company formulates the strategy for our entire overseas operations, manages the performance of existing overseas businesses, conducts research and assesses investment for growing markets. We are also focusing on expanding our environmental business overseas.

The cement export business involves the sale of cement produced in our plants in Japan to customers in Asia, the Middle East, Africa and Oceania, as well as intermediary trade. We plan to expand the trade in bulk materials other than cement. By geographical region, our business in the United States is centered on CalPortland, which handles the cement, ready-mixed concrete and aggregates operations on the West Coast. In China, through our three core joint-venture companies for production and sale of cement in Dalian City, Qinhuangdao City and the Jiangnan region, we are expanding our downstream business, such as ready-mixed concrete.

In Southeast Asia we conduct business, from production to sales, through Nghi Son Cement, our joint venture in Vietnam, and Taiheiyo Cement Philippines in the Philippines. We are also broadening the export of quarried products as well as other businesses in Thailand. In South Korea, Taiheiyo Cement is an equity and joint management partner of Ssangyong Cement Industrial, while in Papua New Guinea, we conduct a clinker grinding business. Collaboration with our overseas group companies requires the promotion and expansion of CSR management. We implement a variety of programs to encourage communications with stakeholders and to instill an awareness of CSR among employees across the globe. In the Philippines we support the development of human resources through a scholarship program for high school graduates entering universities, as well as education and training programs for local employees. We are also establishing a group-wide risk management system whereby overseas group companies are encouraged to formulate their own risk management rules and integrate them. Through these efforts, we are working to safeguard our ability to effectively handle any crisis that may occur, while minimizing damage and avoiding any possible loss of trust.

Others

● Construction Materials

We manufacture and sell construction materials and concrete products and do construction work. We also provide diagnostic and repair services to extend the life of concrete structures and reduce their life-cycle cost.

● Others

We conduct a wide range of business activities, including real estate (utilization of properties, operation of fitness clubs, and an insurance agency); ceramics and electronics; transportation and warehousing; plant engineering; and information processing.
Medium-Term Management Plan

We withdrew the quantitative targets for fiscal 2010, the final year of our 10 Medium-Term Management Plan, and repositioned fiscal 2010 as a year to lay the groundwork for sustainable growth from fiscal 2011 and began restructuring the company’s business.

Business Environment and Performance for the Taiheiyo Cement Group

In our 10 Medium-Term Management Plan, formulated in April 2008, we focus our management resources on our core businesses—cement, mineral resources and the environment—in order to remain firmly on the growth trajectory we aimed for in our 07 Medium-Term Management Plan. One of the plan’s core policies is to build a revenue structure that balances domestic and overseas businesses.

As in fiscal 2007 and 2008, however, we experienced in fiscal 2009 a sharper than predicted decline in domestic cement demand, which dropped to 42.7 million tons against the 48 million tons projected in the plan.

Consequently the Japanese cement industry operates in an unprecedentedly unfavorable business environment. Given this situation, we are facing a crisis that requires us to fully implement business restructuring without exceptions.

Domestic cement demand dramatically declined by 15% in fiscal 2009 from fiscal 2008 due to reduced public sector demand and a significant decline in private sector demand under the influence of stagnating business and housing investments. The total volume of cement exports, meanwhile, slightly increased compared to fiscal 2008.

Under these circumstances the volume of domestic cement sales for the group, including consigned sales, dropped 15% in fiscal 2009 while the export volume went up approximately 18%. Our domestic cement prices rose slightly as a result of our efforts to raise sales prices. In export cement prices, we passed along the previous year’s increased fuel costs to sales prices.

Demand in the mineral resources business was weak. Sales in the sand and gravel supply business for airports also declined significantly. Sales in the environmental business also dropped due to the recession and a decline in cement production.

As a result, consolidated net sales for the company dropped. Consolidated operating income amounted to 3.5 billion yen while consolidated ordinary income was 0.1 billion yen. We reported, however, a net loss of 37.0 billion yen, primarily due to the inclusion of restructuring costs, a loss on fixed assets sales and an impairment loss as an extraordinary loss.

Distribution of Economic Value to Stakeholders

With regard to the future business environment for the group, we expect domestic demand will continue to decline in our core domestic cement business due to decreased public demand and sluggish private demand. A risk of prolonged recession persists in the United States and, although we see some signs of recovery, we expect the difficult circumstances to continue.

In the face of this business environment we will focus on enhancing our management foundation, particularly reinforcing our financial position, as a top priority. We intend, through these efforts, to continue paying stable dividends going forward.

In light of the results of operations and the reporting of restructuring cost as an extraordinary loss in the term under review, we did not distribute dividends from retained earnings for fiscal 2009. We will make every effort to improve our business performance and resume dividend payments in the near future.

Final Year for 10 Medium-Term Management Plan and New Management Plan

Under the 04 Medium-Term Management Plan and the 07 Medium-Term Management Plan, we worked to improve our financial position and enhance earnings power.

However, the business environment surrounding the group worsened dramatically and the assumptions we made in the 10 Medium-Term Management Plan significantly differ from the present situation.

Given this environment, it is very difficult to achieve the growth we had sought in the plan. Accordingly, we positioned fiscal 2010 as a year for restructuring our business to prepare for the rebirth of a new Taiheiyo Cement.

Specifically, we have identified the following two objectives as our management policy.

(1) Prevail in difficult markets by enhancing our cost competitiveness

(2) Solidify our position as a top-class manufacturer by leveraging our technological and creative capabilities

Through bold and expeditious implementation of major measures under this policy in fiscal 2010, the results of our efforts will lead to sustainable corporate growth starting in fiscal 2011. On the back of these activities we intend to achieve the necessary earnings and management foundation that will enable us to pay
stable dividends, invest in future growth and improve our financial footing.

As a result of this overall situation, we withdrew the quantitative targets for fiscal 2010 announced in the 10 Medium-Term Management Plan.

We will focus in fiscal 2010 on the rapid and secure implementation of the following three measures to complete business restructuring without exceptions. Through these efforts we intend to establish a robust corporate structure with an optimal business structure. This will ensure stable income even in a market with declining domestic demand for cement.

**Major Managerial Issues that Require Comment**

The Medium-Term Management Plan—Revision and Business Restructuring published in March 2010 promised to review and restructure domestic cement production.

In accordance with this undertaking, we revised the projected domestic cement demand starting in fiscal 2010 to approximately 40 million tons and reduced our production capacity as follows.

1. **Taiheiyo Cement plants**
   - We discontinued cement production at the following plants.
     1. Saiki factory at Oita Plant (May 21, 2010)
     2. Tosa Plant (August 20, 2010)
   - Following the discontinuation of cement production at these two sites, we addressed workforce concerns through transfers to other plants and group companies, and the introduction of an early retirement program. We are currently consulting with the partner companies of the two plants on the impact of discontinuing cement production. At the two plants, we are holding sincere discussions with local governments and other related parties to deal with issues related to the discontinuation of production at these plants.

2. **Alliance firms (production contractors and sales contractors)**
   - We discontinued cement production at Chichibu Taiheiyo Cement on August 9, 2010. We also revised our consigned production and sales contracts with other alliance firms and will continue efforts to reduce our cement production capacity.

At the plants that discontinued cement production, we continue operations such as the mining, crushing and sale of limestone, production of specialty cements and the operation of service stations. We also continue to pursue opportunities for converting existing facilities to new business uses.

**Major Measures for Fiscal 2010**

1. Review and restructure domestic production
2. Reform organizational structure and human resources system
3. Restructure domestic cement sales system and streamline logistics

In fiscal 2010 we plan to sell corporate assets to secure a profit and raise funds.

Given declining domestic cement demand we will strategically strengthen the following rapidly growing businesses, including overseas businesses, in order to restructure our business portfolio in response to future social and economic trends. Starting in fiscal 2011 we will strive to establish a solid market position by focusing resources on the following areas.

**1. Overseas Business**
   - Disseminate and enhance the Taiheiyo Cement brand in overseas markets.

**2. Environmental Business**
   - Fully expand existing business and establish a business model that does not solely rely on cement plants.

**3. Mineral Resources Business**
   - Shift our strategy focus from quantity to quality.

**4. Strengthen R&D System**
   - Pursue R&D efforts to achieve sustainable growth for existing businesses and develop new businesses.

By the end of fiscal 2010, and with the completion of business restructuring, we will formulate a new plan for the next stage of the company that will include the following.

1. Concrete measures to strengthen business areas other than growth and cement businesses.
2. Strategic programs to accelerate “selection and concentration” in business operations to generate synergies with group companies.

Commitment to the Environment

1. Saiki factory at Oita Plant (May 21, 2010)
2. Tosa Plant (August 20, 2010)
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CSR Management

Our CSR Prospectus identifies the key issues and policies associated with implementing our Business Principles, fulfilling our corporate responsibility and realizing our Mission.

Definition of Our CSR

In the CSR Prospectus, formulated in 2005, we defined our corporate social responsibility as follows: The CSR of the company is to conduct business with full consideration for the economic, environmental and social impacts of our business activities, build relationships of trust with our various stakeholders (including the global environment, local communities, shareholders, customers, suppliers and employees) and pursue the sustainable development of society and the company as an upstanding corporate citizen. Our CSR includes risk management, compliance, the environment, quality, safety and health, human rights, communications and other concerns.

Basic Policy for Promoting CSR Management

We have identified the following six basic policies for promoting CSR management.

1. Based on our Mission and Business Principles, the company will clarify the ideal form of CSR management to be pursued and strive to advance operations based on CSR.
2. Promoting a corporate culture that places great importance on compliance, we aspire for all directors and all employees to always make the most appropriate independent judgments.
3. We will manage the company with awareness that our social mission includes environmental protection, defense of human rights and contribution to communities.
4. We will proactively engage on key CSR issues and undertake the most appropriate prioritization and resource allocation.
5. We will practice appropriate information disclosure and communication with stakeholders, based on the status of our CSR management promotion, and build relationships of trust.
6. We will treat CSR management and promotion as a group-wide activity and ensure all group companies are kept well informed.

Long-term CSR Vision

In addition to our Mission, Business Principles and Standard of Conduct, in August 2007 we created a Long-term CSR Vision that fleshes out our mission from a CSR standpoint and describes our goals ten years into the future. We declared that “We at the Taiheiyo Cement Group will support the vitalization of local communities, thereby playing a pioneering role in building safe and secure social infrastructure and creating a recycling-based society for the future of the planet.” This is supported by the foundation: “Creating an Energetic Workplace that Respects Diversity” and the three columns: “Building safe and secure social infrastructure,” “Creating a recycling-based society” and “Vitalization of local communities.” We are pursuing our CSR activities through concrete measures implemented in fiscal 2010.

<table>
<thead>
<tr>
<th>Key Commitment</th>
<th>Measures Category</th>
</tr>
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<tbody>
<tr>
<td>Column 1</td>
<td></td>
</tr>
<tr>
<td>Projects to contribute to society taking advantage of our technologies that help build social infrastructure</td>
<td>Support for improved durability of concrete structures</td>
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<td>Support for building homes, schools, etc. for the poor in developing countries</td>
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<td>Column 2</td>
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<td>Voluntary environmental conservation activities that are not conducted on a business basis</td>
<td>Voluntary reductions to environmental impact that exceed regulations</td>
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<td>Transfer and disseminate environmental technologies internationally</td>
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<td>Column 3</td>
<td></td>
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<tr>
<td>Enhance communication with the community and support community validation</td>
<td>Support for international sites</td>
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<td>Support community vitalization</td>
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<tr>
<td>Foundation</td>
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<tr>
<td>Encourage employees to develop their awareness</td>
<td>Create an environment that facilitates commitment by employees</td>
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<tr>
<td>Foster a sense of unity among employees of Taiheiyo Cement Group</td>
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<tr>
<td>Shared awareness of working with pride and sincere commitment</td>
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<tr>
<td>First steps toward creating a corporate culture that respects diversity</td>
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<tr>
<td>Create pleasant workplace that take work-life balance into consideration</td>
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<tr>
<td>Provide opportunities for volunteering</td>
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</table>
Our System for Promoting CSR Management

We have created a CSR Management Committee, chaired by the company president, and all board directors sit as members. The CSR Management Committee’s role is to screen CSR action plans and other key items and review progress. Below this committee are specialized committees for individual CSR subjects, each chaired by the director responsible for that topic. In fiscal 2009 we reviewed the CSR organizational structure and reorganized ten committees into seven. In addition, we established the Global Warming Countermeasures Committee to address the issue of global warming.

Results of FY2009 CSR Efforts

<table>
<thead>
<tr>
<th>Organization</th>
<th>Plan</th>
<th>Results</th>
<th>See Also</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Management &amp; Compliance Committee</td>
<td>Creation of company-wide plan and manual for BCP(^1) in event of major earthquake</td>
<td>Publication and distribution of head office manual</td>
<td>P29</td>
</tr>
<tr>
<td></td>
<td>Creation of manual and BCP to counter new influenza virus</td>
<td>Creation of guidelines for plants and branches is ongoing</td>
<td>P29</td>
</tr>
<tr>
<td></td>
<td>Creation of educational materials and self-assessment tools for compliance training</td>
<td>Development of regulations related to new influenza virus</td>
<td>P27</td>
</tr>
<tr>
<td></td>
<td>Ensuring thorough awareness of whistle-blower program</td>
<td>Creation of pilot plan for plants and branches</td>
<td>P27</td>
</tr>
<tr>
<td>Information Security Committee</td>
<td>Enhancement of ISMS(^2) regime and continuous operation &amp; improvement</td>
<td>Creation of educational materials based on examples from other companies, use of materials at workshops, etc.</td>
<td>P27</td>
</tr>
<tr>
<td></td>
<td>Guidance on and promotion of information security measures for group companies</td>
<td>Display of the icon on the portal site at all times</td>
<td>P27</td>
</tr>
<tr>
<td>Human Rights Committee</td>
<td>Continuation of systematic internal training</td>
<td>In-house events and workshops with 2,800 participants</td>
<td>P50</td>
</tr>
<tr>
<td></td>
<td>Awareness-raising events during human-rights week</td>
<td>External events and workshops with 2,300 participants</td>
<td>P51</td>
</tr>
<tr>
<td></td>
<td>Creation of employment opportunities for persons with disabilities</td>
<td>Provision of information to Group companies</td>
<td>P52</td>
</tr>
<tr>
<td></td>
<td>Making consultations and counseling about sexual harassment available at all times</td>
<td>2 consultation sessions</td>
<td>P53</td>
</tr>
<tr>
<td>Safety &amp; Health Committee</td>
<td>Enhancement of Safety Operation Officer Certification System</td>
<td>Discussion on measures at Safety Administrator Meeting</td>
<td>P50</td>
</tr>
<tr>
<td></td>
<td>Safety-awareness survey of employees and partner companies</td>
<td>Conducted survey (1st half of FY) and implemented education program (2nd half of FY)</td>
<td>P51</td>
</tr>
<tr>
<td></td>
<td>Hands-on safety training for three plants in Kanto region</td>
<td>Training held in April 2009 with 97 participants</td>
<td>P52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emergency safety patrol (3 plant)</td>
<td>P53</td>
</tr>
<tr>
<td>Quality Assurance &amp; Product Liability Committee</td>
<td>Creation of Material Safety Data Sheet (MSDS(^3)) website</td>
<td>System construction is ongoing</td>
<td>P30</td>
</tr>
<tr>
<td>Environmental Management Committee</td>
<td>Firm establishment of PDCA cycle in company-wide environmental management system</td>
<td>Creation of the Policy (March 2010) (response to Draft of Basic Act on Global Warming, promotion of energy saving, etc.)</td>
<td>P37</td>
</tr>
<tr>
<td>Global Warming Countermeasures Committee</td>
<td>Creation of Global Warming Countermeasures Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder Communication Committee</td>
<td>Holding of stakeholder dialog</td>
<td>Dialog held (May 2009) with the theme “Circle of Recycling”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creation of measures to ensure thorough awareness of CSR</td>
<td>Launch of monthly e-mail magazine “Top Message” to promote company-wide communications (February 2010)</td>
<td></td>
</tr>
<tr>
<td>Individual measures of Long-term CSR Vision</td>
<td>Tuition assistance for students residing near plants of overseas group companies</td>
<td>Selection of 3 students in the Philippines and provision of university tuition until graduation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creation of plant site reports and effectiveness assessments</td>
<td>Plan to continue selecting 3 students every year and provide tuition</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>Holding of CSR Workshop for Group Executives</td>
<td>Creation of the report (December 2009) (effectiveness not yet assessed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Periodic reporting of relevant information about group companies to local communities (twice per year)</td>
<td>Workshop held (October 2009) (107 companies and 109 employees attended)</td>
<td>P27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report meetings held (April and October 2009)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meetings held (October 2009 and February 2010)</td>
<td></td>
</tr>
</tbody>
</table>

\(1\) BCP: Business Continuity Plan  
\(2\) ISMS: Information Security Management System  
\(3\) MSDS: Material Safety Data Sheet

CSR Management Promotion System

<table>
<thead>
<tr>
<th>Board of Directors</th>
<th>CSR Management Committee</th>
<th>Stakeholder Dialog</th>
<th>Commitment to the Environment</th>
<th>Commitment to Society</th>
<th>Commitment to the Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal control</td>
<td>Worksite</td>
<td>Community</td>
<td>Environment Management Committee</td>
<td>Global Warming Countermeasures Committee</td>
<td>Stakeholder Communication Committee</td>
</tr>
<tr>
<td>Risk Management &amp; Compliance Committee</td>
<td>Information Security Committee</td>
<td>Human Rights Committee</td>
<td>Safety &amp; Health Committee</td>
<td>Quality Assurance &amp; Product Liability Committee</td>
<td></td>
</tr>
</tbody>
</table>

All business facilities: Group companies
Collaboration with External Organizations

We have been a member of the Cement Sustainability Initiative (CSI) of the WBCSD1 since 2000. As a core member of the CSI we work with 23 other cement companies from around the world to address the sustainable development challenges facing our industry. To that end we also collaborate with a variety of external organizations.

**Participation in the WBCSD-CSI**

In 2002 the CSI published an Agenda for Action as a joint commitment by ten core member companies in accordance with the research based on dialogs with stakeholders worldwide about the sustainable development of the cement industry. Following this Agenda for Action, which was created as a vision for the following twenty years, the CSI established working groups for each key challenge. These included measures to mitigate global warming, efficiently use raw materials and fuel, reduce emissions of pollutants, and ensure health and safety. Members jointly developed Key Performance Indicators (KPIs) and various guidelines for the challenges.

With respect to climate change in particular, the CSI has developed a common methodology for calculating CO₂ emissions, a standard CO₂ protocol for reporting by the world’s cement companies, and a regime for providing highly reliable information on CO₂ emissions. The CSI also built a global database and reports actual CO₂ emission volumes for a significant number of the world’s cement plants. Member companies publish their individual reduction targets and take their own actions to reduce their emissions.

**Participation in the APP**

The Asia Pacific Partnership on Clean Development and Climate (APP) was set up in July 2005 to address challenges such as growing energy demand, energy security and climate change. Its eight sectoral task forces engage both the public and private sectors. The Cement Task Force encourages verification and applications of technologies for manufacturing clean, energy-saving products that significantly reduce greenhouse gases and air pollutants emitted from the cement production process in partnership countries, which produce about 60% of the world’s cement in volume. We are participating in this initiative as a member of the Japan Cement Association.

**Participation in the Keidanren Voluntary Action Plan on the Environment**

As an initiative of the Japanese business community to actively take action in global environmental protection, Nippon Keidanren, Japan’s major private business association, encouraged various industrial associations to take part in the Keidanren Voluntary Action Plan on the Environment. We are participating as a member of the Japan Cement Association and are vigorously working to achieve the plan’s goal for reducing the consumption of energy per unit of cement manufactured in fiscal 2010 (mean level of the five-year period from 2008 to 2012) by 3.8% from the fiscal 1990 level.

**Participation in the Industrial Federation for Human Rights, Tokyo**

We participate in the Industrial Federation for Human Rights, Tokyo. Established in November 1979, the Federation now consists of 120 companies (representing about 1 million employees as of May 2010), most of which are headquartered in Tokyo. Under its basic philosophy of voluntary management and full participation, the Federation actively tries to resolve Dowa and other human rights issues from the point of view of companies.

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1. World Business Council for Sustainable Development, Cement Sustainability Initiative (WBCSD-CSI) is an international collaborative effort to achieve sustainable development in the world’s cement industries.
2. Net CO₂ emissions per unit production: The total CO₂ emissions per ton of cement produced minus the CO₂ emissions from alternative fuels per ton of cement produced.
3. APP (The Asia-Pacific Partnership on Clean Development & Climate) is a partnership between seven countries (U.S.A., China, India, Korea, Australia, Canada and Japan) for the development, dissemination and transfer of clean technologies.
Key Performance Indicators of the CSI

An action plan published in 2002 guarantees that the performance of the CSI’s various member companies on priority issues will be made public. Based on key performance indicators (KPIs) developed by the CSI, the performance of our group is as follows. Also, our group’s performance for climate change management and health and safety has been third party certified by Det Norske Veritas (DNV).

### Key Performance Indicators of the CSI (Scope: 7 plants and 14 domestic and overseas group companies)

<table>
<thead>
<tr>
<th>Key Performance Indicators of the CSI</th>
<th>FY2007</th>
<th>FY2008</th>
<th>FY2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Climate change management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of facilities using the CSI CO2 Protocol Guidelines for emissions inventory</td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Percentage of facilities using the CSI CO2 Protocol Guidelines for emissions inventory (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Company-wide total CO2 emissions (gross and net), million tons/year</td>
<td>38.4</td>
<td>35.6</td>
<td>33.6</td>
</tr>
<tr>
<td>Gross</td>
<td>37.4</td>
<td>34.6</td>
<td>32.7</td>
</tr>
<tr>
<td>Net*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company-wide gross and net CO2 emissions per ton of cementitious product (kg/ton of cementitious product)</td>
<td>770</td>
<td>757</td>
<td>763</td>
</tr>
<tr>
<td>Gross</td>
<td>750</td>
<td>737</td>
<td>742</td>
</tr>
<tr>
<td><strong>Fuels and materials use</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific heat consumption of clinker production, in MJ per ton of clinker</td>
<td>3,302</td>
<td>3,231</td>
<td>3,282</td>
</tr>
<tr>
<td>Alternative fossil fuel rate: consumption of alternative-fuels, as a percentage of thermal consumption</td>
<td>91</td>
<td>93</td>
<td>100</td>
</tr>
<tr>
<td>Biomass fuel rate: consumption of biomass, as a percentage of thermal consumption</td>
<td>1.4</td>
<td>1.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Raw materials use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative raw materials rate: consumption of alternative raw materials, as a percentage of total raw materials for cement and clinker production (calculated on a dry basis)</td>
<td>13.8</td>
<td>11.6</td>
<td>14.0</td>
</tr>
<tr>
<td>Clinker/cement factor: ratio between clinker consumption and cement production calculated according to cement CO2 protocol</td>
<td>87.1</td>
<td>86.7</td>
<td>87.1</td>
</tr>
<tr>
<td><strong>Health and safety (Calendar year basis)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fatalities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of fatalities for directly employed</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fatality rate per 10,000 for directly employed</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of fatalities indirectly employed (contractors and subcontractors)</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Number of fatalities involving 3rd parties (not employed)</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lost-time injuries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of lost-time injuries for directly employed</td>
<td>11</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Injury frequency rate (per 1,000,000 man-hours directly employed)</td>
<td>1.01</td>
<td>0.89</td>
<td>1.10</td>
</tr>
<tr>
<td>Number of lost time injuries for indirectly employed (contractors and subcontractors)</td>
<td>21</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td><strong>Emission monitoring and reporting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of clinker produced by kilns covered by a monitoring system, either continuous or discontinuous for main and other pollutants</td>
<td>90</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
<td>NOx</td>
<td>88</td>
<td>89</td>
<td>93</td>
</tr>
<tr>
<td>SOx</td>
<td>51</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Dust</td>
<td>77</td>
<td>84</td>
<td>85</td>
</tr>
<tr>
<td>Total emissions (tons/year)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOx</td>
<td>54,764</td>
<td>53,635</td>
<td>47,993</td>
</tr>
<tr>
<td>SOx</td>
<td>1,915</td>
<td>4,582</td>
<td>6,117</td>
</tr>
<tr>
<td>Dust</td>
<td>2,693</td>
<td>1,840</td>
<td>2,533</td>
</tr>
<tr>
<td>Specific emissions (g/ton of clinker)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOx</td>
<td>1,289</td>
<td>1,339</td>
<td>1,274</td>
</tr>
<tr>
<td>SOx</td>
<td>62</td>
<td>160</td>
<td>232</td>
</tr>
<tr>
<td>Dust</td>
<td>62</td>
<td>45</td>
<td>66</td>
</tr>
<tr>
<td><strong>Local impacts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of sites with community engagement plans in place</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Percentage of active sites with quarry rehabilitation plans in place</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Number of active sites where biodiversity issues are addressed</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

*Net CO2 emissions: The total CO2 emissions minus the CO2 emissions from alternative fuels.
Stakeholder Relationships and Identification of Key Issues

We believe that maintaining sound relationships with stakeholders, directly and indirectly, is essential to our business operations grounded in the group management mission.

Taiheiyo Cement’s Awareness of Problems

In today’s rapidly changing society, we must review and recognize, effectively and in a timely manner, which issues to focus on toward creating a better society for all our stakeholders.

At the same time, one of our social responsibilities is to provide opportunities for stakeholders wherein they can understand our awareness of problems and the recognition process.

To this end, we analyzed the current status of our overall CSR efforts and discussed which issues to emphasize and include in our report.

Process for Identifying Issues

We projected the impact of social needs on stakeholder relationships by developing a comprehensive understanding of the current concerns and challenges facing society drawn from various standards, guidelines, questionnaire surveys and other sources. In preparation for this report, we selected key CSR areas to be covered based on an analysis of our priorities.

Results of Analysis on Our Priorities

<table>
<thead>
<tr>
<th>Long-term CSR Vision: Column 1</th>
<th>Focus 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution to social capital through cement</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long-term CSR Vision: Column 2</th>
<th>Focus 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of a recycling-based society</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long-term CSR Vision: Column 2</th>
<th>Focus 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of a low-carbon society</td>
<td></td>
</tr>
</tbody>
</table>

The three themes above were selected from our Long-term CSR Vision with the belief that our proactive efforts in these areas at this time would add value for a broad range of stakeholders.

Detailed reports on these three themes are provided in the “Focus” section.
### Stakeholder Relationships and Identification of Key Issues

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Relationship with Taiheiyo Cement</th>
<th>Major dialogs with stakeholders and frequency</th>
<th>Economy</th>
<th>Society</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholders</td>
<td>• Publication of reports, such as annual and financial statements</td>
<td>Stakeholder expectations</td>
<td>Compliance with the Company Act, listing rules, etc.</td>
<td>Report on social activities to shareholders and dialog with them</td>
<td>Environmental report</td>
</tr>
<tr>
<td></td>
<td>• Participation in the carbon disclosure project (once a year)</td>
<td>Fair use of shareholders’ equity</td>
<td></td>
<td></td>
<td>Environmental management</td>
</tr>
<tr>
<td></td>
<td>• Publication of various reports</td>
<td>Financial strength</td>
<td></td>
<td></td>
<td>Compliance with environmental regulations</td>
</tr>
<tr>
<td></td>
<td>• Setting up contact points for consultation</td>
<td>Governance</td>
<td></td>
<td></td>
<td>Environmentally sound products and services</td>
</tr>
<tr>
<td>Customers</td>
<td>• “Ready-mixed Concrete Society” at each branch</td>
<td>Contingency plans/ clarification of responsibilities</td>
<td>Report on social activities to customers</td>
<td>Dialog with customers/gain their involvement</td>
<td>Compliance with environmental regulations</td>
</tr>
<tr>
<td></td>
<td>• Technical support for users</td>
<td>Building relationships with customers</td>
<td></td>
<td></td>
<td>Reduced environmental impact</td>
</tr>
<tr>
<td></td>
<td>• Publication of various reports</td>
<td></td>
<td></td>
<td></td>
<td>Focus 1</td>
</tr>
<tr>
<td></td>
<td>• Holding of stakeholder dialog</td>
<td></td>
<td></td>
<td></td>
<td>Contribution to social capital through cement</td>
</tr>
<tr>
<td>Employees</td>
<td>• Portal site</td>
<td>Compliance concerning work environment regulations</td>
<td>Dialog with employees/gain their involvement</td>
<td>Respect for human rights</td>
<td>Environment standards for supplier selection</td>
</tr>
<tr>
<td></td>
<td>• Labor-management consultation</td>
<td>Contingency plans/ clarification of responsibilities</td>
<td>Human resource management</td>
<td>Respect for diversity</td>
<td>Support environmental actions to suppliers</td>
</tr>
<tr>
<td></td>
<td>• e-mail magazine and various reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Questionnaire survey on various training programs, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Setting up contact points for consultation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local communities</td>
<td>• Opening our site facilities to the community</td>
<td>Disclosure of information related to our business</td>
<td>Dialog with local communities/gain their involvement</td>
<td>Protection of human rights and respect to citizens</td>
<td>Social investment and implementation of social contribution activities</td>
</tr>
<tr>
<td></td>
<td>• Tours/briefing sessions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reporting to local governments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Environmental monitoring program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Stakeholder dialog</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Publication of various reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppliers</td>
<td>• Workshops</td>
<td>Compliance with standard trade practices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Publication of various reports</td>
<td>Contingency plans/ clarification of responsibilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• etc.</td>
<td>Partnership</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Issues were selected from the perspectives of a triple bottom line and relevance for respective stakeholder groups.
We assumed compliance items are clearly required for an enterprise.
We assumed environmental issues impact all stakeholders.
The table is the result of company discussions in the context of identifying social demands based on guidelines, SRI questionnaire surveys, etc., as well as advice from external advisors.
We do not guarantee that the priority assessment in the table is unerringly correct or comprehensive.
A Landscape that Serves to Protect the Life Around It

This park is popular with young people who enjoy skateboarding and families with children. Its concrete basin structure also serves as a reservoir with a capacity of 6,000 m³ to protect local residents from flood damage during heavy rain.

Recreation and Relaxation Facility also Provides Dependable Disaster Protection

The Aqua Park managed by Yoshikawa City, Saitama Prefecture, is an urban park that is popular for its full-scale skateboard area, which is rare in public parks.

The shape of the park has also attracted attention. Constructed by digging down almost 4 m into the ground, the park looks like the base of a swimming pool without water. Why was the park built below the ground? Because the park also serves as a reservoir to temporarily retain rainwater during concentrated torrential rains, etc. At all other times the location is used as a park. During heavy rain, floodgates are opened to hold rainwater and prevent the Oba River near the park from flooding.

Although flood control reservoirs have been built in many parts of the nation, the Aqua Park reservoir is unique. The park division of Yoshikawa City still receives inquiries from local governments across the country several times a year.

This novel idea came from citizens. The desire of young people for a skateboard park was incorporated into a reservoir project that just happened to be under consideration at the time. The park developed into a citizen engagement project, which started with workshops in which the city government and citizens learned about the reservoir together. Discussions then followed regarding the park’s design, rules and operation and maintenance after opening.

A representative of the Yoshikawa City Road and Park Division explained, “Yoshikawa City is a low area and therefore has frequently suffered flood damage. We are still developing a flood control infrastructure, including reservoirs and storm water main drains. Because citizens were involved in developing the Aqua Park, users exhibit excellent manners there. The park surely fulfills two roles: normally a place of recreation and relaxation for citizens, and a disaster prevention facility in times of heavy rain.”
Urban Flooding is Increasing Across the World

“Flooding in the desert?” This news was broadcast in November 2009. People around the world were surprised to hear that Jeddah in Saudi Arabia had suffered flood damage due to rain. Rainfall was only about 70 mm, an amount not generally associated with severe damage. We tend to think that rainwater is rapidly absorbed into sand but, in fact, sand retains very little water. Therefore, a heavy rainfall will send water rushing to lower lands.

In addition, desert cities do not typically maintain drainage structures for rainwater and cannot control water falling onto the city. The abnormal weather patterns hitting various locations across the world have highlighted this vulnerability of cities. It is not yet proved, but incidents of concentrated torrential rain may be attributed to global warming related to the increase in greenhouse gases. This means that concentrated torrential rains may continue.

Cement and Concrete Support the Functions of the Earth

Inundation and flood damage due to concentrated torrential rain is also increasing in Japan. The amount of rainfall often exceeds historical precedents and the capacity for cities to process it cannot manage. Urban flooding is referred to as internal water inundation, mostly occurring when sewage systems cannot handle massive volumes of water. Thus, various measures are being taken to prevent large volumes of rainwater from flowing into the sewage system during short periods.

Yoshikawa Aqua Park fulfills the function of a reservoir as well as a park. In an urban area where it is difficult to obtain land, the development of underground reservoirs and storage pipes can effectively reduce flood damage.

A reservoir (Ome City, Tokyo) that looks like a huge underground parking lot has been built along the Kasumi River. It can hold as much as 88,000 m$^3$ (equivalent to about 200, 25 m swimming pools) in its double-structure pool and thereby reduce flood damage across the neighborhood.

Various measures are also being taken to boost the capacity of sewage systems. Storm water infiltration inlets force rainwater to infiltrate the ground in order to control runoff into storm drains while at the same time recharging the water table to maintain sufficient circulation. Strengthening sewage system capacity by developing and improving water drains and pumping stations is also important. Flooding from water drains can be prevented by promptly discharging water from pumping stations into rivers and seas.

The Takashimadaira No. 1 Sewer Main built in Itabashi Ward, Tokyo, in fiscal 1999 as a rain water sewage system has been successful in preventing flooding and reducing flood damage. During a heavy rain in July 2001, even though precipitation exceeded 95.5 mm per hour, damage was limited to one case of flooding below floor level.

In Tokyo’s Nakano and Suginami wards, improvements in the storage pipes of the Wadayayoi Sewer Main significantly reduced flood damage, reducing the number of flooded homes to about 5% of the number affected by the same scale of rainfall previously experienced.

Infrastructure such as sewage and drainage systems have been improved, mostly “behind the scenes,” to prevent urban flooding across the nation as well as in the Tokyo metropolitan area. Temporary water retention and discharge functions, once adequately managed by the earth itself, can be provided by cement and concrete infrastructure to ensure public safety.

Now, we don’t worry as much about heavy rains.

We have been living here for many years. The neighborhood along the Oba River used to repeatedly suffer flood damage. Our house also experienced flooding below floor level. Since completion of the reservoir, however, there has been no severe damage. There was no damage from last year’s “guerrilla heavy rain” either.

More than 20 years ago, a petition undertaken by people in the community led to the creation of the reservoir. It is wonderful that it also serves as a park that provides a play space for the children of the community. It would be a waste to use the facility only as a reservoir.

Because the local residents’ association manages the park, including its opening and closing hours, patrolling and cleaning, we have a special bond with the park and consider it as something we created and should maintain.
Committed to Resource Recycling

To develop the resource loop that is essential for creating a sustainable society, we continue work on expanding the use of waste and by-products as materials and fuel for cement while never compromising the quality of the cement.

Challenges for Recycling Waste and By-products

Crushed limestone is brought to the cement plant, where it is mixed with predetermined quantities of clay, silica and other materials, and then ground to a fine powder. This powder is then burnt in a rotary kiln at temperatures reaching 1,450°C to produce a melting reaction. After cooling, a nodular intermediate product called "clinker" is formed, which is then ground with an addition of gypsum to produce the final product, cement. Since cement is a chemical product, its components and burning conditions must be closely controlled to maintain quality.

Waste and by-products can be used as material and fuel for cement because they contain the main components of cement (calcium oxide, silica dioxide, aluminum oxide, and iron trioxide). For example, sewage sludge contains 5–30% calcium oxide, 20–30% silica dioxide, 20–50% aluminum oxide, 5–10% iron trioxide and a combustible component that can be used as fuel.

Waste and by-products, however, can contain other components that have a negative impact on manufacturing equipment, operations and product quality, or be harmful to the environment.

In addition, unlike the case of limestone and clay, it is difficult to ensure the stable supply of homogenous material. Consequently, the use of waste and by-products as material and fuel requires technology development and investment in equipment to support the more sophisticated quality management requirements.

We are addressing these issues to expand the use of waste and by-products as material and fuel for cement without compromising the quality of cement.

Technology to Ensure High-quality Cement

- Upgrading quality control—Introduction of the Rietveld method

In the earlier days of cement production when little waste or by-products were used, we were able to maintain a predetermined quality by conducting process inspections only once every several hours. This was because the chemical composition of natural materials, including limestone, was mostly homogenous.

Today, when we use high-mix, low-volume waste and
by-products, for which the chemical composition can vary depending on the type and source, process inspections are required every hour or several times an hour. We have therefore fully automated process inspections of the quality of the materials made by crushing, mixing and conditioning wastes, by-products, limestone, and so forth, as well as the quality of the clinker and the cement. We also established a system for facilitating more detailed inspection by introducing new quality control methods such as the Rietveld method.

**Rietveld method**

The quality of the clinker basically depends on the relative quantity of four minerals, alite, belite, aluminate and ferrite. The amount of these minerals in the clinker can be determined through point counting under an optical microscope. It has been difficult, however, to adopt this method in the process inspection of cement manufacturing because it takes several hours, even for a person skilled in the technique. Consequently, plants have used a method for estimating the mineral quantities of clinker based on the chemical composition of the clinker, although this method has not ensured sufficient accuracy. If minor components deriving from waste and by-products, in particular, are contained in the clinker, the difference between the estimated and actual mineral quantity can become even greater. The Rietveld method is a mineral composition quantification method that uses X-ray diffraction analysis. Since it allows measurement and analysis in ten minutes or so, it can also be used for process inspection in cement plants, providing accurate mineral analysis and significantly improving quality control and the prediction of clinker and cement quality.

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- **Ensuring process stability**—Taiheiyo Sludge Drying System (TSDS)

  If waste containing large amounts of water is introduced into a rotary cement kiln the water would cause heat loss and disturb the burning process, thereby affecting the quality of clinker. In order to use sewage sludge that contains a large amount of water, we have developed a high-efficiency drying machine, TSDS. This system uses waste heat from the rotary kiln to dry the sludge before it is transferred to the rotary kiln, thereby ensuring the stability of the burning process. It also provides simultaneous odor decomposition.

- **TSDS equipment**

  ![Image of TSDS equipment]

- **Removal of harmful substances**—Ash Washing System

  Because municipal wastes often include materials that contain chlorine, such as food scraps and polyvinyl chloride, large amounts of chlorine remain in the ash after incineration (incineration ash). Chlorine induces clogging in equipment during the cement manufacturing process and can disrupt stable operation. Furthermore, if cement containing a large amount of chlorine is used in a reinforced concrete building, the chlorine may rust the reinforcing bars, shortening the life of the building or causing other problems.

  The Ash Washing System was developed to address this problem. The system removes more than 96% of contained chlorine by prewashing the incineration ash. The washing also removes heavy metals and other contaminants contained in the incineration ash. Water used for washing is treated in compliance with applicable environmental standards.

  ![Flow of the Fly Ash Washing System]

  We are continuing to develop our technologies and equipment to ensure both the effective utilization of recycled resources and the maintaining of cement quality. In light of the feedback found in the Stakeholder Dialog in CSR Report 2009, we will deepen our commitment to quality while contributing to the development of a recycling-based society.

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**From the Stakeholder Dialog in CSR Report 2009**

As a user of cement, what I absolutely can’t compromise on is cement quality. In the construction field in particular, we have to guarantee our quality for many, many years. We cannot allow salt from household trash to get into the cement. This would give buildings high blood pressure and cracks would start appearing before the purchasers had finished paying their loans. In this sense, I want the cement industry to focus on quality.

Kenji Sugimoto
Senior Researcher,
Taisei Research Institute, Inc.
Environmental Engineering – Great Potential in China

The Chinese market occupies a key position in our overseas deployment with significant growth potential. In this market, which is becoming enormous, our focus on the environmental engineering business is contributing to low-carbon and resource-recycling objectives while boosting the momentum toward growth.

Advancing into a Promising Market by Leveraging Our Environmental Technology

Economic development in China is spreading from the coastal areas in the east into the interior, while public investment focused on infrastructure development such as highways and railroads is further extending to western backlands. The Xinjiang Uygur Autonomous Region, at the western edge of China, is a developing area worth keeping an eye on, as demand for cement there is expected to exhibit medium- to long-term growth.

Our International Business Company encountered Xinjiang Tianye Group Co., Ltd. about three years ago when we conducted a market survey in collaboration with Taiheiyo Cement (China) Investment Co., Ltd. Xinjiang Tianye Group Co., Ltd. is based in Shihezi City, 200 kilometers west of the provincial capital, Urumqi, in the middle of the northern foothills of the Tian Shan mountains. It produces and distributes PVC (polyvinyl chloride), but also manufactures cement using calcium carbide residue, a by-product of the PVC production process.

The interaction started with our consultation on cement production technology based on our expertise. An examination of their cement production process revealed the presence of a significant amount of chlorine, which rendered the process unstable. We then recommended introducing a chlorine bypass system to address this problem. Chlorine bypass systems include the necessary equipment for the utilization of waste and byproducts as raw materials and fuel, and have been introduced into all of our plants in Japan. The equipment ensures the stability of kiln operation, thereby eliminating energy wastage and leading to increased energy efficiency. Xinjiang Tianye Group Co., Ltd. has other kilns that are currently operating or under construction and plans to install this equipment in its first kiln. We anticipate that through providing guidance on the operation of this equipment we will strengthen our relationship with Xinjiang Tianye Group Co., Ltd. Above and beyond this support, multifaceted, large-scale business development is possible in Xinjiang through environmental engineering. There are untapped environmental business opportunities waiting to be found in foothills of the Tian Shan mountains.
“Spending a great deal of time to build good relationships will accelerate subsequent development in doing business with Chinese companies. Trust among people is also essential in technical cooperation.”

Bao Qin-li
Business Planning & Development Department, International Business Company and Taiheiyo Cement (China) Investment Co., Ltd. Leader of the Xinjiang project.

Adopted as a Project for Energy Conservation and Environmental Business Promotion

The transfer of chlorine bypass technology described above was adopted as a project that promotes energy saving and environmental technology at the Fourth Japan-China Energy Conservation Forum held in Beijing on November 8, 2009, where we signed an agreement with a Chinese company. We also signed an agreement at this forum for a project to produce cement using incineration ash from municipal waste in Dalian.

Toward Addressing the Growing Municipal Waste Problem Facing China

Municipal waste in China is estimated to exceed 150 million tons a year and is still rising with the continuing population flow into the cities. Facilities for waste treatment, such as incineration and composting, have lagged behind landfill disposal, making widespread dumping even more conspicuous. Shifting waste treatment from landfills to incineration is a challenge that requires prompt action and encouragement by each province. In this context, Dalian City started constructing garbage incineration facilities in its four wards. One of our business locations in China, Dalian-Onoda Cement Co., Ltd., in collaboration with a local Dalian company, Dongtai Industrial Waste Treatment Co., Ltd., proposed recycling the fly ash generated by waste incineration.

We have established a technology for rendering waste incineration ash harmless using the Fly Ash Washing System and recycling the ash as a cement raw material. In Japan, the Kumagaya and Fujiwara plants use this system which, in partnership with local governments, diverts waste from landfill through recycling.

Because partnership with local governments is essential for the waste recycling business in China, the development of waste treatment systems based on our experience in Japan is expected. Looking ahead, a survey of differences in waste treatment systems and waste components will be conducted followed by improvements that meet local needs.

Promoting incineration ash recycling projects in tandem with the construction of incinerators portrays Dalian as a model environmental city, while this development also indicates the fast pace of urbanization in China. The dissemination of model development projects here will likely impact other cities.

Challenge for Cement Plants to Exist Side by Side with Cities

In China, as in Japan, areas surrounding cement plants tend to develop into cities. For a cement plant to exist side by side with a city, it must contribute to the environment of the local community, which will naturally include waste treatment. While environmental awareness and skills are not yet mature in China, the accelerating pace of urbanization calls for immediate action. Creating a low-carbon and recycling-based society is a pressing issue in China, and provides an ideal opportunity for us to contribute through our business by transferring cement-related environmental technologies that have been proven in Japan.

“Because the market is not yet mature, we can do something and expect major opportunities to result from it. I look forward to the fascinating business development that will take place here.”

Shinji Fukami
Facility & Technology Deployment Project Team
Mr. Fukami participated in a survey and negotiations as a member of the Environmental Technology Utilization Team together with local staff.

VOICE

Wang Zhao-Wen, Director and General Manager, Dalian-Onoda Cement Co., Ltd.

Environmental Awareness is Improving with the Quality of Life

Along with economic growth, ordinary people in Dalian are experiencing a far richer life than ever before. Nevertheless, an affluent society generates massive quantities of waste. We will introduce the advanced waste treatment technologies owned by Taiheiyo Cement to produce cement from the incineration ash of industrial and general waste as a way of promoting recycling.

The environmental awareness of the Chinese people is increasing. All employees are working to enhance corporate value by playing a part in creating a recycling-based society in Dalian.
Corporate Governance

Enhancing and strengthening corporate governance is essential in order to increase corporate value and meet the expectations of shareholders and all other stakeholders. We are working to broadly instill corporate ethics and ensure sound management toward further strengthening public trust in the company.

Corporate Governance System

Our organizational architecture is based on our Board of Directors and Board of Auditors, which are the engine of the joint-stock corporation as stipulated by the Companies Act. In accordance with the Companies Act, the Board of Directors makes management decisions, while the Executive Committee decides other important matters.

We have also introduced an executive officer system in order to, within the scope of the law, separate and segregate management decision-making and supervisory functions from executive administration.

We have 8 board directors, including 2 representative directors, and 17 executive officers, including 6 officers who also sit on the Board of Directors. No outside directors have been appointed. The Board of Directors selects candidates for board directors with the qualifications and capabilities for realizing the group’s mission and fulfilling its social responsibilities. Candidates are recommended at the General Meeting of Shareholders and appointed based on its decision. We have 5 corporate auditors, 3 of whom are outside auditors. We have also a Corporate Auditors’ Office, which provides comprehensive assistance with the duties of the corporate auditors (as of August 31, 2010).

In response to the revised listing rules by the Tokyo Stock Exchange calling for the introduction of an independent director system for protecting the interest of general shareholders, we appointed one outside auditor as an independent director in March 2010.

We determined, based on the guidelines of the Tokyo Stock Exchange and other reference sources, that the auditor is best suited for this job given the risk of a conflict of interest with general shareholders.

We have also created a CSR Management Committee, which reviews the ideal direction for our business activities from the perspective of CSR and promotes the strengthening of corporate governance.

We have adopted a performance-based remuneration system for board directors and executive officers.

Internal Control System

We are committed to fulfilling our Basic Policy for Building an Internal Control System, which was decided by board vote on May 16, 2006 (and partially revised on March 31, 2008 by board vote). We are building the system from the following three perspectives: (1) corporate governance; (2) risk and compliance; and (3) financial reporting.

In fiscal 2009, we gave risk-management training to executive managers (including subsidiaries) in order to advance the development of our group risk-management readiness.

The entire group operates internal controls over financial reporting accurately and effectively, in accordance with the Financial Instruments and Exchange Law.
Our Business Principles pledge that we will act in strict compliance with the law and in accordance with societal mores. Fully aware that compliance is the foundation of CSR management, we are committed to ensuring compliance with a focus on employee education and awareness-raising.

**Basic Compliance Policy**

In March 2005 we published a Basic Compliance Policy, simultaneously creating compliance rules. We do not limit our definition of compliance to legal compliance; our definition includes compliance with the social mores from which our laws originate, the mission and business principles of our group and internal regulations.

**Basic Compliance Policy (Summary)**

- Compliance with the Mission, Business Principles and social norms
- Maintaining internal systems and rules and ensuring broad-based awareness of them
- Cooperation with all group companies and promotion of educational activities
- Working out appropriate responses and policies for occurrence of problems
- Timely and appropriate disclosure and communication of necessary information
- Compliance with international standards and rules, and respect for local cultures and customs
- Rejection of corrupt and unfair requests from antisocial influences or organizations

**Compliance Promotion System**

**Record of Fiscal 2009 Group Legal Round Tables**

<table>
<thead>
<tr>
<th>Date</th>
<th>Number Attending</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>12th October 30, 2009</td>
<td>90 companies 96 people</td>
<td>Laws concerning leased land/houses, Practical study of leased land/houses</td>
</tr>
<tr>
<td>13th February 10, 2010</td>
<td>91 companies 100 people</td>
<td>Points of the revised Antimonopoly Law, Outline of the Antimonopoly Law (part 1)</td>
</tr>
</tbody>
</table>

**Whistle-blower Program**

In August 2005, we created a compliance hotline in accordance with the newly enacted Whistleblower Protection Act.

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*We have whistle-blower hotlines, both internally (at the CSR Group of our General Affairs Department) and externally (at a law firm). Our internal hotline is located in a dedicated locked room that is only accessible to hotline staff. It is equipped with dedicated phone and fax lines, and a computer with a dedicated address. We have created regulations so that whistle-blowers who use the program are not subject to unfavorable treatment.*
Our Risk Management & Compliance Committee plays a central role in our commitment to advancing risk management, both in times of emergency and normal circumstances. Based on our philosophy that advancing risk management is our corporate social responsibility, we are committed to managing risk more efficiently.

**Basic Risk Management Policy**

Enterprises face increasing risks every year. Risks are associated with any business activity and we must manage them through our daily activities to prevent them from developing into actual crises. Possible risks associated with the nature of our business include those related to the environment, quality, safety and health, and natural disasters. To accurately assess and overcome these risks and ensure the stable continuation of our business, we formulated the Basic Risk Management Policy and Risk Management Regulations. We are working to advance risk management in accordance with these steps.

**Basic Risk Management Policy (Summary)**

- Prevent and reduce risk in order to earn greater trust from our stakeholders.
- Create a system to appropriately manage a wide range of risks.
- Promote risk management through a plan-do-check-act cycle.
- Quickly and appropriately deal with risks as they are identified.
- Build a system to quickly and appropriately deal with risk at the group level.

**Risk Management System**

Our president has ultimate responsibility for risk management. The officer in charge of risk management (officer in charge of the General Affairs Department) is appointed by the president and presides over and runs the Risk Management & Compliance Committee in order to advance organized and planned risk-management activities.

The committee plays a core role in our risk management system. In addition to proposing and drafting a company-wide action plan for risk-management activities, the committee studies and proposes the creation and revision of risk-management regulations, and gives instructions for advancing the awareness and education of employees. We strive to counter risks in a fine-grained way; working groups and other bodies are also created under this committee as needed in order to prevent and respond to unforeseen risks. Each business site also has an officer responsible for risk management and compliance and a risk-management and compliance officer, who carry out such duties as promoting specific initiatives relating to risk management. Each group company also has an officer responsible for risk management and compliance and a risk-management and compliance promoter, and we provide them with support in various ways.

**PDCA in Risk Management Activities**

One of the key roles of the Risk Management and Compliance Committee is to develop and discuss annual company-wide action plans for risk-management, which form the basis for annual action planning by officers responsible for risk management and compliance at individual business sites, enabling the entire company to work together to reduce risks based on PDCA cycles. Each business site develops its annual action plan using the results of an independent review of the previous year’s results and other considerations as well as the company-wide action plan.

The Risk Management & Compliance Committee and each business site practice risk management (Do) in accordance with the respective plans (Plan) and independently inspect and audit the progress of these efforts (Check). They also take corrective
measures and revise action plans (Act) as required and based on the results of the reviews and audits for ongoing improvement.

**Business Continuity Plan**

We maintain a Business Continuity Plan (BCP) for mitigating risks that could significantly impact our ability to continue conducting business, for example, damage from earthquakes that have frequently occurred over recent years and the possible spread of a highly virulent new influenza virus that could threaten human lives.

In fiscal 2009 we updated our Manual to Handle Earthquake Disaster at Headquarters in line with the BCP. We raised the level of our initial response to earthquakes and added manuals for rebuilding the business infrastructure necessary for business continuity, including finance and information systems and logistics.

To combat a new influenza virus, we established regulations and manuals that incorporate guidance for handling an outbreak and the knowledge required. Moreover, we identified all operations in individual business sites, determined priorities and possibilities of continuity during an epidemic and the required countermeasures, and assessed challenges for business continuity.

In fiscal 2010 we plan to develop guidelines for handling earthquake damage for plants and branch offices to further boost the level of existing regulations and improve our business continuity readiness. At the same time, we will conduct effective education and training to spread and firmly establish the Manual to Handle Earthquake Disaster at Headquarters, updated in fiscal 2009. In regard to countermeasures for a new influenza virus, we will endeavor to address the operational challenges of a possible outbreak of a highly virulent new influenza virus such as the one identified in fiscal 2009. All of these BCP development activities have been identified as concrete issues for the Company-wide Risk Countermeasure Action Plan, which was discussed by the Risk Management & Compliance Committee. We are promoting these risk management actions using the PDCA cycle on a regular basis.

**Information Security**

Our Information Security Management Regulations are the basic regulations of our information-security management system. We have created an Information Security Management Regime in accordance with these regulations and we work actively to maintain information security under this regime. In fiscal 2009 we placed particular focus on leveraging information-security governance in order to contribute to internal control, with the target of fomenting and firmly establishing a group-wide culture of information security. In addition to developing an environment for employees working in remote locations to participate in an information security education program that had been conducted in the company, we carried out an annual group-wide Information Security Survey as part of a continuing initiative to enhance information security at the group level.

**Protection of Intellectual Property**

Under the four pillars of our patent policy—safeguarding the advantages of our technologies and products; actively utilizing patent rights; taking resolute action against infringement; and respecting the patent rights of others—we have dedicated ourselves to building and applying a powerful patent portfolio.
Environmental Management

We have created an Environmental Management Committee, which proposes cross-functional environmental strategies and actively works to promote environmental preservation while proactively contributing to the resolution of environmental issues facing society. In April 2009 we unified environmental management systems developed by individual plants and obtained a unified ISO 14001 certification for the entire company.

Environmental Management Policy

In January 2006 we created an environmental management policy, reflecting the fact that in addition to environmental awareness in our own businesses, we also consider an active commitment to the environmental issues facing society, such as the creation of a sustainable society and combating global warming, to be key management challenges.

In April 2008 we added a sixth item to our policy: “compliance with environmental laws and regulations.” In addition to initiatives emphasizing these six items, we strive to communicate with a wide range of stakeholders, from international society to local communities, and to seek the ideal form for a sustainable cement industry as a member of the WBCSD Cement Sustainability Initiative.

Company-wide Environmental Management System

In June 1997 the Tsukumi plant, part of the then Chichibu Onoda Cement Corporation, obtained our first ISO 14001 certification. By 1999 all plants had obtained certification.

Recognizing, however, that plant level management systems alone are insufficient to ensure comprehensive environmental activities through environmental-management projects, we built a company-wide Environmental Management System (EMS) and extended it beyond plants to cover our headquarters, branches and Research & Development Center. In April 2009 we obtained ISO 14001 certification at the Japan Testing Center for Construction Materials (JTCM).

The top manager for the company-wide EMS is the officer in charge of the General Affairs Department, who chairs the Environmental Management Committee with ultimate decision-making authority for environmental management. The head of the committee’s secretariat, who is the manager of the Corporate Social Responsibility Group, is the officer responsible for EMS management. In addition, with regard to the Plant Division, Mining Department, Branch Operations Division, and Branch Logistics Division, the relevant Headquarters Division performs primary management using an “umbrella” model.

Company-wide EMS Readiness

Environmental Management Committee

- CSR Group, General Affairs Department
- Production Group
  - Production Department
    - Cement Business Company
- Mining Group
  - Mining Department
    - Mineral Resources Business Company
- General Affairs Group
  - General Affairs Department
- Logistics Group
  - Sales Department
    - Cement Business Company
- Other sites
- Plants
- Mines
- Branches
  - Administration Department
  - Logistics Department
- Research & Development Center
Internal Environmental Audits

In fiscal 2009 we spent a total of 44 person-days on internal environmental audits targeting all sites.

Priority items from this year’s audit included efforts to combat global warming. Mutual audits were also conducted, in which internal environmental auditors from individual sites inspected each other’s work with auditors from the secretariat in an effort to laterally spread the EMS. The audit turned up a total of 151 findings. Corrective actions have been taken for all 47 findings for which improvements were requested.

Environmental Education

- Environment Month Events
  During Environment Month each June, we deliver a message from the president and provide instructional materials on the environment page of our portal site to increase awareness and encourage learning about the environment. Each workplace also engages in a number of different activities, such as viewing environment-related DVDs, holding lectures, and organizing No Car Days and local cleanup activities.

- Training for EMS Officers
  For three days, starting July 21, 2009, 36 EMS officers, including new officers from business sites and the headquarters, learned about ISO 14001, trends related to how environmental laws and regulations have been revised, internal environmental audits, and other subjects. We trained 19 new internal auditors during this time.

Group Efforts

Each group cement company in Japan and overseas is working on environmental preservation. All group cement plants, excluding some that produce special cement in Japan and 4 plants overseas, are ISO 14001 certified. About 70% of all our cement output was produced in ISO 14001-certified plants in fiscal 2009.

One overseas plant plans to obtain ISO 14001 certification in fiscal 2010, which will mean almost 95% of our total cement output will be produced in ISO 14001-certified plants.

Compliance with Environmental Laws

Environmental Accidents

We had no legal or regulatory violations in fiscal 2009 that were subject to fines or penalties.

Environmental Complaints

In fiscal 2009 our cement plants received 72 environmental complaints. This is a 24% increase from the 58 complaints received in the previous fiscal year. Complaints about odor, in particular, increased to 24 from 17 in the previous year.

If we receive an environmental complaint, whenever possible we quickly travel to the site in question to check the situation, investigate the cause and provide an explanation. Then, if we find that our activities are the cause, we implement improvements.

Breakdown of Environmental Complaints

- Odor: 24 complaints (33%)
- Air/dust: 29 complaints (40%)
- Noise: 7 complaints (10%)
- Vibration: 4 complaints (6%)
- Water quality: 3 complaints (4%)
- Other: 5 complaints (7%)

Total: 72 complaints

Actions against Environmental Accidents

Each plant maintains emergency response plans in preparation for possible environmental accidents. They also conduct training, including fire fighting training in cooperation with local fire departments, and setting up oil fences to prepare for an oil spill at sea.

- Breakdown of Environmental Complaints

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- Noise: 7 complaints
- Vibration: 4 complaints
- Water quality: 3 complaints
- Other: 5 complaints

Total: 72 complaints
Key Environmental Targets and Results in Fiscal 2009

Our key environmental targets in business operations were to reduce CO₂ emissions and expand the use of waste and by-products as materials and fuel for cement production.

We are confident that we can accomplish the group’s CO₂ reduction target for 2010 in spite of declining energy efficiency due to falling cement demand in Japan.

The target for waste and by-product use was not achieved because lower production activities across the industrialized world generated less waste and fewer by-products.

Caustic Soda Spill

From December 25 to 30, 2009, 25% caustic soda aqueous solution, used for a power-generation unit, leaked from a loose mounting part of a piping valve at our Saitama plant (Hidaka City, Saitama). About 3 m³ of the leaked solution entered into about 1,500 m³ of discharge water that flowed into the nearby Koaze River.

After the incident we took action to prevent future spills of this solution and reported the accident to the Saitama prefectural and Hidaka City governments. Since the solution is highly alkali, it may have temporarily raised the pH (hydrogen-ion concentration) of the Koaze River and have been the cause of the death of small fish in the river.

We deeply apologize for this incident, which has resulted in problems and concern among neighborhood residents and other persons involved.

We have investigated the cause of the accident and implemented preventive actions, such as equipment improvements and a more robust monitoring system to prevent recurrence. In addition, we released about 100 kg of young fish, including *Tribolodon hakonensis* and catfish, into the Koaze River in April and June 2010.

We take this incident seriously and will do everything possible to prevent such accidents and protect the environment.

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### 2009 Company-wide Environmental Activity Targets and Status

<table>
<thead>
<tr>
<th>No.</th>
<th>Initiative Type</th>
<th>Environmental Goals</th>
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<tbody>
<tr>
<td>1</td>
<td>Through Businesses</td>
<td>Penetration and establishment of company-wide integrated EMS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1) Reduce CO₂ emissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Operate EMS with universal involvement</td>
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<tr>
<td></td>
<td></td>
<td>· Improve performance and confirm legal compliance with internal environmental audits</td>
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<tr>
<td></td>
<td></td>
<td>· Improve reliability of externally published data</td>
</tr>
<tr>
<td>2</td>
<td>Raise level of EMS Real</td>
<td>Comply with environmental laws and regulations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1) Penetraion and establishment of company-wide integrated EMS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Operate EMS with universal involvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Improve performance and confirm legal compliance with internal environmental audits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Improve reliability of externally published data</td>
</tr>
<tr>
<td>3</td>
<td>International and Community Commitments</td>
<td>Reduce usage of fossil energy in order to reduce CO₂ emissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1) Penetraion and establishment of company-wide integrated EMS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Operate EMS with universal involvement</td>
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<tr>
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<td>· Improve performance and confirm legal compliance with internal environmental audits</td>
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<tr>
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<td></td>
<td>· Improve reliability of externally published data</td>
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<tr>
<td>4</td>
<td></td>
<td>Reduce waste output by our company</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1) Disseminate and transfer environmental technologies to emerging countries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Penetraion and establishment of company-wide integrated EMS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Operate EMS with universal involvement</td>
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<tr>
<td></td>
<td></td>
<td>· Improve performance and confirm legal compliance with internal environmental audits</td>
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<tr>
<td></td>
<td></td>
<td>· Improve reliability of externally published data</td>
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<tr>
<td></td>
<td></td>
<td>2) Comply with environmental laws and regulations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Thorough compliance with laws concerning prevention of pollution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Ensure appropriateness of waste treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) Reduce usage of fossil energy in order to reduce CO₂ emissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Voluntary action plan of Japan Cement Association (energy per unit production: 3.8% reduction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Energy for transport per unit production under the Act on the Rational Use of Energy (5% reduction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Promote energy conservation in offices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4) Reduce waste output by our company</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Penetraion and establishment of company-wide integrated EMS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Operate EMS with universal involvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Improve performance and confirm legal compliance with internal environmental audits</td>
</tr>
<tr>
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<tr>
<td></td>
<td></td>
<td>· Thorough compliance with laws concerning prevention of pollution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Ensure appropriateness of waste treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5) Promote environmental communication</td>
</tr>
</tbody>
</table>

*1 EMIST: Environmental information system |
*2 Port: Abbreviation for Portland cement, a common variety of cement |
*3 SS: Service Station |
*4 ETT: Eco Technology Transfer
<table>
<thead>
<tr>
<th>Environmental Targets</th>
<th>Results</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comply with the revised Act on the Rational Use of Energy and the Law Concerning the Promotion of Measures to Cope with Global Warming</td>
<td>Group under the Environmental Management Committee was reorganized into the Global Warming Countermeasures Committee to implement these measures</td>
<td>□</td>
</tr>
<tr>
<td>2. Ascertain and publish total group emissions</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>3. Participate in and report on pilot emissions-trading program in Japan</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>4. Study measures to popularize use of blended cement</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>5. Promote development of innovative technologies</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>1. Expand EMS-related divisions</td>
<td>[1] Expansion was suspended following change in branch structure</td>
<td>□</td>
</tr>
<tr>
<td>2. Thoroughly educate EMS officers, internal environmental auditors, etc.</td>
<td>[2] Group training was conducted from July 21 to 23 (36 participants)</td>
<td>□</td>
</tr>
<tr>
<td>3. Carry out efficient and effective internal environmental audits</td>
<td>[3] Implemented from October 20 to November 20 (44 persons/day in total)</td>
<td>□</td>
</tr>
<tr>
<td>4. Improve reliability of environmental performance</td>
<td>[4] EMISTA*3 was improved</td>
<td>□</td>
</tr>
<tr>
<td>1. Ensure knowledge of pollution-prevention guidelines</td>
<td>[1] Provided explanations and confirmed understanding</td>
<td>□</td>
</tr>
<tr>
<td>2. Ensure knowledge of revised manual for acceptance and use of recycled resources</td>
<td>Assisted in acquiring permits and licenses under the revised Soil Contamination Countermeasures Act</td>
<td>□</td>
</tr>
<tr>
<td>1. Plant heat per unit production: 2,535 MJ/ton of Port*2 (fossil fuels only)</td>
<td>[1] Status: 2,628 MJ/ton of Port</td>
<td>△</td>
</tr>
<tr>
<td>2. Plant electricity per unit production: 113.4 kWh/ton of Port</td>
<td>[2] Status: 111.4 kWh/ton of Port</td>
<td>△</td>
</tr>
<tr>
<td>3. Transportation energy per unit production: 3% reduction (from fiscal 2006 levels)</td>
<td>[3] Status: 5.85 kl/Mtkm (fiscal 2008) 1.5% reduction in two years</td>
<td>△</td>
</tr>
<tr>
<td>4. SS*3 power consumption: 0.7% reduction (from fiscal 2008 levels)</td>
<td>Modification to energy-saving ships (8 vessels)</td>
<td>△</td>
</tr>
<tr>
<td>1. Reduce waste sent from plants to landfills (no more than 250 tons/year)</td>
<td>[5] Provided guidance on EMISTA data entry and simplified compilation method</td>
<td>□</td>
</tr>
<tr>
<td>2. Control office waste emitted by headquarters and branches</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>3. Recycle 100% of scrapings from SS silos at plants</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>1. Advance plant environmental monitoring systems</td>
<td>[1] Status: 424 tons</td>
<td>□</td>
</tr>
<tr>
<td>2. Create and publish plant site reports (model plant)</td>
<td>Promoted recycling of non-chrome waste brick in fiscal 2009</td>
<td>□</td>
</tr>
<tr>
<td>1. Cooperate in sectoral approach through APP</td>
<td>[2] Difficult to ascertain waste emissions because many offices are building tenants</td>
<td>△</td>
</tr>
<tr>
<td>2. Promote ETT*4 project-team activities</td>
<td>Copy paper use in headquarters was reduced 16.0% compared to previous year</td>
<td>△</td>
</tr>
<tr>
<td></td>
<td>[3] Status: 6,459 tons of 7 cases</td>
<td>△</td>
</tr>
<tr>
<td></td>
<td>Recycling rate at plants: 98.1%</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>[1] Held information exchange meetings at individual plants</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>[1] Participated in the 7th APP Cement Task Force (Seoul) in July 2009</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Held 1st policy workshop to share same recognition</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>Recycling of municipal waste incineration ash and chlorine bypass</td>
<td>□</td>
</tr>
</tbody>
</table>

TAIHEIYO CEMENT CSR REPORT 2010
We remain committed to such initiatives as recovering waste heat from our manufacturing processes to generate electricity (cogeneration), and using waste and by-products as raw materials and fuel in order to track and manage the various ways that our business activities impact the environment, and help to create a low-carbon, recycling-oriented society.

### Material Balance of Business Activities

#### Commitment to the Environment

Our commitment to the environment is reflected in our efforts to minimize our environmental impact and to promote sustainable development. We strive to reduce our carbon footprint, minimize waste generation, and optimize energy and water usage in all aspects of our operations.

#### Energy

- Coal (t): 1,725,164
- Petroleum Coke (t): 449,929
- Heavy Oil (kl): 27,595
- Diesel Oil (kl): 18,352
- Kerosene, other (kl): 19,168
- Recycled Fuels (t): 530,255
- Purchased Electricity (MWh): 558,051

#### Raw Materials

- Limestone (t): 32,058,039
- Clay (t): 77,090
- Silica (t): 1,686,943
- Gypsum (t): 99,237
- Other (t): 184,208
- By-Product Gypsum (t): 462,541
- Blast Furnace Slag (t): 911,646
- Other (t): 2,003,645
- Fly Ash: 1,973,097

#### Other Materials

- Additives, etc. (t): 14,170
- Explosives (t): 3,417
- Grinding Media (t): 1,042
- Admixtures (t): 14,170

#### Water Usage

- Total Sea and Fresh Water (1,000 m³): 311,018
- Household Waste Water (1,000 m³): 221
- Flue-Gas Desulfurization (t): 303,288
- Waste Externally Consigned for Treatment (t): 3,176

#### Material Inputs

- Natural Resources
  - Mineral Resources
    - Diesel, Explosives, etc.
    - Quaries
  - Power Plants
    - Power Generation
  - Cement
    - Natural Minerals such as Limestone
    - Limestone Products
  - Environmental
    - Waste and By-Products
    - Ash Centers

#### Natural Resource Balance

- Tablets such as Scrap Metals (t): 4,674
- Amounts to Land/fill (t): 547
- Concentration 0.013
- Average Exhaust Gas Concentration 0.016
- Total Emissions (g- TEQ/year): 70,000
- Number of Kilns Covered: 0.51
- Total Emissions (g- TEQ/year): 15

#### Environmental

- Dust: 16,730 15,660 14,924
- NOx: 5,000 5,737 5,353
- SOx: 3,176 3,417 3,855
- Emissions to Ground and Water: 21,702
- Emissions to Ground and Water: 0.51

#### Environmental

- CO2: 3,533 3,855
- Emissions to Ground and Water: 21,702
- Emissions to Ground and Water: 0.51

---

* Cements and power generation businesses only
* Does not include CO from transportation, etc.


Environmental Accounting

We calculate the costs and benefits of environmental conservation with the belief that we can accurately assess the cost effectiveness of our business activities and capital investment by ascertaining environmental impact and comprehensively identifying the costs of environmental conservation.

### Environmental Conservation Cost

<table>
<thead>
<tr>
<th>Category</th>
<th>Main Activities</th>
<th>Environmental Impact Indicators</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>Changes From Previous Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Area Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pollution Prevention</td>
<td></td>
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<tr>
<td>Global Environmental Conservation</td>
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<tr>
<td>Resource Recycling</td>
<td></td>
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<tr>
<td>Upstream and Downstream Cost</td>
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<td></td>
</tr>
<tr>
<td>Administration Cost</td>
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<tr>
<td>Research and Development Cost</td>
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<tr>
<td>Social Activity Cost</td>
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<td></td>
<td></td>
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<tr>
<td>Environmental Remediation Cost</td>
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</tr>
</tbody>
</table>

### Environmental Conservation Benefits

**Business Area Benefit**

- **Pollution Prevention**
  - S02 Emissions (t): 3,533, 3,855, 3,470
  - N0x Emissions (t): 26,252, 25,385, 21,702
  - Dust Emissions (t): 605, 580, 618

- **Global Environmental Conservation**
  - CO2 Emissions (1,000 t): 15,660, 14,924, 14,037
  - Energy Consumption (1,000 GJ): 84,328, 76,853, 69,209

**External Waste Use Benefit**

- **Global Warming Prevention**
  - Reduction of CO2 Emissions (1,000 t): 2,597, 1,845, 1,599
  - Reduction of Energy Consumption (crude oil) (1,000 t): 100, 79, 69

- **Prevention of Depletion of Energy Resources**
  - Reduction of Energy Consumption (crude oil) (1,000 t): 100, 79, 69

- **Prevention of Depletion of Mining Resources**
  - Reduction of Mining Resource Consumption (1,000 t): 7,981, 5,444, 4,733

- **Extending Life of Landfills**
  - Reduction of Landfill Waste (1,000 t): 5,318, 4,799, 4,299

**Socioeconomic Benefits Derived From Recycled-Waste-to-Cement System**

Taiheiyo Cement has evaluated the External Economic Benefits (EEBs), or socio-economic benefits, derived from environmental impact reduction as a result of recycling wastes accepted from outside the company. The EEBE (External Economic Benefits Evaluation) method is applied and the evaluation is expressed in monetary terms.

**Impact**

- **Inventory**
  - CO2: 833, 735, 98, 818
  - Crude Oil: 36, 32, 4, 18,400
  - Natural Resources: 1,487, 1,197, 290, 1,000
  - Waste (Environmental Business): 0, 258, 258, 15,000

- **Per Ton of Cement (kg)**
  - VPC: 1,633
  - All Cement Types: Reduction

- **Inventory Market Price (¥/t)**
  - Cement Production (10,000 t): 1,633

- **Economic Benefit (¥100 millions)**
  - Global Warming: 13
  - Depletion of Energy: 13
  - Resources Depletion of Mining Resources: 47
  - Shortage of Landfills: 631
  - Total: 708

**External Economic Benefits**

- **External Economic Benefits**
  - 2007: 918, 816
  - 2008: 708
  - 2009: 607

* Figures for fiscal 2007 and 2008 are recalculated to include depreciation costs.

---

**Notes:**

1. Taiheiyo has developed a unique evaluation method to estimate the contribution to overall environmental benefit to society by utilizing waste materials emitted from other industries.
2. First, the environmental impact of VPC (Virgin Portland Cement) production that does not use any wastes is estimated and its environmental inventory is compared to that of actual production.
3. Second, EEBs are calculated by multiplying the inventory differences (VPC vs. actual production – volumetric environmental conservation effect) by market prices for each inventory item. The prices, assumed to be kept constant at year 2000 levels, are estimated as follows: CO2: ¥1,000/t (hypothetical CO2 emission tax ratio); Crude oil: import price; Natural resources: estimated price; Waste: controlled landfill cost in Tokyo area.
4. A portion of the EEB, such as the waste treatment fee, is accounted for in Taiheiyo’s profit and loss statement.
We are committed to reducing emissions of greenhouse gases to mitigate global warming. This includes taking action to reduce greenhouse gas emissions, centered on our cement plants, while also reducing transportation and office emissions. These actions are being taken as we develop a company-wide EMS and fulfill our promises as members of the WBCSD-CSI.

Efforts to Mitigate Global Warming

Cement is the core business of the group and a large amount of carbon dioxide is produced in the course of manufacturing cement. This is because the production process requires a high temperature of 1,450°C, and limestone, used as raw material, is decarbonated through a chemical reaction during the calcination process ($\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$).

Consequently, the bulk of greenhouse gas emissions associated with our business operations and the operations of group companies is CO$_2$ from cement production. We are therefore particularly focusing on cement production in our efforts to reduce CO$_2$ emissions.

Since fiscal 2008 we have been implementing integrated efforts to reduce CO$_2$ in transportation and offices as well as cement plants through the penetration and promotion of our company-wide EMS.

In the face of rising public expectations for businesses to curb global warming and increasingly strict regulations, we have been active in voicing the views of the cement industry in international discussions, including the need for a “sectoral” approach.

Global Warming Countermeasures Promotion System

In November 2008 we classified our greenhouse gas management challenges into short-, medium- and long-term measures in order to create and advance our own strategic measures against global warming. We then created a separate Global Warming Subcommittee for each of these time frames, placing the three committees under the CSR Management Committee. In January 2010 we reorganized the three committees into the Global Warming Countermeasures Committee to pursue our activities in a more integrated approach.

Using this system we will work to achieve the societal targets for reducing greenhouse gas emissions.

Calculation of Greenhouse Gasses

We calculate and report our energy use and greenhouse gas emissions in accordance with the Act on the Rational Use of Energy and the Law Concerning the Promotion of the Measures to Cope with Global Warming, respectively. In addition, as a member of the WBCSD-CSI, we calculate and report cement-related CO$_2$ emissions at group cement production plants and grinding plants according to the CO$_2$ protocol of the CSI.

We are also proactively responding to various questionnaire surveys on global warming countermeasures, including the Carbon Disclosure Project (CDP).

Scope of Calculations

The calculations of CO$_2$ emissions reported on pages 35 and 36 cover the four businesses of cement, resources, the environment and power generation at our seven plants and one group company plant in Japan using an emission calculation method pursuant to the Law Concerning the Promotion of the Measures to Cope with Global Warming.

The calculations of CO$_2$ emissions reported on pages 17 and 38 encompass the cement business of our 7 plants and 14 group companies in Japan and overseas using an emission calculation method in line with WBCSD-CSI CO$_2$ Protocol Ver. 2.

Emissions Trading Efforts

Our basic approach to reducing emissions is to achieve reductions through our own efforts.

With one group company in Japan we participate in the experimental introduction of an integrated domestic market for emissions trading as a member who sets targets. As a means to obtain credit, we invested 1 million US dollars into the Japan Greenhouse Gas Reduction Fund.
**Efforts Related to the Cement Production Process**

About 40% of CO₂ emissions generated during cement production are from burning fuel and about 60% are from the decarbonation of raw materials.

To reduce CO₂ emissions from fuel combustion, we have been working to conserve energy. In addition to energy-saving efforts, we are also pursuing measures such as using waste-derived fuels and biomass fuels. To reduce CO₂ emissions from the decarbonation of the limestone used as raw material, we are moving toward using recycled resources with less carbonate content.

**CO₂ Emission Reduction Targets**

Reduce net CO₂ emissions per unit production by 3% from 2000 levels by 2010

- **Scope:** 7 Taiheiyo Cement plants, 6 group companies in Japan and 8 overseas group companies
- **Net CO₂ Emissions:** The total CO₂ emissions minus the CO₂ emissions from alternative fuels

**Specific Net CO₂ Emission**

<table>
<thead>
<tr>
<th>Year</th>
<th>Emission (1000 tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>4,050</td>
</tr>
<tr>
<td>2007</td>
<td>4,050</td>
</tr>
<tr>
<td>2008</td>
<td>3,959</td>
</tr>
<tr>
<td>2009</td>
<td>3,959</td>
</tr>
<tr>
<td>2010</td>
<td>3,445</td>
</tr>
</tbody>
</table>

**Use of Alternative Energy Resources**

Our group uses alternative energy resources such as waste tires, plastic, oil and wood for cement production.

In fiscal 2009 non-fossil energy and biomass energy accounted for about 11.6% of all energy use for our kilns. Going forward, we will continue to use alternative energy resources such as tatami mats, oil sludge and waste paint, which are difficult for other industries to handle.

**Energy Conservation Efforts**

Our group is introducing energy-efficient equipment to reduce CO₂ emissions.

At Jiangnan-Onoda Cement Co., Ltd. in China, construction of a waste heat power generation system that began in August 2008 was completed in May 2009. We estimate to save more than 45,000 MWh of purchased electricity per year by using this system.

On July 17, 2009, a groundbreaking ceremony was held for the construction of a waste heat power generation facility at our Kamiiso plant. The waste heat power generation facility generates electricity using waste heat from three kilns and coolers. The new facility is expected to save the equivalent of 26,600 kl heavy oil and reduce CO₂ emissions by 67,000 tons. Construction will be completed in November 2011.

**Specific heat consumption of clinker production**

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumption (MJ/t-clinker)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>3.282</td>
</tr>
<tr>
<td>2008</td>
<td>3.281</td>
</tr>
<tr>
<td>2007</td>
<td>3.302</td>
</tr>
<tr>
<td>2006</td>
<td>3.370</td>
</tr>
</tbody>
</table>

**Energy Conservation Efforts**

In April 2010 the construction of our first electric propulsion ship was completed.

**BOF (mixed fuel of biomass and oil sludge)**

**Ratio of alternative/biomass fuel**

<table>
<thead>
<tr>
<th>Year</th>
<th>Alternative fuel</th>
<th>Biomass fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>11.6%</td>
<td>10.0%</td>
</tr>
<tr>
<td>2008</td>
<td>10.9%</td>
<td>9.3%</td>
</tr>
<tr>
<td>2007</td>
<td>9.1%</td>
<td>8.4%</td>
</tr>
<tr>
<td>2006</td>
<td>14.4%</td>
<td>15.5%</td>
</tr>
</tbody>
</table>

**Transportation**

As part of our efforts to reduce our environmental impact, we are working to reduce CO₂ emissions during transportation. To reduce CO₂ emissions from fuel combustion, we have been purchasing vehicles. This initiative has raised our proportion of cars with reduced CO₂ and NOx emissions when replacing or starting in fiscal 2006 we have been actively introducing hybrid cars.
Reducing CO₂ Emissions during Transportation

We contract the delivery of our raw materials and products to transportation companies and are striving to reduce CO₂ emissions as a specified consigner (under the Act on the Rational Use of Energy). Major efforts include implementing a plan to transport goods on return trips, encouraging drivers to eco-drive, and introducing energy-efficient devices such as digital tachometers and eco-tires on vehicles. In shipping, which covers a significant part of our transportation needs, we have been installing energy-efficient equipment following consultations with operators. In April 2010 the construction of our first electric propulsion ship was completed.

In fiscal 2009 we transported a total of 36,960,000 tons with a transport volume of 9,216 million ton-kilometers (volume transported multiplied by distance transported). Our CO₂ emissions were about 140,000 tons, a 12% reduction compared to the previous fiscal year. The entire group, as well as the company itself, will continuously strive to reduce CO₂ in fiscal 2010.

<table>
<thead>
<tr>
<th>Mode of Transportation</th>
<th>Amount Transported (1,000 t)</th>
<th>Average Distance Transported (km)</th>
<th>Transported Ton x kilometer (1,000 t × km)</th>
<th>CO₂ Emission (1,000 t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ship</td>
<td>18,951</td>
<td>441.9</td>
<td>8,375,091</td>
<td>97</td>
</tr>
<tr>
<td>Truck</td>
<td>13,619</td>
<td>52.3</td>
<td>712,128</td>
<td>44</td>
</tr>
<tr>
<td>Railway</td>
<td>4,388</td>
<td>29.3</td>
<td>128,639</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>36,958</td>
<td>249.4</td>
<td>9,215,858</td>
<td>144</td>
</tr>
</tbody>
</table>

Super Eco-ship Kaiko Maru

- 749G/T electric propulsion ship completed in April 2010
- Load capacity: 2,000 tons
- Speed: 12.5 knots
- Features: All loads, including propulsion and material handling facilities, are powered by electricity supplied by multiple generators. This reduces fuel use by more than 10% compared with conventional diesel main engines.

Initiatives at Offices

- Promotion of “Cool Biz” Initiative
  We recommend the use of “cool biz” style (wearing light clothes in summer) for the four-month period from June to September and set the office temperature to 28°C to reduce energy required for air-conditioning. During this period we actively call on guests to visit our office wearing the “cool biz” style toward expanding this initiative.
  We also work to reduce electricity consumption in the areas where we work through promoting such habits as turning off lights and computers when they are not in use and using stairs instead of elevators as often as possible.
- Actively Introducing Hybrid Cars
  As part of our efforts to reduce our environmental impact, starting in fiscal 2006 we have been actively introducing hybrid cars with reduced CO₂ and NOx emissions when replacing or purchasing vehicles. This initiative has raised our proportion of hybrid cars to more than 15% of our company fleet.

Breakdown of Our Greenhouse Gas Emissions

Our greenhouse gas emissions in fiscal 2009 (calculated based on the Law Concerning the Promotion of the Measure to Cope with Global Warming) were 13,500,000 tons, with CO₂ from our cement plants (Scope 1) accounting for about 98% of the total.

Breakdown of our greenhouse gas emissions (CO₂-e) in fiscal 2009 (tabulated in July 2010)

- Scope 1: Emissions from our cement plants: 98%
- Scope 2: Purchased electricity: 1%
- Scope 3: Emissions as a designated shipper: 1%
Reducing Environmental Impact

We continue to act to protect the local environment and reduce impact on the environment through such means as preventing environmental pollution, making effective use of resources, reducing waste and appropriately managing chemicals.

Preventing Environmental Pollution

Air Pollution

The main air pollutants generated from cement production are SOx, NOx and dust contained in the combustion gases emitted from our rotary kilns, power-generator boilers and the like. To ensure proper management of these substances, we are putting in place a system, to be established by 2010, for monitoring exhaust gases from all group rotary kilns. We remain committed to appropriately operating our facilities by maintaining the capacity of equipment to process gas emissions including electrostatic precipitators, as well as by continuously monitoring emission levels. Through these actions, we are working to reduce air polluting emissions.

Soil Contamination

Taiheiyo Cement evaluated the risks associated with cement plants that may be sited on contaminated ground by consigning an expert consultant to undertake a soil history survey in fiscal 2000. We are in the process of conducting drilling studies, etc., starting with higher-risk locations, to verify whether the soil is contaminated or not. Actions are taken as necessary based on the findings.

We are also working to eliminate the possibility of soil contamination by preventing leakage of wastewater from scrap yards and fluid from oil tanks, acid/alkali tanks and so forth.

Water Pollution and Making Effective Use of Water Resources

At about 300 million m³, our total wastewater discharge is immense. Almost all of it, however, is seawater for cooling our in-house power generators and is not classified as liquid waste under Japan’s Water Pollution Control Law.

At our cement plants we reuse water resources as recycled water and strive to minimize the amount of water discharged into public waterways.

We install sedimentation tanks, oil separation tanks and oil film detectors on the routes our wastewater travels to reach public waterways in order to minimize the risk of pollution.

Example of Water Circulation Flow of Cement Plant

Calculation based on the WBCSD-CSI
(monitored emissions from 7 plants in Japan, 14 group companies in Japan and overseas)
Reducing Waste

- **Initiatives at Plants**
  Our cement plants reduce the amount of waste handled by waste disposal contractors by reusing waste from operations as material for cement.
  We also work to reduce the volume of waste to landfill by promoting the use of chromium-free kiln bricks.

- **Initiatives at Quarries**
  Our quarries reduce the waste handled by waste disposal contractors by reusing such materials as logged trees (made into chips), heavy machinery lubricant oil, and the waste tires of some vehicles as materials and fuel for cement plants.

- **Initiatives at Service Stations**
  Service stations reduce the waste handled by waste disposal contractors by returning to our plants the residual cement that remains in silos after switching product type for reuse as cement raw material.

- **Initiatives at Offices**
  - **Reuse Corner**
    We have a "reuse corner" at our headquarters where used office supplies no longer needed by their divisions are collected and can be reused. This system makes it possible to get the maximum utility from used products and minimize our purchase of new products.
  - **Recycling of Paper**
    We set up corners for the reuse of copier paper on which one side cannot be used due to printing errors and the like. We make effective use of this paper for notes and drafts. Confidential documents are placed in a locked wastepaper box and recycled by a specialized company with which we have a confidentiality agreement.

Appropriate Management of Chemical Substances

- **The Pollutant Release and Transfer Register (PRTR)**
  The PRTR Law requires us to report on the equipment installed at our Kumagaya plant for the washing of municipal waste incineration ash. The ash washing process uses water, and our total discharge of dioxins and lead into public waterways are as follows.

- **Reported Levels of Dioxin and Lead Emissions**

<table>
<thead>
<tr>
<th></th>
<th>FY2007</th>
<th>FY2008</th>
<th>FY2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dioxin Emissions (mg-TEQ)</td>
<td>0.0010</td>
<td>0.0013</td>
<td>0.012</td>
</tr>
<tr>
<td>Lead and its compounds (kg)</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Our lead emissions for fiscal 2008 and 2009 were below the mandatory reporting levels.

- **Management of PCB Waste**
  The Law Concerning Special Measures against PCB Waste was created in June 2001. In accordance with this law we ensure that PCB waste at all 43 of our facilities nationwide is properly stored and report an inventory each year. We signed a processing agreement with the Japan Environmental Safety Corporation (JESCO) in 2006 and are processing the PCB waste that we have stored in line with our plan.
  The capacitors maintained at the Kamiiso and Oita plants and the Kobe service station were processed in fiscal 2009.
  In fiscal 2010 the capacitors stored in 11 locations in Japan, including the Kamiiso and Tosa plants and the Tokyo service station, are scheduled to be processed.

- **Condition of PCB Waste**

<table>
<thead>
<tr>
<th></th>
<th>Processed in FY2009</th>
<th>Stored in FY2009 (as of March 31, 2010)</th>
<th>Processing plans for FY2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacitors</td>
<td>138</td>
<td>240</td>
<td>56</td>
</tr>
<tr>
<td>Transformers</td>
<td>0</td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>
Commitment to the Environment

Recycling Waste and Other Materials

Our cement-manufacturing equipment features the ability to safely treat large volumes of waste and by-products. We are committed to expanding our recycling of resources to include industrial waste produced by all industries, as well as household waste, through the use of a wide range of technologies.

Creating a Social System Built on a Closed Resource Cycle

We are committed to creating a recycling-based society and, through our recycled-waste-to-cement system, we will maintain ties with a wide range of industries and communities, accept a wide variety of waste and by-products, and recycle them into cement.

Electric Power Utilities

We accept large volumes of coal ash produced at coal-fired power plants and use it as a substitute for clay as a raw material in cement. In addition, we operate ash centers* to use more ash. We also deliver limestone powder, which is used as a flue-gas desulfurization material to scrub the harmful sulfur oxide from the exhaust produced by the burning of coal. The reaction of flue-gas desulfurization material with sulfur oxide forms gypsum, which we use effectively as a raw material in cement.

Steelmakers

In the steelmaking process, impurities are removed from iron ore to make iron. We supply the limestone powder and quicklime used as purifying materials in the refining process. We also use by-products such as blast furnace slag and steel slag that remain after the refining process as raw materials for cement and admixtures.

Municipal Waste Recycling Systems for Use in Cement Production

Although most municipal waste is incinerated and the ash is buried in landfills, it has now become very difficult to find new landfill sites. Waste treatment has become a particularly difficult issue for Japan’s major city governments and the situation is expected to only get worse. We have three systems for recycling municipal waste into resources and strive to make effective use of resources and resolve environmental issues.

Ecocement System

Ecocement is a new type of cement made primarily from the incineration ash from municipal waste. More than 500 kg of municipal waste incineration ash and other waste materials are used per ton of Ecocement.

Ash Washing System

This is a preprocessing system that removes foreign objects in incineration bottom ash and washes fly ash to remove chlorine contained in the dust allowing the use of municipal-waste incineration ash as raw material for cement at cement plants.

AK System

A system for recycling household waste and general business waste as fuel and raw material for cement manufacture. The waste is pre-processed through biological breakdown (fermentation) using a waste recycling kiln.

Recycling of Construction Soil

Conventionally, this soil had been dumped into landfills. By making effective use of it as a raw material for cement, we contribute to the material recycling of construction soil as well as the extension of the lifetime of landfills. We are certified as a designated survey agency by the Ministry of the Environment and offer one-stop services from surveying, construction and distribution, to treatment at our plants. We have also set up intermediary facilities that organically link sites where construction soil is produced to our nationwide plants.

The Mineral Resource Cycle with Electric Power Utilities and Steelmakers
Recycled-Waste-to-Cement System Using Waste and By-products

We recycle waste and by-products into resources for cement. This helps to extend the lifetime of landfills, prevent the depletion of natural mineral resources, control the emission of greenhouse gases, and reduce air pollution.

In fiscal 2009 we recycled 387.5 kg of waste and by-products per ton of cement manufactured. Both the total volume and the rate of consumption fell from fiscal 2008 due to a decline in industrial activity.

Waste and By-product Used in Cement Manufacturing Process

1. Raw material preparation process
   - Limestone, iron wastes, etc., are mixed together, dried and ground in a raw mill.

2. Burning process
   - After preheating, the materials are burned in a rotary kiln. The resultant material is then rapidly cooled forming an intermediate product called clinker.

3. Finishing process
   - A small amount of gypsum is added to the clinker and ground in the finish mill to produce cement.

4. Transportation
   - The cement is then transported by ship, truck or railway freight car.

Waste and By-products Used in Cement Manufacturing Process

- Raw materials
  - Blast furnace slag, Coal ash, Polluted waste sludge, Non-ferrous slag, Steelmaking slag, Construction soil, Molding sand, etc.
  - Municipal waste incineration ash, Fly ash, Used clay, Sewage sludge
  - Waste oil, Waste plastic, Used tires, Wood Chips, Scrap pachinko machines, RDF (municipal waste), Recycled oil, BOF

- Gypsum
  - FGD gypsum, Chemically derived gypsum

- Mixed materials
  - Slag powder, Fly ash

Trends in Use of Waste and By-products per Unit Production

<table>
<thead>
<tr>
<th>Year (FY)</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste and by-products used</td>
<td>2,978,689</td>
<td>2,958,983</td>
<td>2,909,723</td>
<td>2,869,784</td>
<td>2,819,868</td>
<td>2,769,947</td>
</tr>
</tbody>
</table>

Reference: Resource necessary to produce one ton of cement

- Limestone: 1,100 kg
- Clay: 220 kg
- Silica: 60 kg
- Iron, etc.: 30 kg
- Gypsum: 35 kg
- Coal, etc.: 110 kg
- Electric power: 105 kWh

Waste and By-products Consumption in Cement Plants (FY2009)

<table>
<thead>
<tr>
<th>Waste and By-products</th>
<th>Total Consumption (t)</th>
<th>Rate of Consumption (kg/t-cement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal Ash (including fly ash)</td>
<td>1,902,259</td>
<td>116.5</td>
</tr>
<tr>
<td>Blast furnace slag</td>
<td>1,114,135</td>
<td>68.2</td>
</tr>
<tr>
<td>Construction soil</td>
<td>562,440</td>
<td>34.4</td>
</tr>
<tr>
<td>Byproduct Gypsum</td>
<td>558,323</td>
<td>34.2</td>
</tr>
<tr>
<td>Dirt and Sludge</td>
<td>435,175</td>
<td>27.9</td>
</tr>
<tr>
<td>Wood Chips</td>
<td>81,016</td>
<td>5.0</td>
</tr>
<tr>
<td>Waste Plastic</td>
<td>84,382</td>
<td>5.2</td>
</tr>
<tr>
<td>Other</td>
<td>1,141,227</td>
<td>69.9</td>
</tr>
<tr>
<td>Subtotal</td>
<td>5,899,157</td>
<td>361.3</td>
</tr>
<tr>
<td>Household</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Treatment Plant Sewage Sludge and Ash</td>
<td>332,840</td>
<td>20.4</td>
</tr>
<tr>
<td>Municipal Incinerator Ash</td>
<td>75,537</td>
<td>4.6</td>
</tr>
<tr>
<td>Other Municipal Waste</td>
<td>19,860</td>
<td>1.2</td>
</tr>
<tr>
<td>Subtotal</td>
<td>428,237</td>
<td>26.2</td>
</tr>
<tr>
<td>Total Waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw Material-related</td>
<td>6,327,394</td>
<td>387.5</td>
</tr>
<tr>
<td>Fuel-related</td>
<td>9,919,978</td>
<td>362.5</td>
</tr>
<tr>
<td></td>
<td>407,416</td>
<td>25.0</td>
</tr>
</tbody>
</table>

References

- Ecocement System
- Municipal Waste Recycling Systems for Use in Cement Production
- Electric Power Utilities
- Steelmakers
- Recycling of Construction Soil

Note: Calculation formulas for the trends in use of waste and by-products per unit production are not provided.
Conserving Biodiversity

We are striving to protect biodiversity. We are also members of the WBCSD-CSI’s task force on conserving biodiversity.

Reducing the Environmental Impact of Quarry Development

Cement production starts with mining limestone, which is a major raw material of cement. Quarrying involves the removal of topsoil and so has a significant impact on the natural environment and landscape. Therefore, after quarrying is finished we restore the landscape with consideration for biodiversity, including replacing topsoil and replanting vegetation based on an environmental assessment conducted prior to development.

Environmental Impact Assessment

Fujiwara plant in Mie Prefecture (Fujiwara Quarry of Ishizaki Corporation) plans to develop a new raw-material quarry. In December 2008 it began procedures for an environmental impact assessment in accordance with the Environmental Impact Assessment Ordinance of Mie Prefecture.

Another quarry that had already conducted an environmental impact assessment formed a Biodiversity Conservation Advisory Committee to discuss ways for contributing to the conservation and restoration of flora and fauna in the surrounding area as well as to regional development.

We believe it will become vital for future quarry development to take care of the biodiversity of the surrounding area and to promote local economic development.

Based on this basic stance, the Fujiwara plant will examine and implement conservation measures to minimize its environmental impact toward realizing sustainable quarry development.

Protection of Rare Plant Species

Since 1972 we have been protecting and nurturing rare species of native plants on Mt. Buko, the location of the Minowa Quarry of Chichibu Taiheiyo Cement Corporation (Chichibu, Saitama). We created a botanical garden within the quarry and together with local experts and other people we cultivated 65 species of rare plants. Additionally, in 1995 our Research & Development Center began researching ways to preserve and grow rare plants using biotechnology. Since then we have continued efforts to replant species grown through this research at old quarry sites.

Greening Quarry Slopes

We are continuing our efforts to restore greenery to the quarry slopes that were formed during the quarrying process toward restoring the previous natural plant environment insofar as possible. The vegetation that we plant is based on the plants native to that location, usually a mountainous area, and we strive to create harmony with the surrounding environment. At the Buko Quarry of Boku Mining Co., Ltd. (Saitama Prefecture), we planted basket willow, Euptelea, white birch, Japanese cypress, and other vegetation.

Activities to Protect the Natural Surroundings of the Community

Once again, this year the Mining Department of our Mineral Resources Business Company participated in the Diverse and Bountiful Forest Promotion Project in Tokyo.

We cleared stands of 45-year-old Japanese cedar and cypress from our land at a quarry site in Nishitama, Tokyo, and planted broad-leaved trees. We cleared about 80% of the trees in the target area covering 0.46 hectares. Because fewer trees could be planted in the area this year, we chose to plant cherry blossom trees only. Thirty-seven 1.5- to 2.0-meter high saplings (equivalent density of eighty saplings per hectare) were planted.

Lecture on Biodiversity

On July 16, 2009, we sponsored a lecture entitled “The actual state of biodiversity and the role of enterprises” by invited speaker Mr. Yasushi Hibi, a representative of Conservation International (an environmental NGO) at the auditorium of our headquarters.

Survey of rare animals

Greening a quarry slope

Planting broad-leaved trees
We are committed to developing a wide range of technologies in order to meet the increasingly diverse needs of society. We offer products and services that have environmentally-benign properties, contributing to a better living environment while conserving resources and reducing CO₂ emissions.

**Ultralight Photovoltaic Panel**

A&AM Light Solar is an ultralight photovoltaic panel that integrates film-type amorphous solar cells on light and strong FRP baseplate. Conventional crystal photovoltaic systems, including mounting components, typically weigh about 20 kg/m² and are sometimes too heavy to mount on light roofs, such as those made of slate or folded metal sheet. A&AM Light Solar panels weigh just 3.8 kg/m² (5.6 kg/m² including installation baseplate), about one-fourth the weight of conventional panels, and can be mounted on light roofs. The product is best suited for large roofs of factories, warehouses, distribution centers, railway platforms and similar structures.

**Highly Functional, Sound Absorption Insulation Panels**

“SHAON KYU FREKI” is a thin and light soundproofing panel that combines sound-blocking and sound-absorbing capabilities, unlike ordinary concrete sound insulation walls.

Combining SHIZUKALITE (acoustic absorbent) developed from ALC (autoclaved lightweight concrete) panel technology and FLEXIBLE BOARD (sound insulator), the panels are as thin as 61 mm and deliver not only sound insulation, but also excellent acoustic absorption performance across a wide frequency range from low to high.

Having the strength of common outer walls, this product provides quiet and pleasant environments in all application fields, including industrial projects, railways, roads and housing.

**BACK LOCK (precast reaction wall for jacking method)**

In a conventional jacking method, a reaction wall is cast using concrete on site. This wall must be crushed and removed after completing the work, which generates significant noise and industrial waste. “BACK LOCK” can be disassembled, transported and reused without vibration, noise or dust disturbances during installation and removal. The wall is highly regarded in the comprehensive evaluation bidding process for public works.

**Water Permeable/Water-Retaining Paving Blocks with Slits**

“ART THROUGH” and “OCEAN SLIT” are water-permeable/water-retaining Paving Blocks with slits on their surfaces. These Paving Blocks feature a pleasing design and “barrier-free” functionality. They prevent puddles, have an anti-slip surface and facilitate walking. They also help to prevent flooding by alleviating the flow of water into rivers and sewers during intensive torrential rains. On their surface are slits that are the same width as joints between blocks. This prevents unpleasant vibrations from being transmitted and allows wheelchairs, bicycles, baby carriages and the like to roll smoothly over them.
Quality Control

For more than 100 years we have developed quality control technologies through the manufacture and sale of cement. Using these technologies we have advanced initiatives to guarantee the safety and security of our products. We are committed to improving the satisfaction of our customers through efforts to maintain and enhance product quality, including the introduction of the Rietveld method, which enables rapid, quantitative determination of clinker minerals and other minerals.

Quality Policy

Since our founding in 1998 we have had the following quality policy, which is based on our management policy.

Quality Policy

By pursuing quality designs that meet users' needs and providing quality assurance, our customer satisfaction shall be enhanced.

As concrete becomes increasingly multifunctional and high-performance, it is absolutely essential that we continually strive to improve customer satisfaction by offering our users high-quality, safe and reliable products and services. As part of these efforts, we introduced the Rietveld method, a new quality control approach using X-ray diffraction. This method is expected to raise the level of quality control by enabling rapid quantitative determination of clinker minerals that significantly affect cement quality. Through new initiatives such as this, we are building quality into the Taiheiyo Cement Brand to meet user demand.

Quality Management System (QMS)

We have obtained certification for the ISO 9001 standard for quality assurance. We have built a company-wide quality management system (QMS) that operates at our manufacturing plants as well as our head office, branches and R&D Center.

To strengthen production focused on quality that meets customer expectations, we ensure robust communication between our sales, production and R&D departments, and effectively implement PDCA cycles throughout all processes and systems for continuously improving operations and enhancing customer satisfaction.

Safety for Cement and Cement Products

Safety and security have come to be demanded of all products and cement is no exception—especially because it is an essential building material for the creation of social capital.

The manufacture of cement mainly uses limestone, silica, clay, iron and gypsum. We have long used blast furnace slag, coal ash, by-product gypsum and other by-products as substitutes for natural mineral resources. Recently we have also developed technology for systems to recycle municipal waste into resources for cement, which we use to recycle household waste, soil and waste materials from construction, and other waste into raw materials. As we use higher volumes and increasingly diverse sources of recycled resources, we are enhancing the quality control of our products in order to maintain the quality of our final cement products and ensure environmental safety through such means as introducing the latest technologies. In particular, we carefully manage quality control of minor components, with control criteria aligned to the recent tightening of environmental regulations.

We widely publish our material safety data sheet (MSDS), which records information about hazardous and harmful substances and enables our customers to safely handle our products. In May 2010 we released a GHS* version, in which harmful or hazardous properties are classified according to given criteria and displayed in an easy-to-understand manner through, for example, graphical presentations, to ensure customers handle our products safely.

* GHS: Globally Harmonized System of Classification and Labeling of Chemicals
Commitment to Safety of Soil Stabilizer Products

Cement-based soil stabilizers are used widely for shallow and deep improvement of soft soil, as well as for applications such as improving soil from construction and sludge solidification. The cement that serves as the base material of the soil stabilizer contains extremely minute quantities of hexavalent chromium. For this reason, and depending on the type and condition of the soil, hexavalent chromium exceeding environmental standards for soil is sometimes eluted. In April 2009, to enable us to offer products with lower environmental impact, we switched to selling only soil stabilizers that elute reduced levels of hexavalent chromium*. We also produce cement-based soil stabilizers with a special Teflon treatment to reduce the generation and scattering of dust. Demand for this product is increasing to control dust in overcrowded residential areas and especially urban locations.

Technical Assistance to Users

In recent years, development of multifunctional, high-performance concrete has been dramatically advancing, driven by the diversifying performances required of emerging applications. In addition, related specifications and standards are frequently revised to keep pace with evolving social needs in the face of globalization.

We conduct TBC (Taiheiyo Brand Cement/Concrete) activities on an ongoing basis to support users in maintaining and improving their technical capabilities and to provide differentiating technologies. As part of these activities, we created a manual on concrete shrinkage control in July 2009, primarily for users of ready-mixed concrete. The manual was developed in response to concern over shrinkage cracks that affect the durability of concrete buildings and to regulatory trends associated with shrinkage. We intend to continue providing users with useful technical information.

| Transition of Minor Component Content of Ordinary Portland Cement (mg/kg) |
|------------------|------------------|------------------|------------------|------------------|
| Fluorine          | Average | 556   | 495   | 497   | 449   | 515   | 534   |
|                  | Minimum | 53    | 42    | 52    | 39    | 69    | 64    |
|                  | Maximum | 1,000 | 763   | 866   | 634   | 695   | 667   |
| All chromium      | Average | 221   | 84    | 76    | 63    | 61    | 159   |
|                  | Minimum | 18    | 43    | 44    | 47    | 38    | 36    |
|                  | Maximum | 223   | 200   | 139   | 90    | 90    | 83    |
| Water-soluble hexavalent chromium | Average | 19   | 14    | 12    | 10    | 13    | 10    |
|                  | Minimum | 17    | 11    | 12    | 10    | 13    | 10    |
|                  | Maximum | 23    | 157   | 152   | 127   | 133   | 131   |
| Zinc             | Average | 23    | 17    | 14    | 12    | 10    | 13    |
|                  | Minimum | 17    | 12    | 12    | 10    | 13    | 10    |
|                  | Maximum | 23    | 157   | 152   | 127   | 133   | 131   |
| Lead             | Average | 122   | 151   | 152   | 127   | 133   | 131   |
|                  | Minimum | 17    | 32    | 27    | 37    | 43    | 47    |
|                  | Maximum | 23    | 157   | 152   | 127   | 133   | 131   |
| Copper           | Average | 17    | 14    | 12    | 10    | 13    | 10    |
|                  | Minimum | 17    | 12    | 12    | 10    | 13    | 10    |
|                  | Maximum | 23    | 157   | 152   | 127   | 133   | 131   |
| Arsenic          | Average | 17    | 14    | 12    | 10    | 13    | 10    |
|                  | Minimum | 17    | 12    | 12    | 10    | 13    | 10    |
|                  | Maximum | 23    | 157   | 152   | 127   | 133   | 131   |
| Selenium         | Average | 1.1   | 0.9   | 0.9   | 0.9   | 0.9   | 0.6   |
|                  | Minimum | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   |
|                  | Maximum | 1.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.6   |
| Cadmium          | Average | 1.5   | 3.0>  | 3.0>  | 3.3   | 3.0>  | 3.0>  |
|                  | Minimum | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   |
|                  | Maximum | 1.5   | 3.0>  | 3.0>  | 3.3   | 3.0>  | 3.0>  |
| Mercury          | Average | 0.016 | 0.017 | 0.010 | 0.011 | 0.012 |
|                  | Minimum | 0.005>| 0.005> | 0.005> | 0.005> | 0.005> |
|                  | Maximum | 0.03   | 0.04   | 0.010 | 0.011 | 0.012 |

*Even when using soil stabilizers with reduced levels of hexavalent chromium elution, tests should be conducted under the specific conditions before use to ensure that the level of hexavalent chromium eluted from the stabilized soil meets environmental standards.

Commitment to Partnership with Customers

Research and Development

Our research and development division responds swiftly to our business divisions’ urgent development requirements and conducts medium and long-term research in order to contribute to the continued growth of the company. We also work to improve our corporate value with deep commitments to topics with strong social demand, while maintaining a full awareness of the perspective of CSR.

Research and Development Mission

The mission of our R&D division is to carry out research and development within the framework of corporate management in order to achieve long-term business continuity. The division is also responsible for sharing with each business company the results of R&D, including details, strategies and processes.

As a result of our experience of unprecedented severe conditions in fiscal 2010, we are pursuing self-improvement efforts through which we will steadily promote research and development that supports the ongoing growth of existing businesses. We will conduct surveys, research and development for new business, and organizational operations with the utmost efficiency, while working to promptly address current problems.

Priorities for R&D and Recent Development Examples

- **To Maintain Overwhelming Cost Competitiveness**
  We are advancing the development of technologies to expand the use of fuel waste for further cost reduction as we approach the limits of using raw material-related waste and by-products in place of natural clay. As the use of fuel waste expands in various industries, collecting more waste will require a technology for reusing waste that has been difficult to handle as an alternative fuel. Our Research & Development Center in its research and development gives top priority to understanding physical aspects, chemical components and possible dangers, such as explosion and ignition of wastes that are difficult to handle, and to developing a method for using them in our cement plants. Major achievements include a technology used with recycled solid fuel (biomass and oily sludge fuel coarse: BOFc), which is made by mixing and impregnating biomass (e.g., waste wood, tatami mats) with materials such as waste oil. The most distinctive feature of the BOFc technology is that cement plants can directly accept and mix waste oil that has been difficult to handle, such as high-viscosity oil and oil that contains sludge, and effectively use it as fuel for cement production.

- **Establishment of Top Brand through New Technology Development**
  We are reinforcing the technical advantages of our cement and concrete under an initiative entitled, Taiheiyo Brand Cement/Concrete (TBC), to strengthen our competitiveness through differentiating technologies and technical services. We are focusing on general themes for concrete, such as high strength and shrinkage control, while aggressively providing group companies with technical support. For high strength applications we developed Silica Fume Premix Cement (SFPC*) for use in super high-strength concrete and have been developing practical applications focused on super high-rise reinforced concrete buildings. Twenty certifications have been granted from the Japanese Ministry of Land, Infrastructure, Transport and Tourism to users who received our support in using these applications. The number of buildings that use the product is also steadily increasing. We are now pursuing 200 MPa-level concrete technology.

- **Advancing into Growing Fields**
  As the focus of social infrastructure shifts from development to maintenance, technologies to extend the life of structures have become increasingly important. These technologies not only represent a cornerstone for the firm foundation of our existing businesses, but are also expected to evolve into technologies for developing durable construction materials and for the examination, diagnosis and repair businesses of our group. By learning from structures that have endured many years of service, we will support the extended lifespan of structures with state-of-the-art technologies.

- **Application range of high-strength cement**

- **Recycled Solid Fuel BOFc**

- **Examination of Ishioka Daiichi Power Plant, a key cultural asset**

- **RFID strain measuring system**

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[Image 316x94 to 430x180]

[Image 431x85 to 545x171]

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1. TAIHEIYO CEMENT CSR REPORT 2010
Fair Trade

We encourage our employees to advance fair trade through a variety of tools.

Fundamental Policy

To build relationships of trust and collaboration with business partners for mutual growth, we promote fair trade in general and compliance in each contract and commitment.

Distributing a Standard of Conduct Casebook

We included fair trade in our Standard of Conduct, which was established as a guideline for individual action, and have made sure that every employee is aware of this expectation.

We also created and distributed a Standard of Conduct Casebook that describes specific examples for practice, such as what to do if you are in danger of getting involved in bid-rigging and how an overseas affiliate could present a problem for the group.

Distributing Antimonopoly Law Compliance Manual

We published and distributed an Antimonopoly Law Compliance Manual to employees toward ensuring compliance.

The manual first presents an outline of the Antimonopoly Law focusing on private monopoly, unfair restraint of trade (cartels) and unfair business practices, the three pillars of the law, and then offers examples of illegal conduct in a form of “Don’t” statements to help employees more concretely understand the law.

Information Disclosure

We are exerting our strongest efforts to offer information through various media to promote understanding of our activities while incorporating feedback and other information sent to us into our daily management and IR activities.

Information Disclosure Policy

We believe that achieving the understanding and trust of our stakeholders through information disclosure is essential for achieving the Taiheiyo Cement Group Mission.

We also recognize that the active disclosure of information is part of our corporate social responsibility. We disclose corporate information fairly, accurately and at the appropriate time, in accordance with the Information Disclosure Policy that we created in May 2007. Furthermore, we convene regular press conferences with newspaper and wire-service reporters assigned to the cement industry in order to build understanding of the company. In these meetings a director in charge and other company representatives provide explanations of our business and the content of the meetings is reported in newspapers.

IR Activities

We are committed to disclosing information about our group clearly, concisely and in a timely manner in order to enable our shareholders and investors to judge our group’s corporate value appropriately. We hold results briefings with institutional investors twice each year to enable our top management to communicate our management policies directly. We held 241 individual meetings (with a total of 393 people) in fiscal 2009. We also provide tours of our production sites (our plants and quarries) for our investors upon request.

A total of 166 institutional investors attended a briefing held on March 30, 2010 to explain the revision of our medium-term management plan and our comprehensive cost cutting plan.

Information Disclosure Tools

We are committed to disclosing information using a wide range of tools in order to enable a greater understanding of our group. We update our website continually and additionally publish CEM’S (a technical journal for users of our products) four times per year, and annual reports for Japanese and international investors once per year. We also publish the “Taiheiyo” in-house newsletter six times per year as a tool for internal communication that is distributed to our local communities and the mass media as well.
Creating an Energetic Workplace that Respects Diversity

We are actively working on hiring and training people to ensure our sustainable growth. We are also committed to creating employee-friendly workplaces through measures that promote diversity, including the employment of persons with disabilities and updating our human resource system to improve work-life balance.

Commitment to Employment Diversity

We see our employees as the most important management resources for achieving sustainable growth of our group. We are actively committed to hiring people with diverse individual characteristics and values based on fair hiring practices, irrespective of nationality or gender. In addition to hiring and training our human resources, we also believe that it is vital to ensure our human resources can put down roots for the long term and get the most out of their abilities.

Human Resource Development and Education

The development of our employees’ skills is one of the most important challenges in our management strategy and we are committed to developing their skills continuously in accordance with our Basic Human Resources Development Policy. Aiming for reorganization of our on-the-job training program, which focuses on junior and mid-level employees, we are committed to develop autonomous employees based on the fundamental approach of “although an employee’s superior is responsible for his or her development, the employee is responsible for his or her own growth.”

Basic Policy Concerning the Development of Human Resources

Our aim is to develop human resources that are highly regarded both inside and outside the company.

1. In principle, human resources will be developed through on-the-job training supplemented by off-the-job training.
2. Human resources will be developed to succeed the roles of their superiors, playing central roles in the future in each area and at each level.
3. Human resources will be developed to take action in constant consideration of group management.
4. Human resources will be developed to be competent by global standards.
5. Human resources will be developed to protect the environment and to serve society by assuming active roles in CSR initiatives.
6. Human resources will be encouraged and assisted to develop their motivation and to adopt broader perspectives through self-development.

Human Resources Evaluation System

Our human resources evaluation system focuses on development, in the sense that it is intended to use evaluations to identify improvements employees must make to achieve their goals or to satisfy internal qualifications, as well as to decide how each employee is treated. In addition to our previous evaluator training program for new evaluators, in fiscal 2007 we began a management (HR evaluation) training program with the objective of improving evaluation and development skills and supporting evaluators in improving their management capabilities. As of the end of fiscal 2009, about 400 people have undergone this training.

Employment Opportunities for Persons with Disabilities

In fiscal 2009 our average employment ratio for persons with disabilities reached 1.88%, achieving the mandatory employment rate of 1.8% for three straight years. Unfortunately, however, the ratio fell to 1.71% for the reporting period ending June 2010. Nippo Onoda K.K. (one of our exceptional subsidiaries) produces groundcover that effectively improves scenery, lowers room temperatures and reduces carbon dioxide emissions. In September 2009, a local newspaper reported that people with disabilities working at the company had built a greenhouse for growing groundcover and were trying to create a business that would encompass operations from planting to shipping. The company plans to expand the employment of persons with disabilities by accepting three more people from the region and tripling the greenhouse area over the next two years.

Trends in Employment Ratio for Persons with Disabilities

(as of June 1 of each year)

<table>
<thead>
<tr>
<th>Year</th>
<th>Taiheiyo Cement</th>
<th>Private industry average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>0.92</td>
<td>1.02</td>
</tr>
<tr>
<td>2001</td>
<td>0.91</td>
<td>1.06</td>
</tr>
<tr>
<td>2002</td>
<td>0.79</td>
<td>1.03</td>
</tr>
<tr>
<td>2003</td>
<td>1.01</td>
<td>1.00</td>
</tr>
<tr>
<td>2004</td>
<td>1.05</td>
<td>1.04</td>
</tr>
<tr>
<td>2005</td>
<td>1.09</td>
<td>1.04</td>
</tr>
<tr>
<td>2006</td>
<td>1.14</td>
<td>1.08</td>
</tr>
<tr>
<td>2007</td>
<td>1.19</td>
<td>1.09</td>
</tr>
<tr>
<td>2008</td>
<td>1.22</td>
<td>1.08</td>
</tr>
<tr>
<td>2009</td>
<td>1.09</td>
<td>1.09</td>
</tr>
</tbody>
</table>

People working at Nippo Onoda K.K.
Employee-Friendly Workplaces

Commitment to Work-Life Balance
We are promoting work-life balance by, for example, allowing the use of accumulated paid leave for care of a family member. In fiscal 2009 we formulated a new action plan for reducing overtime and holiday work time. The number of men taking childcare leave, another goal of the action plan, is steadily increasing. We will advance an awareness campaign to promote the use of the program.

Result of the Action Plan Based on the Next Generation Promotion Support Measures Promotion Method
(Target period: March 31, 2011 from April 1, 2008)

<table>
<thead>
<tr>
<th></th>
<th>Target</th>
<th>Results for FY2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average overtime hours per month</td>
<td>No more than 15.5</td>
<td>12.65</td>
</tr>
<tr>
<td>Average proportion of paid vacation taken</td>
<td>At least 80%</td>
<td>69.40%</td>
</tr>
<tr>
<td>Childcare leave rate by women</td>
<td>At least 70%</td>
<td>100%</td>
</tr>
<tr>
<td>Number of men taking childcare leave</td>
<td>At least 1</td>
<td>2</td>
</tr>
</tbody>
</table>

Respect for Human Rights and Creating a Comfortable Working Environment
Our Standard of Conduct governs the actions of each employee. We strive to make the Standard of Conduct specific, with statements such as “We will respect human rights and will not discriminate on the basis of national origin, gender or other factors,” “We will create a harassment-free workplace” and “We will respect individuality, and communicate constructively and frankly.” We are committed to respecting the human rights of our employees and everyone involved in our business activities, and to creating a cheerful, pleasant and employee-friendly workplace. We have been continuing our efforts to raise awareness of human rights since 1981. In fiscal 2009, about 2,800 people underwent in-house training. We also continue to learn about human rights. As an example, about 230 people attended external seminars and the like. We conduct surveys of people undergoing training and use the results to identify our future training needs.

Main Internal Training Topics and Numbers of Attendees

<table>
<thead>
<tr>
<th>Main topics of in-house workshops in FY2009</th>
<th>Attendees (approximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace communication and human rights</td>
<td>1,240</td>
</tr>
<tr>
<td>History of human rights and modern issues</td>
<td>400</td>
</tr>
<tr>
<td>Introduction to human rights for newly hired employees (including social integration and antidiscrimination)</td>
<td>190</td>
</tr>
<tr>
<td>Top-management seminar (including group companies)</td>
<td>120</td>
</tr>
<tr>
<td>Human Rights Week workshop</td>
<td>160</td>
</tr>
</tbody>
</table>

Sexual Harassment Hotline
Counselors assigned at every business site and members of our Human Rights Committee promote awareness to prevent sexual harassment and respond to complaints toward creating a cheerful and pleasant workplace.

Mental Healthcare
We are committed to increasing our employees’ interest in their own mental well-being. We give all employees mental-health checkups and give workshops to improve the prevention of mental-health issues in accordance with the Industrial Safety and Health Act and the Ministry of Health, Labor and Welfare’s Mental Health Guideline.

We also provide free counseling through our mental-health support system that includes counseling contracted through the Taiheiyo Cement Health Insurance Society. The system is available to employees as well as their families and we are actively encouraging the use of the system.

Taking Childcare Leave
I used the childcare leave program with the desire to be with my child as much as possible and reduce the burden on my wife. During the leave I struggled to take care of my child at home. While I was not great at doing this job, I did do my best, encouraged by my wife’s gratitude. Although I was concerned this would inconvenience my coworkers, thanks to their kind support I was able to have a very gratifying childcare leave.

In charge of mining, Mining Department, Garo mine, Kamisato Plant

My wife delivered our child in a hospital near her parents’ house in Sapporo, 270 km away from our home. I subsequently drove there to pick up my wife and our newborn daughter. My wife said my being there helped a lot because there was so much to do. I am deeply grateful to my workplace for allowing me to rearrange my work shifts.

In charge of production, Production Section, Production Department, Kamisato Plant
Sound Labor-Management Relations
We hold labor-management consultations and briefing sessions as needed as forums for negotiation and opinion exchange between labor and management based on mutual trust and understanding. In fiscal 2009 we held 61 sessions encompassing conventional areas of negotiation, such as explanations of corporate performance, revisions to wages and bonuses, and amended systems and rules. Sessions also included discussions spanning a wide range of topics and those to improve communications between the company and the union. In addition, three specialized committees set up as advisory bodies for labor-management consultation provide opportunities for effective and sincere communication between labor and management.

Objectives of Specialized Committees

<table>
<thead>
<tr>
<th>Committee</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special committee on personnel and treatment of employees</td>
<td>Review and examine overall personnel and treatment of employees</td>
</tr>
<tr>
<td>Special committee on employment and employment formats</td>
<td>Examine the operation of personnel/labor management systems against the background of diversifying employment and employment status</td>
</tr>
<tr>
<td>Special committee on working hours</td>
<td>Examine problems concerning working hours and working hour management; respond to legal system related to working hours</td>
</tr>
</tbody>
</table>

Creating a Safe Workplace
We are aware that ensuring the safety, security and health of our employees and workers in contractors forms the foundation of our company, and we advance organized programs for safety, health and security.

Safety, Health and Security System
We have a Safety & Health Committee at each of our plants, quarries and branches, overseen by the Companywide Safety & Health Committee at our headquarters (chaired by the officer in charge of safety). The committees have representatives from both management and labor.

Safety, Health and Security System

Occupational Safety and Health Management System (OSHMS*)
We began running the OSHMS at the company in 2002 and have been running it at all cement plants and quarries since 2003.

* OSHMS: Occupational Safety and Health Management System
An activity to reduce the potential dangers of the workplace and promote comfortable workspaces by voluntarily practicing continuous, uninterrupted safety and health management as prescribed in the guidelines of the Ministry of Health, Labor and Welfare.

Safety & Health Policy
Our Safety & Health Policy is shown below. Our headquarters and business sites create and implement fiscal yearly health (security) and safety policies based on our company Safety & Health Policy.

Taiheiyo Cement Safety & Health Policy

1. Promote safety and health activities through cooperation between management and labor, with the aim of eliminating work-related accidents.
2. Ensure the safety and health of our employees and those of our affiliates by complying with safety and health-related laws and regulations, and in accordance with safety and health management regulations created by us, and safety and health regulations created by our business sites.
3. Strive to improve the level of safety and health by actively promoting the implementation and operation of an Occupational Safety and Health Management System, and continually ensuring the true safety of our equipment, providing education and training, and raising awareness.
4. Continually improve the working environment and work methods through the company-wide and business-site Safety & Health Committees, by applying technological progress and new knowledge and information about safety and health.
5. Ensure safety and health throughout the Taiheiyo Cement Group by advancing programs to eliminate work-related accidents under the leadership of the company-wide, business-site, group-company and affiliate Safety & Health Committees.

Building a Work-related Accident Database
We created a database from a technical report on past accidents involving work stoppage (about 1,200) for all group employees, as well as employees of partner companies (including temporary employees) and have been using the database since fiscal 2008. We identify the root causes of unsafe actions and equipment as well as prioritize countermeasures based on the “4 Ms” (men, machines, methods and management). We use this information to prevent the recurrence of similar accidents and develop safety training.
- **Plant Safety Patrol by Officers and Union Officials**

  Officers in charge of safety at Taiheiyo Cement and group companies along with union officials conducted a safety patrol. They observed a morning assembly, operating instructions, safety instructions, danger prediction activities and the actual operations of the local partner company. After completing their safety patrol, they coached employees of the plant and the partner company on all-hands safety efforts.

- **Hands-on Safety Training**

  To experience potential hidden dangers at work with the aim of increasing safety awareness, a total of 97 employees from 3 plants, including those of our group and partner companies, participated in safety training in April 2009, which included simulated accidents of being caught or sucked into equipment or involving working in high places and electrical work. We will continue to advance education and training activities, including hands-on safety training, with a focus on employees at our plants and partner companies.

- **Lost Time Frequency Rate**

  There were no accidents in fiscal 2009 involving lost employee workdays, although there were such accidents in partner companies involving temporary workers. The frequency rate is down to a record low of 0.46 as a result of safety efforts at plants. We will work to further reduce industrial accidents.

### Lost Time Frequency Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Taiheiyo Cement</th>
<th>Average of cement industry</th>
<th>Average of all industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1.95</td>
<td>2.01</td>
<td>1.75</td>
</tr>
<tr>
<td>2006</td>
<td>1.07</td>
<td>1.84</td>
<td>1.11</td>
</tr>
<tr>
<td>2007</td>
<td>1.05</td>
<td>1.07</td>
<td>0.99</td>
</tr>
<tr>
<td>2008</td>
<td>0.88</td>
<td>1.11</td>
<td>0.81</td>
</tr>
<tr>
<td>2009</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Safety Operation Officer Certification System**

  In fiscal 2007 we created a Safety Operation Officer Certification System as an independent company safety program. The purpose of the system is to reduce work-related accidents caused by human actions. Persons who have taken the requisite classes can become Safety Operation Officers. It is the system’s goal to enhance command and control as well as the abilities of work-group leaders.

  In addition to our employees, employees at our subcontractors are also able to take the course toward becoming certified as Safety Operation Officers after checking qualifications based on a tested understanding and self evaluation of skills. There are already over 6,000 people registered and working in safety operations.

- **Health Issues Caused by Asbestos**

  The status of health issues related to asbestos at Taiheiyo Cement is as follows: of former employees with certified work-related injury/illness, 31 have died and 12 are currently undergoing treatment (as of April 20, 2010).

  We also conduct continuing health examinations of employees who have been involved in the manufacture of products using asbestos, with a focus on retired plant workers. As of this time, no nearby residents have reported health problems, so we are not conducting health examinations for nearby residents.

  Please visit our Website for more information.

### Status of Health Issues Caused by Asbestos

<table>
<thead>
<tr>
<th>Year</th>
<th>Taiheiyo Cement</th>
<th>Average of cement industry</th>
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</tr>
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<tbody>
<tr>
<td>2005</td>
<td>1.75</td>
<td>1.01</td>
<td>1.05</td>
</tr>
<tr>
<td>2006</td>
<td>0.46</td>
<td>1.11</td>
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<td>0.81</td>
</tr>
<tr>
<td>2009</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Our Response to Asbestos

- In July 2005 we conducted a survey of the use of asbestos at all business sites and group companies, and informed them that the use of asbestos was prohibited.

- We swiftly dismantled and removed locations requiring urgent remedy, such as locations where there was a possibility of asbestos being dispersed. We subsequently took other necessary measures and completed our response by the end of fiscal 2006.

- We are successively replacing parts and materials containing asbestos with non-asbestos parts.

- When demolishing structures we conduct an investigation to determine whether the construction materials contain asbestos. If the presence of asbestos is confirmed, then we take measures in accordance with the relevant laws and regulations.
Communication with Communities

We are in the business of manufacturing cement, a business that most people are unfamiliar with. In our Business Principles we therefore pledge to communicate broadly with society in order to increase the public’s understanding of our company. We will continue to promote communication with our stakeholders through a wide range of opportunities.

Activities at Our Headquarters

- **Exhibiting at Fairs and Exhibitions**
  We actively participate in exhibitions, seeing them as great opportunities to broaden the understanding of our group’s businesses and products. In fiscal 2009 we participated in the following main exhibitions.

<table>
<thead>
<tr>
<th>Date</th>
<th>Exhibition</th>
<th>Exhibits</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 16–17</td>
<td>Kumagaya Eco Life Fair</td>
<td>Recycling programs at our Kumagaya plant and hands-on experience making &quot;eco&quot; planters</td>
</tr>
<tr>
<td>June 10–12</td>
<td>Image Sensing Show 2009</td>
<td>Image processing inspection device for organic EL panel by Pacific Systems Corporation</td>
</tr>
<tr>
<td>July 8–10</td>
<td>Concrete Techno Plaza 2009</td>
<td>Smart jet concrete, silica fume premixed cement, strain gage measuring system, etc.</td>
</tr>
<tr>
<td>July 31–August 2</td>
<td>Kankyo Hiroba Sapporo 2009</td>
<td>Project to recycle municipal incineration ash as cement material, automobile shredder dust treatment business, etc. (both in Hokkaido)</td>
</tr>
<tr>
<td>August 4</td>
<td>Military Engineer Techno-Fair</td>
<td>Ductal®</td>
</tr>
</tbody>
</table>

- **Simulated Experience Workshop for Welfare Volunteers**
  On December 3, 2009, we held a workshop for social service volunteers at our headquarters. After a lecture entitled “About volunteering” and the screening of a video, “Call to offer help,” by the Minato Council of Social Welfare, the audience of 45 participants was divided into three groups. Each group experienced either a simulated experience of advanced age, wearing an eye mask to simulate being blind and using a white cane, or being in a wheelchair. They also learned from visually impaired people who talked about their everyday challenges and how they felt about them. In addition, goods made in vocational support centers were sold.

- **Collecting Plastic Bottle Caps**
  Our headquarters set up a plastic bottle cap collection box in February 2010. A beverage handler takes the caps and uses them to support the delivery of vaccines in developing countries through NPOs.

Activities at Each Site

- **Community Briefings and Environmental Report Presentations**
  We hold briefings for members of the local community whenever we start a new business or change a quarrying zone. We also periodically report on the status of our acceptance of waste and by-products for recycling, emissions measurements and other information of community interest.
  Environmental Report Presentations have been held by the Iwate Prefecture Environmental Protection Liaison Council at our Ofunato plant since fiscal 2007. A total of 49 people participated in the presentation held on October 27, 2009.

- **Environmental Monitoring System**
  We ask members of the local communities living near our plants to act as environmental monitors, reporting information about the environment periodically and as needed. This enables us to quickly ascertain and act on information about the environment near our plants.

- **Worksite Tours**
  As a major local industry we give tours of our business sites (mainly our plants) to local residents, the families of our employees, government officials, people from industry and others, with a focus on schoolchildren and college students.
  Our Kamiiso plant and Garo quarry presented their cement production process and how they treat industrial waste to 22 participants at a citizens workshop organized by Hokuto City on October 7, 2009.
  Our Kansai Branch invited mainly employees and their families to a tour of the Osaka Service Station on April 4, 2009. They viewed the inside of the service station as well as a cement packing operation and cement tanker.
Support for Career Experience

Junior and senior high school students are the future of society. Our plants accept junior and senior high school students for school career-experience programs in order to teach the significance of working and to motivate them to think about their futures.

Our R&D Center provides internships to foreign university students each year via third-party institutions.

We also participate in the Training Programs for Educators at Private Companies organized by the Japan Institute for Social and Economic Affairs. These programs give schoolteachers first-hand experience with corporate activities, with the goal of having the teachers communicate what they learn and experience to students through their classes.

Contributing to Local Disaster Prevention

Each of our business sites contributes to local disaster prevention through, for example, participation in local volunteer fire departments.

Two teams from the private fire brigade of our Kumagaya plant participated in the First-aid Firefighting Field Training run by the Kumagaya Fire Department and won a prize for their performance.

Our Fujiwara plant participates in community activities such as crime-prevention campaigns as well as the identification of rescue routes in mountain-rescue training at Mount Fujiwara.

Opening Company Facilities and Holding Events for the Community

Our plants offer company facilities as venues for community interaction. In addition, they hold or actively participate in community events to support local revitalization.

The Ofunato plant, which allows the community to use its baseball field, hosted the 41st Taiheiyo Cement’s Flag Youth Baseball Tournament from April 25 to 29, 2009. A total of ten junior high schools in the city competed.

Our Fujiwara plant allows public use of its gymnasium and gate ball court; it also hosts women’s volleyball and gate ball competitions, with winners receiving the Plant Director’s Cup.

The Kumagaya plant provides unused land as a training site for an off-road motorcycle squad of the Saitama Prefectural Police Traffic Mobile Unit.

Community Cleanup Activities

Employees at each of our business sites regularly clean, pull weeds and carry out other beautification efforts within their local communities. We also participate actively in cleanups organized by local governments and other organizations.

Our Kumagaya plant has been cleaning up roads around the plant every month since January 2003. These efforts were publicly recognized and the plant was registered as a 2009 Sai-no-Kuni Road Support Organization.

Employees of our Tosa plant and partner companies, led by members of the plant track and field team, have regularly cleaned the area around the plant. Eight cleanups were conducted in fiscal 2009.

A total of 22 employees from our Oita plant along with 160 students and PTA members from the nearby Genyou Junior High School once again conducted a community cleanup in fiscal 2009.

Donation of a Former Freight Line Site

Our Saitama plant donated a former freight line site between the plant and JR Komagawa Station (7,465 m²) to Hidaka City. The freight line had been used to transport material, fuel and products for 44 years, from 1955 to 1999.

The donated site will be used to create a walkway for about 200 students to get to and from their elementary and junior high schools.
The word Taiheiyo means “Pacific Ocean” in Japanese and the Taiheiyo Cement Group has business interests quite literally all around the Pacific. In addition to the four communities around our plants showcased here, we regularly carry out activities that are environmentally friendly and contribute to local communities in our respective areas as well.

**Activities at Overseas Sites**

**United States**

CalPortland carries out activities based on a commitment to continuing to coexist with nature and society.

- **Environmental Preservation at Former Quarry Sites**
  
  The company is committed to environmental preservation, including greening and backfilling at former quarry sites. One of our former quarry sites is now used by local residents as a golf country club (owned by a local government in the State of Washington). We will continue taking responsibility for preserving the environment of our former quarry sites.

- **Contributing to Environmental Conservation through the Efficient Use of Energy**
  
  The ENERGY STAR® Awards are given by the US Environmental Protection Agency (EPA) to businesses and organizations that have contributed to environmental conservation by improving energy efficiency. We have won the award six years consecutively (only three companies altogether across the United States have won the award six years in a row). The company’s Mojave plant uses wind-powered electricity for a portion of its electricity demand, resulting in the plant being ranked among the top five in the green electricity user list published by EPA (including more than 1,100 organizations). Through these efforts to more efficiently use energy, the company has won public recognition. We will continue to exercise leadership in environmental conservation.

- **Participating in Operation We Love Our Military**
  
  This year, we again participated in the “Operation We Love Our Military” event in DuPont, Washington, where we operate a large-scale quarry. Making good use of opportunities for our employees to interact with local residents, we operate our business while remaining closely tied to the community.

**Philippines**

Taiheiyo Cement Philippines initiates and maintains various regional contribution activities as a company that is friendly to the environment and benefits the community.

- **Providing Free Healthcare Service**
  
  In fiscal 2009, we provided free healthcare service in three districts, Magsico, Tabionan, and Tananas (in June, August and December respectively), near the company’s clay sources. As many as 700 residents used the service in each district, partly because they have little opportunity to visit hospitals due to poverty and poor access to transportation.

- **Feeding Program**
  
  We provided food to 159 malnourished preschool children in five districts, Pantalan, Cavite Bataan, North Poblacion, Tananas, and Iraya, from January to March 2010. The project, which started in June 2005, has provided well-balanced food for 78 days, from Monday through Saturday, for about 500 children including 159 this year. Ninety-five percent of the children who fully participated in this program reached normal weight. Another pillar of this program is food education for mothers. We want mothers who prepare food to have correct nutrition information so that they can improve the health of their infants as well as their entire families.

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Vietnam

Nghi Son Cement provides a steady supply of high-quality cement as its business as well as many social action programs to grow together with the local communities near its plant and branches in Hanoi and Ho Chi Minh City.

- **Supporting a Better Quality of Life**
  We are committed to improving the lives of people in their communities. Our efforts include donating cement for public facilities developed by local governments around the Nghi Son plant, constructing hospitals in underserved communities, providing scholarships and writing materials to vocational schools in mountainous areas where opportunity for education is scarce, and assisting victims of typhoons or floods.

- **Supporting Human Resource Development**
  Vietnam continues to grow and for four years we have been providing a scholarship program for studying the Japanese language at Hanoi National University to support students who represent the country’s future. In Ho Chi Minh City we opened a free concrete-technology school and are focusing on developing Vietnamese engineers to support safe and secure urban development.

China

In China we are committed to operating businesses rooted in local communities with a focus on our three joint ventures. We continue day-to-day efforts to contribute to our communities and activities with consideration for the environment.

- **Initiatives by Dalian Onoda Cement Co., Ltd.**
  A waste incineration plant is scheduled to be constructed in Dalian. A project through which fly ash generated at the incineration plant is used as material for cement was adopted at the Fourth Japan-China Energy Conservation Forum, and we are proceeding toward commercialization of this project. To further reduce the environmental impact on the area surrounding our plant, we replaced our existing electric dust collector with a bag filter that has high dust collecting capability. We also dispatched persons in charge to Japan for training to promote the effective utilization of waste in Dalian. As a measure to beautify the environment at our plant, we introduced sweeper trucks and work continually to green the plant grounds.

- **Initiatives by Qinhuangdao Asano Cement Co., Ltd.**
  As part of our energy conservation and environmental measures, we are constructing new waste heat power generation (cogeneration) equipment, with construction scheduled to be completed in March 2011. Upon completion, the cogeneration equipment will be able to supply about 35% of the electricity consumed at our plant. We are also actively utilizing recycled resources, such as by starting the production of PF cement in 2009 as a new type of cement (40% fly ash) and accepting glass dust generated by a nearby company.

- **Initiatives by Jiangnan-Onoda Cement Co., Ltd.**
  Cogeneration equipment completed in May 2009 is performing well, exceeding the planned output of 7,200 kW. The introduction of this energy-saving technology is expected to contribute to sustainable economic development by reducing greenhouse gas emissions and other environmental impacts.
Sixth Stakeholder Dialog

**CSR Required at the Time of Business Structural Reform**

We are engaged in business structural reform to re-examine our business model. With opinion leaders we have discussed the nature of CSR needed during this time and have explored its essential aspects. The content of these discussions was posted on our intranet and opinions from employees were solicited. Representative comments can be found on page 60. We will use the results of this dialog to improve our future CSR activities.

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**Vision is needed, especially in hard times**

- **Chair:**
  Taiheiyo Cement is now conducting a major structural reform of its business. What are the company's current challenges?

- **Murata:**
  Our core business is cement. With no sign of relief from falling domestic demand, we are very concerned about how to boost morale and demonstrate vision.

- **Kozuma:**
  I think top management should not comment that our market share will remain the same, that the situation will no longer change, or on not seeing the impact of investment. These types of comments from top management stop employees from seeing a vision of the company's future. For the sake of boosting morale, top management must set a vision, explore strategies for growth and new directions for dominating the market in the next decade, and direct funding toward realizing these goals.

- **Higuchi:**
  As the focus of my research is organizational misconduct, I have looked into various situations. In reviewing past experience, we can observe many incidents of misconduct occurring under circumstances like this. Although there may be several ways to prevent misconduct, I think it is significantly helpful to express the prospects for a bright future after weathering the storm.

- **Kozuma:**
  When recession hit the steel industry, I spoke with one of my former students in the industry and was surprised to hear that so many tasks were being handled in house. A large company has diverse talents, and it is important to be conscious of using these talents for business. I think your company is rich in human resources. However, the organizational climate seems to be stopping good people with business vision from standing out. Strategies such as cross-generational conversations may be useful.

- **Kushimoto:**
  Sumitomo Wiring Systems manufactures wiring harnesses for automobiles. Our plant operations include many labor-intensive manual tasks. Born in a rural area of Mie Prefecture, our company has been under pressure to consider start-to-finish production abroad from the perspectives of overseas car company strategies, production costs and quality assurance, and we have conducted structural reforms. We were fortunate, however, to have started our reform efforts while some potential remained in the market and recognized our future would be shaky without overseas operations. In the course of downscaling our domestic operations, we have developed programs such as “Pika Pika” activities and Skill Olympic Games that provide emotional support for employees of domestic plants, the mother plants for overseas technology transfer.

* Sumitomo Wiring Systems, Ltd. operates “Pika Pika” activities to ensure shared SS activities (Sort, Set up orders, Spick and Span, Stick to discipline) across the world and Skill Olympic Games to honor the most skilled workers each year.
Higuchi:  
You can change organizational culture. In the case of large organizations, don’t try to change the entire company at once. I think the best strategy is to create a lead group that exemplifies the ideal organizational culture. The growth of this group will encourage others to ultimately embody and further spread this culture.

CSR is a Contact Point for a Company to Adapt to Society

Chair:  
You say we need vision, but what should we do specifically to present a vision?

Nakamura:  
We plan to create the foundation for the new Taiheiyo Cement in one year. Also, I think the timing is good for re-examining how we can advance CSR management in the current situation.

Higuchi:  
I advise you to follow your current mission. Nonetheless, I am not able to identify a practical image in your Long-term CSR Vision (see p. 14). You cannot get your message across to employees if so-called middle managers in charge at the worksites cannot see concrete images of what they should do from what you are saying. It may be important to use language that more clearly communicates your intention rather than using expressions with implied meanings.  
For example, one company is committed to preventing accidents and strongly emphasizes its inspection division, which reviews worksites. The division’s office is on the floor above the officers. This communicates an easy-to-understand message.

Kushimoto:  
Since the main actors are employees, it may be necessary to communicate the company’s intentions for employees in easier-to-understand formats, language and actions.

Ensuring that everyone is well aware of the message safety-first requires more than having safety officers fly around the world to check safety covers and limit switches. We maintain an award system for group companies worldwide to clearly communicate our safety-first stance; no award is ever given to departments with poor safety records, regardless of otherwise excellent performance, productivity or quality.

We also conduct the “Pika Pika” activities mentioned above in China and India. At first, the campaign may have sounded foolish to some, and we were not sure it would be as effective in cultures where picking up litter is considered someone else’s job. Nevertheless, we have taken this campaign very seriously, and employees of overseas affiliates recognize this leads to producing good products. If we are able to get the message across to employees through this kind of clear action, we can respond to changing demand in a way that does not lower motivation.

Kozuma:  
Basically, the central issue of CSR is finding ways to develop it for the future. When we look at the company’s future, we can see every business idea in the light of CSR. Since CSR serves as a contact point for a company to adapt to society, we can see indicators of social change in it. For example, we cannot expect to continue developing business without addressing environmental and employment issues.
Chair:

We should respond to climate change as part of our CSR. We can see a new business direction in this response, wouldn’t you agree?

Kozuma:

Given intensifying resource constraints, what we will need and what we should do 10 to 20 years from now will determine the direction of our business. Various businesses will emerge to comply with regulations, and innovation is required to nurture these businesses. This provides us with huge opportunities.

I think steel, for example, now has become an industry that will lead the next generation. Blast furnaces were once believed to represent a mature technology with little development potential, but this is no longer true. Outstanding progress in technical innovation has lifted Japan’s low-carbon production technology to the highest level in the world. With more and more regulations focused on controlling climate change, the time will surely come when this technology will make a large difference.

Climate change must be considered in product development. Once a low-carbon product market emerges in response to tougher climate regulations, these products will become revenue streams while at the same time significantly contributing to society. Then the time will come for resource-saving products. I think you need a strategy for doubling your current environment business every year.

Murata:

To seize this opportunity we are considering the creation of a business that combines cement production and waste treatment technologies based on our environmental technology. We want to do this on a large scale in China, for example, but understand that it will not be so easy to succeed on our own. We hope to pursue this business with the support of the Japanese government, and we will start it under the right conditions, such as through an agreement with the Chinese government, to protect technical know-how and so forth.

Higuchi:

Many companies are doing this without having to depend on the government. You should consider using private networks as well.

Kozuma:

The worse it gets, the better it is to be aggressive. You should actively invest while your business maintains a certain level of profitability abroad.

As it now stands, I think it would be very difficult to restore an organization in balanced contraction. We look to CSR to discern the direction of future growth and the means for achieving it.

I think a little change could dramatically transform your company.

Voice of Employees

- We cannot make a beginning for new growth by merely blaming the downturn on external factors. The starting point for boosting morale is to present a general overview of the past ten years (successes and failures) and clear goals and strategies for the next ten years along with a sense of direction for what employees should do next.
- I agree with the statement, “Vision is needed, especially in hard times.” If employees have a clear vision that serves as their dream, they will accept the burden.
- The main actors are employees. We need to communicate using easy-to-understand formats, language and actions. I fully agree with this.
- There are too many abstractions, such as “social contribution” and “utilization of the group’s bonding power.” I think the development of a visible, concrete growth strategy, such as constructing a clean energy power plant at each plant, would boost morale.
- If officers in charge would visit their departments more often and talk with people, this alone would change our mindset in a positive way.
- Placing emphasis on every policy has made us lose focus. Particularly in times of recession, everything must be cut back, and I feel as if we have wrung the water out of a rug and are now putting the rug in a dryer. With this tension and fatigue likely to continue for quite a while, I feel it would be difficult to maintain our focus without a clear guiding principle that serves as our dream.
- We must transform our organizational climate so that we “walk the talk.” I want to believe that every employee has untapped talents.

Comments on Stakeholder Dialog

Hiroto Murata
Director, Managing Executive Officer
(Current Director and senior Managing Executive Officer)

We deeply appreciate the suggestion that when we look at the company’s future, we can find everything in CSR. We should manage the company with this in mind and present to stakeholders, in a clear and comprehensive manner, the new Taiheiyo Cement as a company that further contributes to creating a recycling-based low-carbon society.

Setsuo Nakamura
Director, Managing Executive Officer (Current Full-time Auditor)

I recognized once again that CSR is based on communication. We will promote communication using easy-to-understand formats, language and actions to reform our organizational climate so that each individual can fully exercise their abilities and discover challenge and satisfaction in their job.
Third-Party Opinion

Genuine innovation beyond technical innovation means unprecedented structural reform, enhancing various company values and techniques, and making them serve society in different forms.

This requirement is essential for surviving through a sustainability revolution and continuing to be a useful organization for society. I pay my respects to the resolve of top management. Deploying business, including technology transfer, in emerging countries is fundamental for the continued existence of humankind from a global perspective and these nations are major battlefields of BOP business.

I am helping the Chinese Government develop environmental reporting guidelines. Japan is also supporting the construction of a management system for prevention of industry pollution. I can sense the excitement and enthusiasm of China for raising the level of environmental efforts to that of advanced countries by 2015, the last year of its next five-year plan. As it is inevitable that other emerging countries will follow the example, there is not only substantial room but great expectation for your success as well. Moreover, I think that while Japanese companies most often entered emerging countries separately, it will now be important to form a consortium in such areas as infrastructure development.

Respecting cultural diversity is absolutely required for interacting with stakeholders, especially employees and local communities abroad. It has now been confirmed that ISO 26000: SR (social responsibility) will be published by the end of this year. Since emerging nations are moving toward extensively using this standard, it must be studied and incorporated into CSR initiatives. Human rights are also emphasized in ISO 26000, and the OECD plans to review its Guidelines for Multinational Enterprises to strengthen human-rights-related areas.

You have positioned this year as the time of foundation development for structural reform “to solidify our position as a top-class manufacturer by leveraging our technological and creative capabilities.” As I commented last year, realizing this objective will require backcasting from very long-term visions and goals. I believe a very long-term vision will only be useful when CSR codes and a CSR long-term vision are at its core. Little time is left before the end of 2010, when your plan is to be finalized. I expect you to call upon young people and exert your best efforts.

Collaboration with external organizations such as the WBCSD-CSI is wonderful, but these efforts should be consistent with the CDSB (Climate Disclosure Standard Board) template, which CDSB is involved in, since the template is expected to be made public this fall.

It is very good that you have established a company-wide EMS. I expect further enhancement in internal audits and the proactive application of the EMS. Although you are working on biodiversity in various ways, as a resources development company, you should consider establishing a basic biodiversity policy.

Finally, the report includes more Plan/Do than Check/Act information, so I expect to see more of the latter. You are making some effort to provide quantitative information, but I expect even more extensive use of such data as a critically important component for visualization. You are also providing some explanation of technical terms; however, I recommend further effort here as well in response to expanding readership.

Reaction to Third-Party Opinion

This year once again, we thank Mr. Goto for his highly thought-provoking opinions.

It is encouraging that Mr. Goto valued our resolution to implement "unprecedented structural reform" toward creating new added value as well as our policy for contributing worldwide through our environmental technologies. We appreciate his suggestion that there is a business opportunity in entering emerging countries and that forming a consortium for doing this is important. As regards backcasting from very long-term visions and goals, while we may not be able to establish a spectacular vision and get things moving in a smooth way, we intend to define our goals, as unrefined as they may appear, as well as the timeline and roadmap for achieving them. This will be done with the full intention of steadfastly moving forward with integrity.

We also thank Mr. Goto for raising other key considerations, including ISO 26000: SR, CDSB, and a basic biodiversity policy. These will serve as a useful reference for promoting CSR in the future.

I look forward to the frank opinions of the readers of this report.
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