TAIHEIYO CEMENT REPORT 2020

TAIHEIYO CEMENT CORPORATION

GRI102-16

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.

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Editorial Policy

We started publishing our integrated report, the Taiheiyo Cement Report, in 2020 as our annual report. It replaces the CSR and annual reports we had published over the years.

In the report, we convey to our stakeholders how we conduct activities to address social issues and sustainably increase corporate value. We aim to deepen mutual understanding through constructive dialogue and further evolve management while raising the level of disclosure.

Environment Social Governance
Guidance for Collaborative Value Creation

Guidelines Used for Reference

The International Integrated Reporting Framework (IIRC)
Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation (Ministry of Economy, Trade and Industry)
GRI Sustainability Reporting Standards (GRI Standards) 2016/2018
Environmental Reporting Guidelines 2018 Edition (Ministry of the Environment)
Environmental Accounting Guidelines 2005 Edition (Ministry of the Environment)
ISO 30414

Publication Dates

December 2020 (previous report: October 2019, next report: October 2021)

Reporting in Accordance with the GRI Standards

This report is prepared in accordance with the core option of the GRI Standards. The GRI Content index is available on our website

Clarifying Efforts to Achieve SDGs

We analyzed our business risks and opportunities, clarified their relevance to the Sustainable Development Goals (SDGs) and displayed icons representing the relevant SDGs on each page of our activities. We will seek to contribute to achieving the SDGs through the group's business activities.

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.

Under the Mission of the Taiheiyo Cement Group, which was established in June 2002, the company pledges to focus its management on the triple bottom line, the economy, the environment and society, to realize sustainable development, a shared principle of the GCCA and WBCSD of which we are a member. In December 2002 we formulated the Business Principles of Taiheiyo Cement, which comprise nine principles for realizing the Mission of the Taiheiyo Cement Group, and are striving to implement them.

Scope and Boundaries of this Report

Reporting Period

April 1, 2019 to March 31, 2020
Where information about events having occurred outside this period are included in the report, it is clearly stated.

In this report, FY means fiscal years shown are as of end of March in the year indicated.

Boundary of Reporting Organizations

The report covers Taiheiyo Cement Corporation (non-consolidated) and includes our group companies. "The company" refers to Taiheiyo Cement Corporation (non-consolidated); when information pertains to one of our group companies, the group company's name is explicitly stated.

Boundary of Reporting Organizations by Quantitative Data

Quantitative data are aggregated on a consolidated basis and under the following three categories. An icon representing the relevant aggregation scope is associated with data for categories 1 and 2.

Category 1 Non-consolidated
Taiheiyo Cement Corporation (non-consolidated)

Category 2 GCCA
Data collected for reporting of GCCA* KPI. Organizations covered are listed on pages 06–07.

Category 3 (others)

- Material Balance of Business Activities (pages 74-75) and Volume of Waste to Landfill (page 71): organizations covered are listed on page 75
- Number of Fatalities (page 09) and the Number of Accidents Registered in the Work-related Accident Database / Number of Work-related Accidents that Occurred / Breakdown of Accidents by Type (page 87): employees of the company, group companies (including overseas) and our contractors

*Global Cement and Concrete Association

Contact Information

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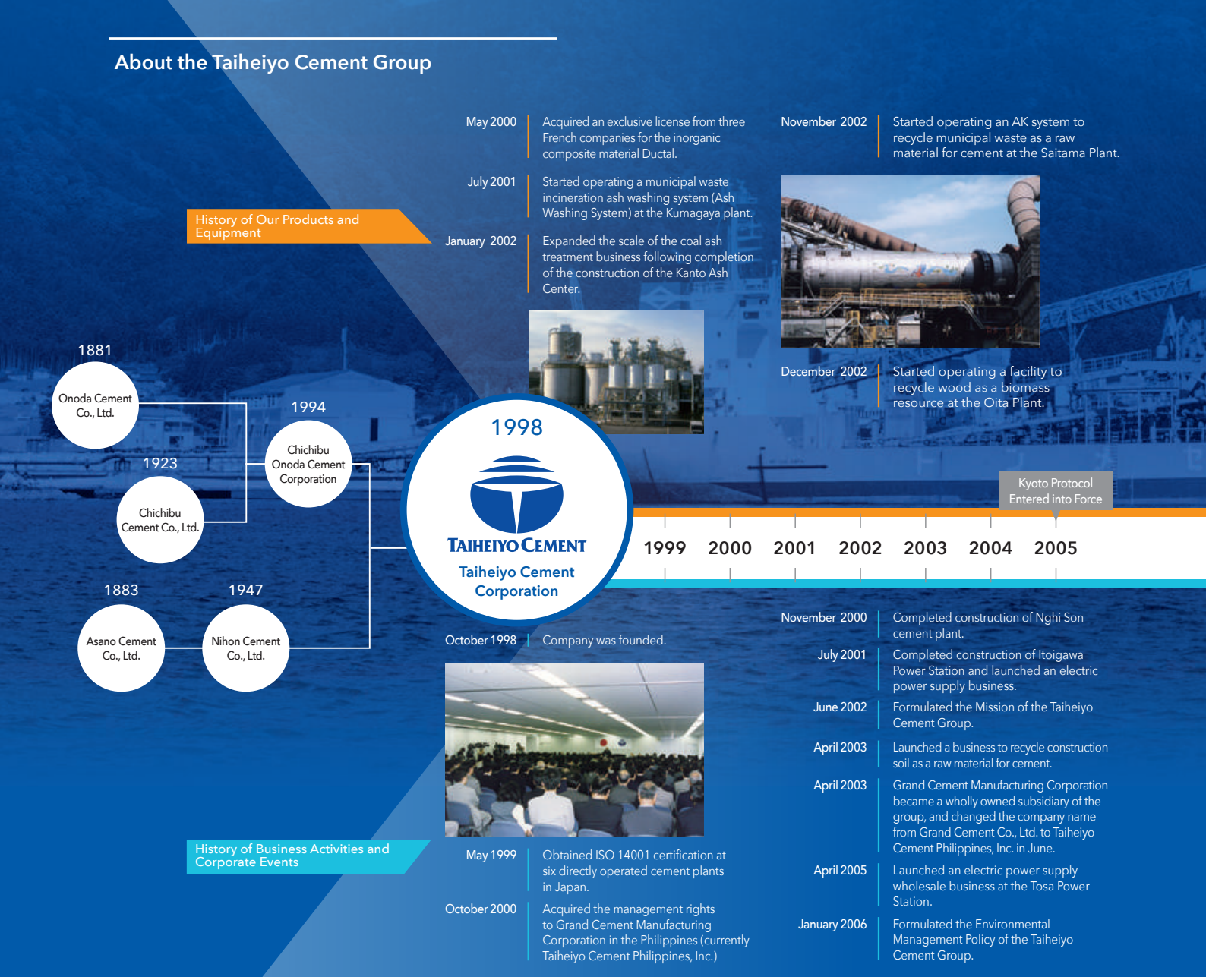
Disclaimer Regarding Forward-looking Statements

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.



History of Our Products and Equipment

May 2000 | Acquired an exclusive license from three French companies for the inorganic composite material Ductal.

July 2001 | Started operating a municipal waste incineration ash washing system (Ash Washing System) at the Kumagaya plant.

January 2002 | Expanded the scale of the coal ash treatment business following completion of the construction of the Kanto Ash Center.

November 2002 | Started operating an AK system to recycle municipal waste as a raw material for cement at the Saitama Plant.

December 2002 | Started operating a facility to recycle wood as a biomass resource at the Oita Plant.

October 1998 | Company was founded.

History of Business Activities and Corporate Events

May 1999 | Obtained ISO 14001 certification at six directly operated cement plants in Japan.

October 2000 | Acquired the management rights to Grand Cement Manufacturing Corporation in the Philippines (currently Taiheiyo Cement Philippines, Inc.)

November 2000 | Completed construction of Nghi Son cement plant.

July 2001 | Completed construction of Itoigawa Power Station and launched an electric power supply business.

June 2002 | Formulated the Mission of the Taiheiyo Cement Group.

April 2003 | Launched a business to recycle construction soil as a raw material for cement.

April 2003 | Grand Cement Manufacturing Corporation became a wholly owned subsidiary of the group, and changed the company name from Grand Cement Co., Ltd. to Taiheiyo Cement Philippines, Inc. in June.

April 2005 | Launched an electric power supply wholesale business at the Tosa Power Station.

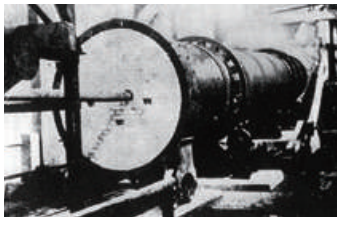
January 2006 | Formulated the Environmental Management Policy of the Taiheiyo Cement Group.

History of the Taiheiyo Cement Group

Nascent Period of Cement Production in Japan

In 1873 the Ministry of Finance constructed a cement production works in Fukagawa, Tokyo. Two years later the works successfully produced and launched sales of domestic cement comparable in quality to foreign products. Following this, Asano Cement Co., Ltd., predecessor of Nihon Cement Co., Ltd., Onoda Cement Co., Ltd. and Chichibu Cement Co., Ltd., which merged into Chichibu Onoda Cement Corporation, were founded and supported the modernization of Japan.

Cement plant in Fukagawa, Tokyo



Japan's first rotary kiln (DB kiln)

Foundation of Taiheiyo Cement

In 1998 Taiheiyo Cement Corporation was founded through the merger of Chichibu Onoda Cement Corporation and Nihon Cement Co., Ltd. The company supplied cement for national construction projects including Kansai International Airport and Central Japan International Airport. In 2000 we also completed the construction the Nghi Son cement plant in Vietnam, and then in 2003 converted Taiheiyo Cement Philippines, Inc. into a wholly owned subsidiary, further expanding the group's global network.

July 2006 Developed Silica Fume Premix Cement for ultra-high-strength concrete.

August 2007 Commenced selling DENITE, a heavy metal immobilizer.

December 2007 Ductal was used in the pier slabs of Haneda Airport Runway D.

November 2010 Launched a phosphor material, ChiccaLight, for LEDs.

March 2011 Suspended operations at the Ofunato Plant due to damage from the Great East Japan Earthquake.

June 2012 Resumed full operations at the Ofunato Plant.

August 2014 Harumi Onoda Remicon Co., Ltd. completed construction of an environmentally sound (indoor) plant.

May 2018 Water purification material Ceraclean obtained ETV mark certification from the Ministry of the Environment.

May 2019 Developed AI technology for predicting concrete slump.

December 2019 Started operating a municipal waste incineration bottom ash washing system at the Kumagaya Plant.

January 2020 Started commercial operations of a biomass power station at the Ofunato Plant.

Global Financial Crisis

Great East Japan Earthquake

COVID-19 Pandemic

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

October 2008 Marked the 10th anniversary of the company.

April 2009 Registered company-wide ISO 14001 integrated certification at six directly operated plants.

March 2010 Announced business restructuring for the group.

April 2010 Started operating the second production line of Nghi Son Cement Corporation.

July 2013 Their Majesties the Emperor and Empress visited the Ofunato Plant.

May 2015 Formulated the CSR Objectives for 2025.

June 2015 Acquired the Oro Grande plant (California, U.S.)

May 2018 Jointly established the Global Cement and Concrete Association (GCCA) with the world's leading cement companies.

October 2018 Marked the 20th anniversary of the company.

June 2019 Supported the Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

July 2019 Formulated the outline of the Framework for Our Long-term Vision of Greenhouse Gas Emissions Reduction toward 2050 and published specific measures in March 2020.

Taiheiyo Cement Corporation was founded in October 1998 through the merger of Chichibu Onoda Cement Corporation and Nihon Cement Co., Ltd., both of which had operated for over 100 years. The Taiheiyo Cement Group continues to support infrastructure development by supplying high quality cement and construction materials and applying advanced technologies at nine cement plants in Japan and nine in the Pacific Rim region, including in the U.S., China and Southeast Asia. We will continue to strive to create a sustainable society by demonstrating the group's overall capabilities.

Commitment to Environmental Issues

In 2006, in response to the Kyoto Protocol which had come into effect the previous year, we formulated the Taiheiyo Cement Environmental Management Policy, declaring an active commitment to environmental issues as key management challenges. In 2007 we launched The Taiheiyo brand cement concrete project and started activities for improving the value of the group's technological strengths and solutions.

Period of Economic Downturn, Earthquake and Adversity

The group marked its 10th anniversary amid a serious economic downturn in the wake of the 2008 global financial crisis. In 2010 we implemented business restructuring and in 2011 the Great East Japan Earthquake struck, hitting the Ofunato Plant and eight service stations in the Tohoku region, and forcing all of them to suspend operations. Our financial structure was bolstered through an increase in capital and we were able to navigate the adversity.

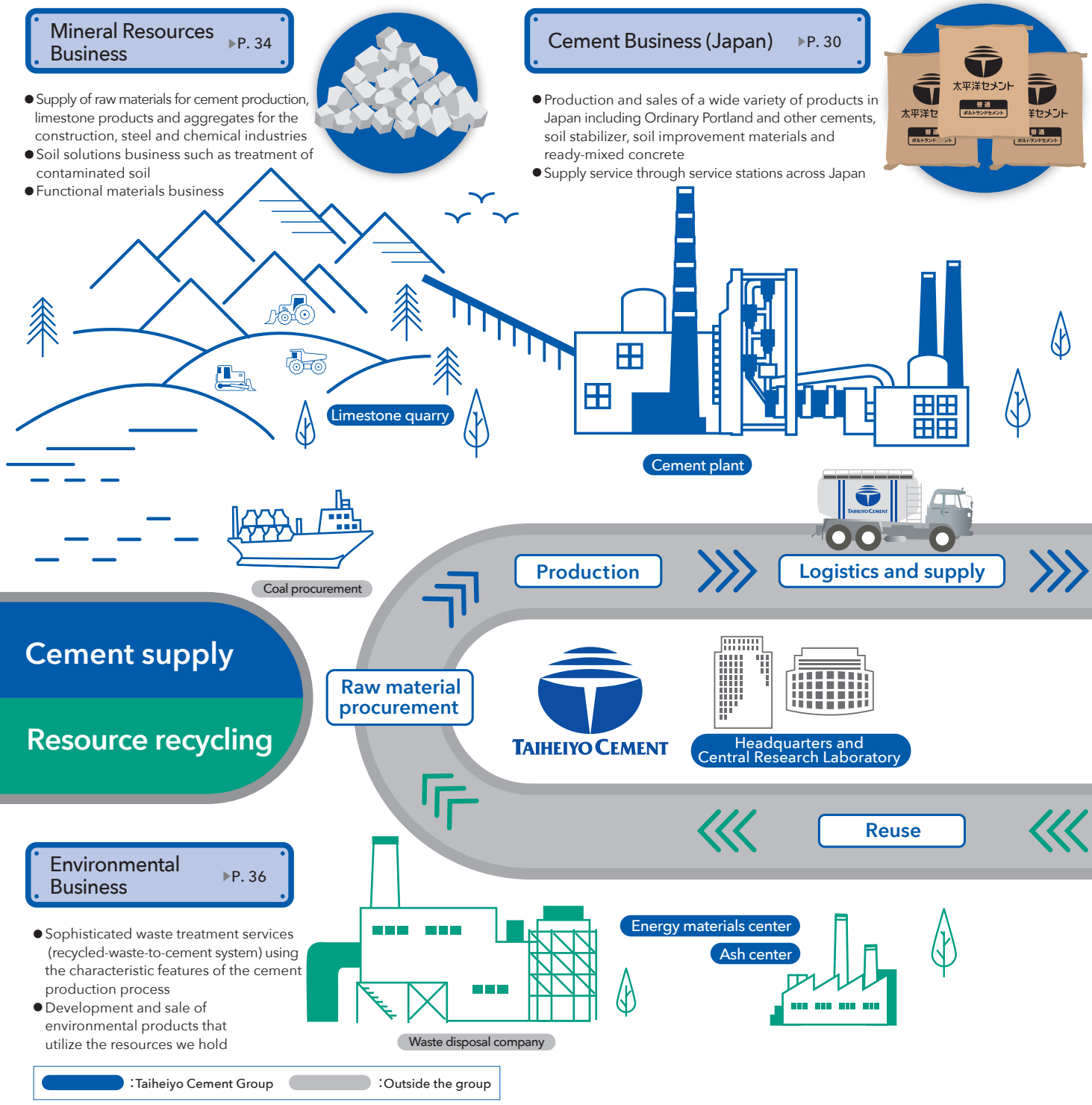
Making Progress by Fully Deploying Our Capabilities

The Ofunato Plant fully resumed operations in 2012 and ensured the stable supply of cement used in disaster restoration work while also treating disaster waste. Capitalizing on those experiences, we have engaged in the treatment of disaster waste generated by earthquakes and typhoons. To achieve continued growth we will contribute to social infrastructure development by providing solutions as pledged in the Group mission.

Business Operations of the Taiheiyo Cement Group

GRI102-2, 9

The cement industry has two major social roles. One is to ensure a stable supply of base materials for building social infrastructure, and the other is to take advantage of cement production technology to encourage the circulation of resources in society through the safe recycling of wastes and by-products as alternative raw materials and fuels for cement. The social value Taiheiyo Cement Group seeks to create under its growth strategy calls for performing these two social functions in the Pacific Rim region, providing a sense of safety and security, and thereby contributing to sustainable development.



Cement Business (Overseas) ▸P. 32

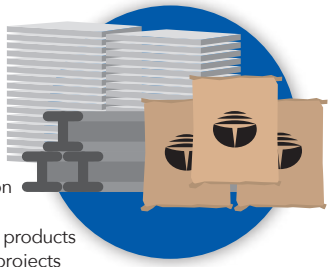
- Cement, ready-mixed concrete and aggregates business around the Pacific Rim
- Solutions for saving energy and reducing environmental impact that incorporate our cement production technologies

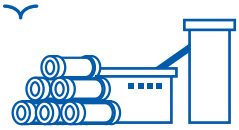
Other Business

- Real estate business
- Information processing business
- Transportation and warehousing business
- Engineering business
- Electric power supply business

Construction Materials Business ▸P. 38

- Manufacture and sales of a wide variety of construction materials
- Manufacture and sales of cement-related and concrete products
- Civil engineering work such as ground improvement projects
- Diagnostic and repair services for existing concrete structures

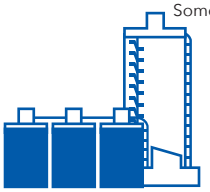




Concrete products manufacturing plant

Some plants operated by the group

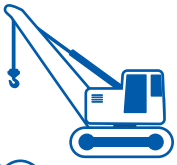
Construction site

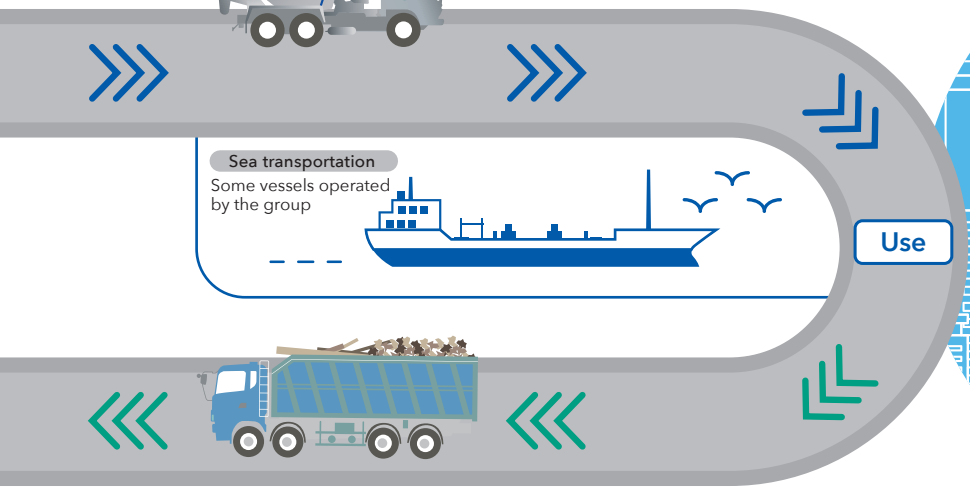


Service station

Ready-mixed concrete plant

Some plants operated by the group





Sea transportation

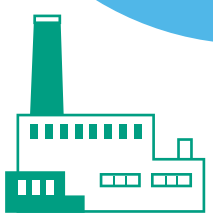
Some vessels operated by the group

Use

Power plant

Steel mill

Water supply and drainage treatment plant



Waste incineration plant

At a Glance

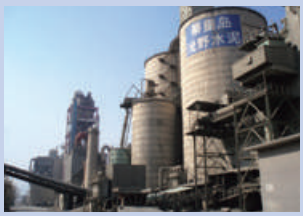
GRI102-4, 6, 7, 8, 45

- ● Holding company
- ◆ Cement plant*
- ◇ Clinker grinding plant*
- ▲ Representative office
- △ Distribution terminal

*Business locations where data for GCCA KPIs are collected (FY2020)

Dalian Onoda Cement Co., Ltd.
(China Dalian)

Jiangnan-Onoda Cement Co., Ltd.
(China Nanjing)



Qinhuandao Asano Cement Co., Ltd.
(China Qinhuandao)

Qinhuangdao Asano Cement Co., Ltd. was removed from the Group in September 2020 as a result of transferring all of its equity interests.

9.9%

Other countries: Net sales (consolidated, as of March 31, 2020)

87.1 billion yen

16.5%

Other countries: Number of employees (consolidated, as of March 31, 2020)

2,171

Male 1,887
Female 284

Nghi Son Cement Corporation
(Vietnam Nghi Son)

Taiheiyo Cement Philippines, Inc.
(Philippines Cebu)

PNG-Taiheiyo Cement Limited
(Papua New Guinea Lae)

Taiheiyo Cement Corporation
Kamiiso Plant

Taiheiyo Cement Corporation
Ofunato Plant

Taiheiyo Cement Corporation
Kumagaya Plant

Taiheiyo Cement Corporation
Saitama Plant

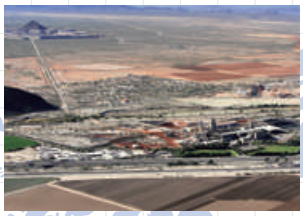
Taiheiyo Cement Corporation
Fujiwara Plant

Taiheiyo Cement Corporation
Oita Plant

DC Co., Ltd.

CalPortland Company, Mojave Cement Plant (U.S.A. Mojave)

CalPortland Company, Oro Grande Cement Plant (U.S.A. Oro Grande)



CalPortland Company, Rillito Cement Plant (U.S.A. Rillito)

16.3%

U.S.A.: Net sales (consolidated, FY2020)

143.7 billion yen

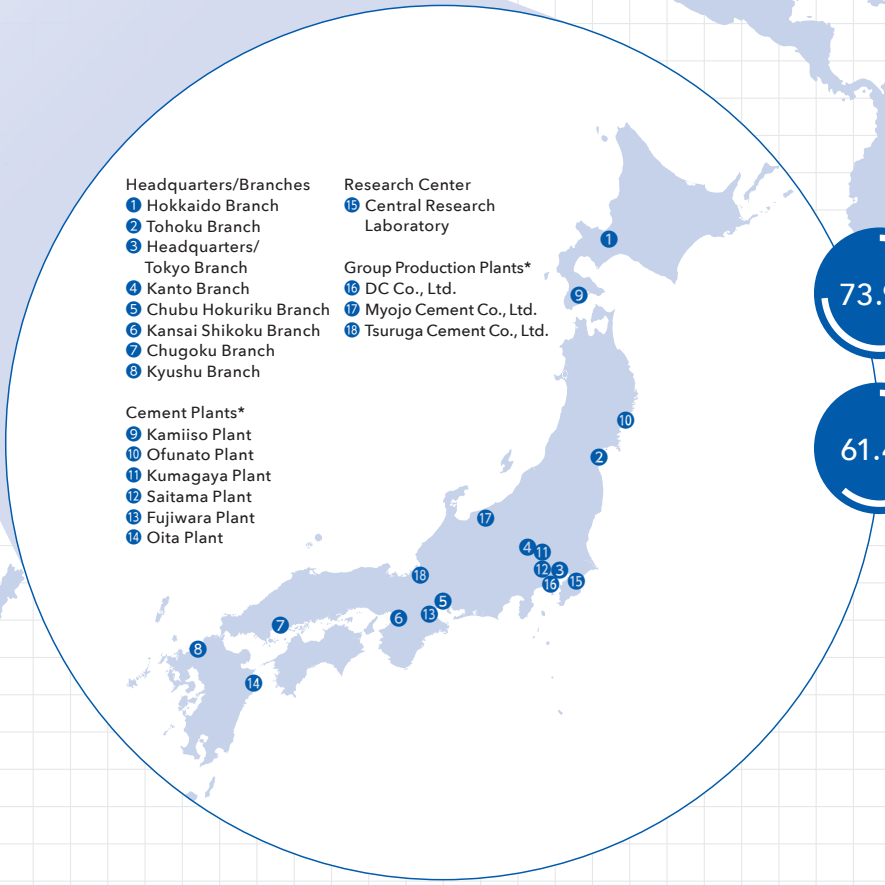
22.1%

U.S.A.: Number of employees (consolidated, as of March 31, 2020)

2,893

Male 2,615

Female 278



73.9%

Japan: Net sales (consolidated, FY2020)

653.5 billion yen

61.4%

Japan: Number of employees (consolidated, as of March 31, 2020)

8,055

Male 7,005

Female 1,050

Tsuruga Cement Co., Ltd.

Myojo Cement Co., Ltd.

Taiheiyo Cement Group Profile

Net sales	Consolidated: 884.3 billion yen Non-consolidated: 314.4 billion yen
Number of employees	Consolidated: 13,119 Non-consolidated: 1,798 (excluding employees on loan to group companies)
Subsidiaries	186 (including 118 consolidated subsidiaries and 6 equity-method subsidiaries)
Affiliates	102 (including 37 equity-method affiliates)

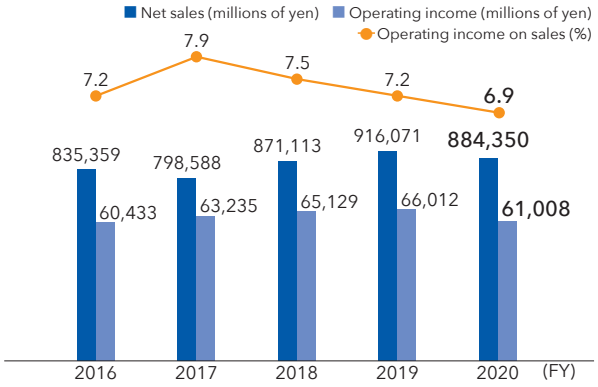
Financial and Non-financial Highlights

GRI102-7, 103-3, 201-1, 405-1

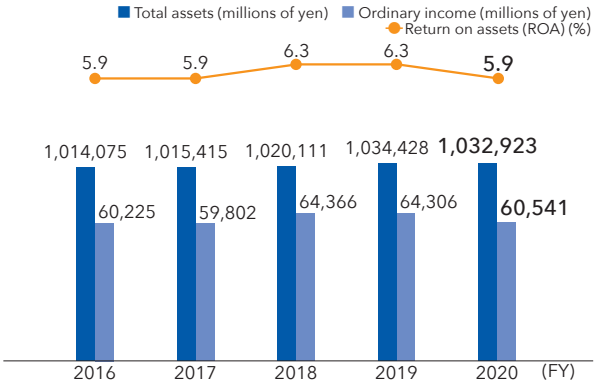
Financial Data

Operating income on sales and ROA are important financial indices to ensure the sustainable growth of the company and our medium- to long-term increase in corporate value, and we also intend to maintain and increase our earnings rate at a level that steadily exceeds equity costs in the 20 Medium-Term Management Plan. We remain committed to investment in growth areas, the generation of cash flow, enhanced shareholder returns and reduction of interest-bearing debt.

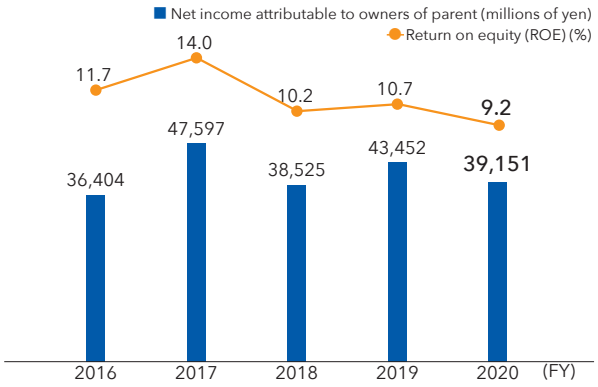
Net Sales, Operating Income and Operating Income on Net Sales



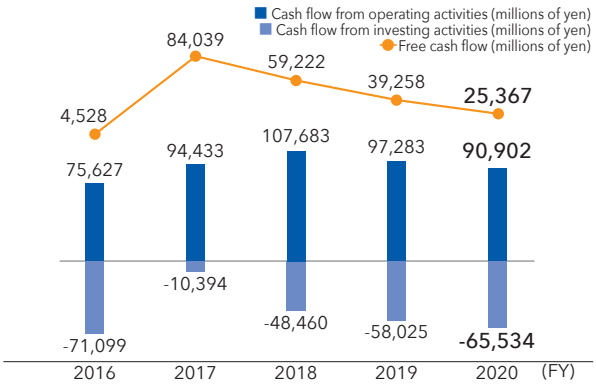
Total Assets, Ordinary Income, and Return on Assets (ROA)



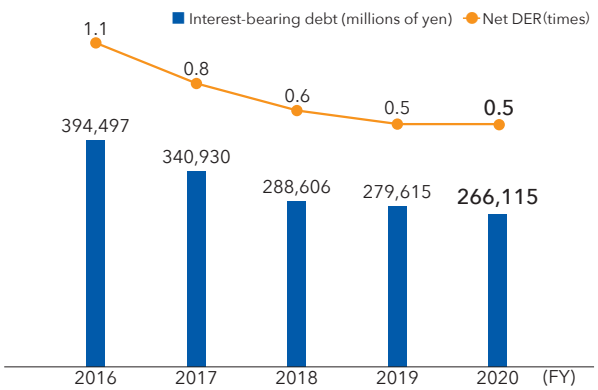
Profit Attributable to Owners of Parent and Return on Equity (ROE)



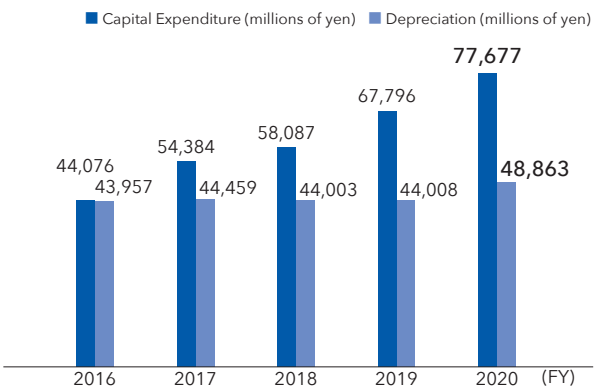
Cash Flow



Interest-bearing Debt and Net DER (Debt Equity Ratio)



Capital Expenditure and Depreciation

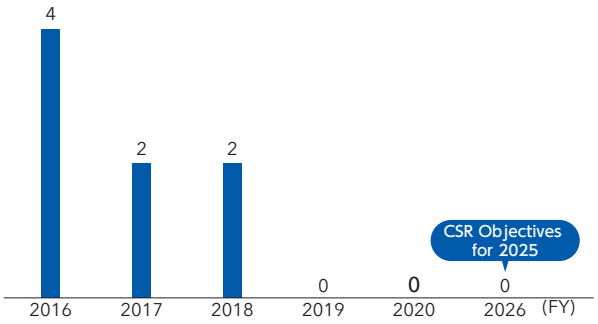


Non-financial Data

The Future Vision and Direction for the mid-2020s is to be an enterprise group capable of providing a sense of safety and security to communities in the Pacific Rim by demonstrating the group's overall capabilities. We are continuing our efforts to achieve this vision by establishing quantitative targets in the areas of (1) prevention of accidents, (2) reduction of greenhouse gas emissions, and (3) workplace diversity as CSR Objectives for 2025.

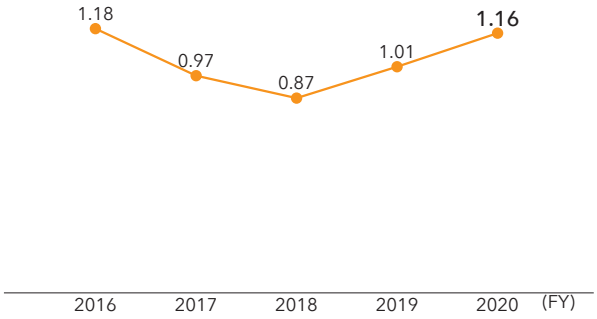
Prevention of Accidents

Number of Fatalities (number of cases)



Lost Time Injury Frequency Rate GCCA

(per million man-hours)

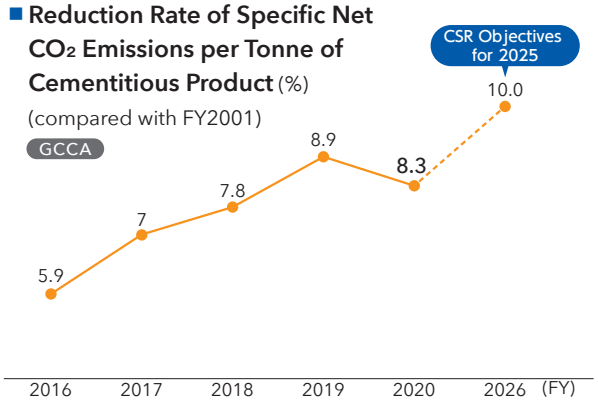


Reduction of Greenhouse Gas Emissions

Reduction Rate of Specific Net CO_2 Emissions per Tonne of Cementitious Product (%)

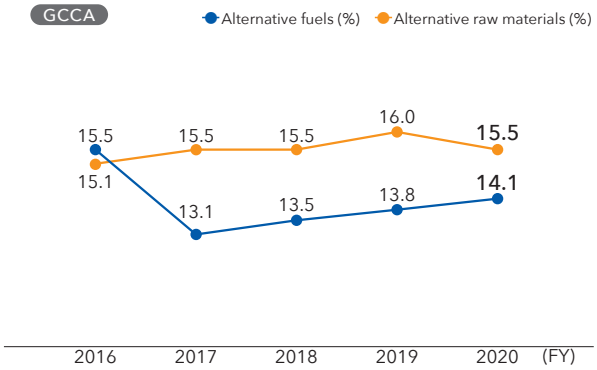
(compared with FY2001)

GCCA



Ratio of Alternative Raw Materials and Fuels

GCCA

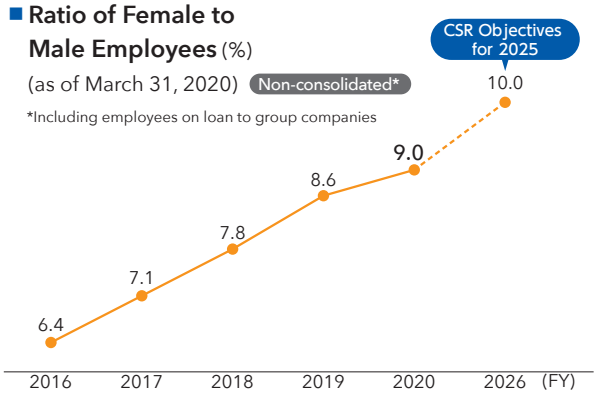


Workplace Diversity

Ratio of Female to Male Employees (%)

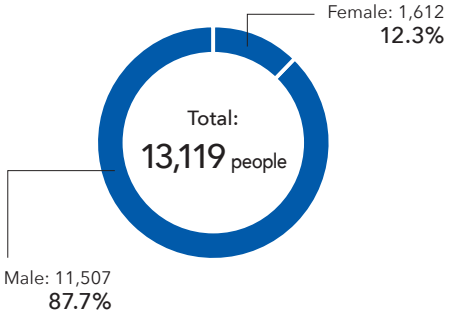
(as of March 31, 2020) Non-consolidated*

*Including employees on loan to group companies



Number of Employees by Gender

(consolidated, as of March 31, 2020)



Striving for Sustainable Growth and Strengthening Our Presence across the Pacific Rim

Masafumi Fushihara
President and Representative Director
Taiheiyo Cement Corporation

Masafumi Fushihara

Business Environment and Results of Our Performance in FY 2020

Increasing Uncertainty in the Global Economy

The Taiheiyo Cement Group has announced its intention to achieve its vision and direction targeting the mid-2020s to be an enterprise group capable of providing a sense of safety and security to communities in the Pacific Rim by demonstrating the group's overall capabilities. In FY2020, the second year of the 20 Medium-Term Management Plan (FY2019–2021), which we formulated as the second step for realizing our Future Vision and Direction, the Japanese economy mildly recovered amid improvements in employment and income. Business performance, however, particularly that of manufacturers, remained weak and the economic outlook was uncertain.

In the Pacific Rim region, a main focus for the group's overseas business, the U.S. economy achieved robust growth with low unemployment and strong consumer spending. While the pace of China's economic growth slowed due to the prolonged trade conflict with the U.S., the rapidly growing economies of Vietnam and the Philippines demonstrated strength. Since the start of 2020, COVID-19 has spread across the globe. Given that the impact of infections across the world will be prolonged, the uncertainty surrounding the global economy is increasing.

Under these circumstances the group's net sales and operating income for FY2020 declined from the previous fiscal year to 884,350 million yen and 61,008 million yen, respectively. The business environment surrounding the group will continue to support a certain level of demand for domestic cement, our main business, due to investments for urban redevelopment and disaster protection and mitigation projects, and an increase in construction work related to the Linear (maglev) Chuo Shinkansen. The prospects for the domestic business, however, will depend on the extent to which economic activities are affected by the spread of COVID-19. Domestic demand for cement for FY2020 was 41.0 million tonnes, the same level as 50 years ago. While we were unable to achieve the net sales we had originally targeted, we are clearly making steady progress toward our goal of strengthening our presence across the Pacific Rim.

For instance, in the West Coast of the U.S., a key area for our investments, we are steadily preparing for an increase in demand through measures such as expanding equipment at the Oro Grande plant, which we acquired in 2015. We also concluded a basic agreement on capital and business partnership with an Indonesian state-owned company, the largest cement manufacturer in Indonesia, in April 2020. This represents a significant step toward establishing a base in an area where the group has not previously maintained any business sites. For example, we are exporting clinker to Australia and Bangladesh from Japan in a partnership with an Indonesian company, and this investment is expected to help us boost efficiency in logistics by leveraging Indonesia as our new export base. In line with its growth strategy, the group has restructured its portfolio through additional investments in the U.S. and equity injection in the Philippines, Vietnam and other South Asian countries. Indonesia, where we have now established a foothold, is the sole untapped region in our strategic business expansion in the Pacific Rim. While declining cement demand in Japan is unavoidable, this recent action could be highly significant for the group in taking a number of proactive measures to ensure its sustainable growth. We will continue to explore future investments in each of our business sites to drive the growth of the group.

Boosting Corporate Resilience in Times of Change

We achieved an operating income of over 60 billion yen despite a greater-than-expected decline in domestic demand for cement. However, we believe we have established a corporate structure that would have delivered the earnings targeted in the Mid-term Management Plan had the level of cement demand been as projected.

One strength of the group's corporate structure is that all of our businesses are well balanced. For instance, the operating income of 66 billion yen for FY2019 was distributed evenly across the domestic cement business at 21.4 billion yen, the overseas cement business at 20.3 billion yen, and the total of Natural Resources, Environmental, and Construction Materials and Building Construction & Civil Engineering businesses at 24.5 billion yen. Even though domestic demand for cement shrank in FY2020, we have established a corporate structure that ensures we would still achieve profits for the group as a whole, regardless of the condition of the domestic market, through the growth in overseas demand and other businesses.

It is undeniable that in the past the Group had been highly reliant on the domestic cement business to earn the major portion of profit. However, we have taken steps to broaden the experience of employees though, for example, cross-departmental and international assignments and, as a result, our human resources have significantly strengthened in each of the businesses and communication in every division has improved, largely contributing to the group's growth. FY2021, which will be significantly impacted by the spread of COVID-19, is the final year of the 20 Medium-Term Management Plan. The Taiheiyo Cement Group has worked on establishing a solid business foundation while balancing its investments for continued business growth, strengthening its financial structure and enhancing shareholder returns. FY2021 will challenge the results of the various measures the group has taken. I am confident that the corporate structures of the company and the group have sufficiently evolved to navigate through this adversity.

Progress of CSR Objectives for 2025

Targeting an 80% Reduction in CO_2 Emissions by 2050

The group has established quantitative targets in the areas of (1) Prevention of accidents, (2) Reduction of greenhouse gas emissions, and (3) Workplace diversity as CSR Objectives for 2025. We have incorporated these into the 20 Medium-Term Management Plan and have been working to achieve them.

We declared our support for the Task Force on Climate-related Financial Disclosures (TCFD) in June 2019. We also set a target of reducing the net CO_2 emissions from cement production by 80% from the 2000 level by 2050 in a framework for our long-term vision of greenhouse gas emissions reduction toward 2050, which we formulated in July 2019. While it is challenging to completely avoid the generation of CO_2 emissions from cement production, the public would never allow the cement industry to demonstrate a reluctance to take action. It is feasible that an alternative material to concrete could be developed but it is unlikely to be available in sufficient quantities to replace the world's most used man-made product. We will therefore continue to pursue the reduction of CO_2 emissions associated with cement and concrete. Moreover, we should regard the reduction of CO_2 emissions as a challenge not for the survival of the company but for that of the cement industry as a whole.

While our environmental technologies in cement production are among the best in the world, outside-the-box, innovative technologies are essential for achieving our target of reducing CO_2 emissions by

80%. For instance, establishing CCS/CCU technology to separate, capture and utilize CO_2 will play a key role in those innovative technologies. Following the construction of a test facility at the Fujiwara Plant in Inabe City, Mie Prefecture, we are planning a demonstration plant with the support of NEDO (New Energy and Industrial Technology Development Organization). We are also preparing to dispatch engineers and researchers to research institutions around the world with the aim of acquiring the latest knowledge. We must clearly address this tough challenge by seizing the initiative and take action toward mitigating climate change as a leading company in the cement industry.

Initiatives for Creating Safety Culture and Promoting Diversity

We continuously focus on establishing a safety culture and creating a safe workplace, and the prevention of accidents has been raised as a priority among our CSR objectives for 2025. Creating a safety culture that secures the happiness of our employees and their families comes first in doing business. A company cannot pursue growth if it is unable to produce safe products in a safe manner. As a result of focusing on measures for the safe operation of equipment, we have nearly achieved zero accidents from equipment malfunctions. Most of the remaining accidents have been due to a lack of safety awareness. The heads of the business sites are responsible for ensuring that employees remain completely aware of safety. In the area of diversity we have set a target of women representing at least 30% of new hires, with specific measures in place for achieving this goal. I fully expect them to have opportunities to continue advancing their careers toward reaching management and senior executive positions. We are also implementing specific initiatives in anticipation of the roles women will have in energizing the future of Taiheiyo Cement. The group has worked on developing global human resources in expanding its business areas focusing on the Pacific Rim region, and we must further promote the effective use of their capabilities. Our overseas business is not based on a strategy of injecting capital and receiving dividends; our

employees are directly engaged in production and sales on-site. Therefore, it is vital for us to recruit and develop human resources from a global perspective regardless of nationality. Looking ahead, we will continue striving to develop and deploy human resources from the viewpoint of motivation and skills.

The Future Envisioned by Taiheiyo Cement

Toward Realizing a Sustainable Society with a Focus on Cement

The Taiheiyo Cement Group has continued to grow while focusing on the cement business and pursuing the potential of cement and concrete. It also contributes to the resolution of social issues by providing environmentally sound products and creating a recycling-based society.

Cement plays a central role in the group's business. Ensuring the availability of limestone, a raw material for cement, is essential for the group's continued contribution to society. With this philosophy we have secured reserves of limestone equivalent to the total production volume of cement over the next 100 years and established a system to ensure the stable supply of cement. In addition to cement, our core product, we will develop the cementitious materials* business to further strengthen the company's presence in overseas markets. In overseas regions where we produce or sell cement, we will contribute to the development of local communities and increase our corporate value by offering the advanced technologies we have nurtured in the Environmental and Natural Resources businesses in Japan.

In order to create a sustainable society we are committed to meeting the expectations of our stakeholders by contributing to achieving the SDGs, which are goals shared internationally, through business activities focused on the cement business.

*Cement with mineral components, such as slag and pulverized fuel ash

Value Creation Process

GRI102-7, 15

Enhancing the

Risks and Opportunities

▶P.16 Recognition of Business Our Environment (Risks and Opportunities)

Risks

- Climate change
- Increase of and developments related to environmental pollution and its impact
- Large-scale disasters
- Technological innovation (advancement of ICTs)
- Changes in economic conditions
- Continuous development related to the declining birth rate and aging population in Japan
- Spread of COVID-19

Opportunities

- Strengthening urban resilience, preventing disasters
- Contribution to a recycling-based society (wide variety of recycled raw materials and fuels)
- Environmentally sound products (with low CO_2 emissions)
- Reconstruction of disaster-stricken areas (acceptance of disaster waste)
- Provision of technologies and technical guidance to emerging economies

Input

Financial Capital

Credit rating (as of August 2020)

A (JCR)

A⁻ (R&I)

Manufacturing Capital

Domestic clinker production capability (FY2020)

17.7 million tonnes

Overseas clinker production capability (FY2020)

12.9 million tonnes

Intellectual Capital

Patents held (as of the end of FY2020)*

Japan 1,235

Overseas 216

Human Capital

Number of employees (as of the end of FY2020)

13,119

Social and Relationship Capital

Relationship of trust with communities in which we do business

Individual meetings with investors

Events: 149

Natural Resources Capital

Limestone quarries of the group (as of the end of FY2020) 19

Input of waste and by-products (FY2020)*

409.5 kg/t-cement

Production

Cement Business (Japan·Overseas)

▶P. 30,32

Cement supply

Mineral Resources Business

▶P. 34

Raw material procurement

Second Step

Strategy for Research and Development | Business Strategies

"Establish a Solid

First Step

The 17 Medium-Term Management Plan

▶P.18 Materiality of the Taiheiyo Cement Group

Group's Material

Group's Total Capabilities

Pioneering a Sustainable Future for the Earth

Business Model

Logistics and supply

Construction Materials Business
▶P. 38

Use

Recycling waste and by-products

Environmental Business
▶P. 36

Reuse

Output and Outcome

Efforts to mitigate and adapt to climate change

Reduction rate of specific net CO_2 emissions per tonne of cementitious product (compared with FY2001) (FY2020)

8.3%

Stable provision of products and services

Cement production in Japan (FY2020)

19.8 million tonnes

Cement production overseas (FY2020)

13.9 million tonnes

Creation and development of a recycling-based society

Socioeconomic benefits from environmental impact reduction due to the input of waste and by-products (FY2020)

91.2 billion yen

Building Safe and Secure Social Infrastructure

Leading a Recycling-based Society

▶P.20 Medium-term Management Plan and CSR Objectives

The 20 Medium-Term Management Plan

Strengthen Management Foundations

Business Foundation"

Third Step
Next Medium-Term Management Plan

CSR Objectives for 2025

Issues

Closely related SDGs

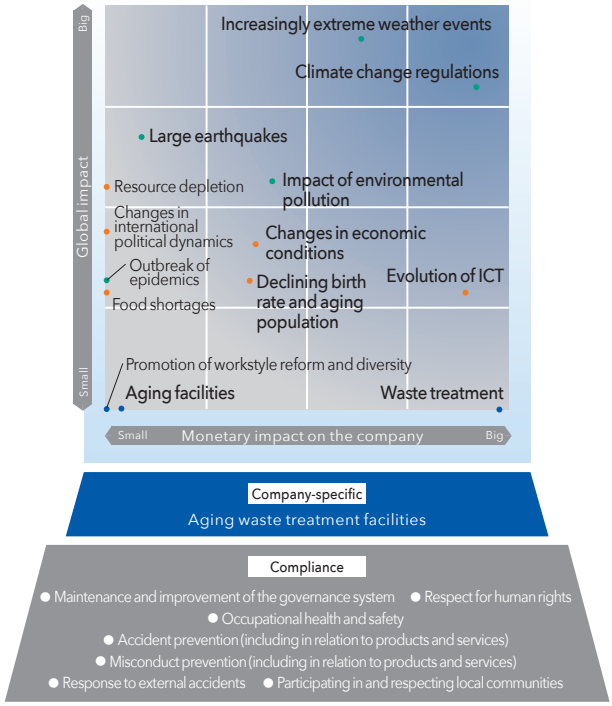
*Figures are on a non-consolidated basis.

Recognition of Our Business Environment
(Risks and Opportunities)

GRI102-11, 15, 29, 32, 46, 103-1, 2, 201-2

The Taiheiyo Cement Group's efforts to prevent or lessen the impacts of risks that could significantly affect its business are key for its sustainable growth. Every three years the Risk Management & Compliance Committee leads the review of the risks that have been identified across the company while implementing risk management from PDCA cycles in each fiscal year. During the review in FY2020 we categorized them in terms of impact of anticipated changes in social and environmental conditions over the next ten years, in relation to uncertainty of group corporate management. The three categories are: change risks, company-specific risks and compliance risks. The review identified 16 risks that could have a material impact on the group.

Materiality Analysis of Risks



Company-wide Material Risk Identification

Risk Category	Item
Change	Environmental aspects ● Climate change: increasingly extreme weather events and dramatic increase in weather disasters ● Climate change: changes in regulations and society ● Increase of and developments related to environmental pollution and its impact: regulations ● Geological and biological activities: occurrence of a large earthquake Social aspects ● Technological innovation: evolution of digitalization (ICT) ● Changes in economic conditions ● Continuity and development related to the declining birth rate and aging population in Japan: declining labor force
Company-specific	● Waste treatment ● Aging facilities
Compliance	● Maintenance and improvement of the governance system ● Respect for human rights ● Occupational health and safety ● Accident prevention (including in relation to products and services) ● Misconduct prevention (including in relation to products and services) ● Response to impacts of external accidents ● Participating in and respecting local communities

● Results of Collection, Evaluation and Identification of Risks

In considering company-wide risks in terms of the social and environmental challenges to be addressed, we categorized them as follows:

- **Change risks:** arising from changes in the social environment
- **Company-specific risks:** arising from the characteristics of our business and capital, including all types of capital such as mining rights and human resources
- **Compliance risks:** related to the foundation of the organization

We then selected the risks deemed material for the entire company and assessed them in accordance with the criteria shown on the right.

(1) Change risks

We examined these items based on their impact on the company (that is, the impact of the monetary evaluation) and the magnitude of the global impact ("occurrence" multiplied by "impact"). In selecting material risks we identified seven items using the magnitude of the impact on the company as the sole metric for selection.

(2) Company-specific risks

In this category the items are not closely related to any changes in global conditions but are closely connected to the group's business history. We identified two such items that could significantly impact on the group.

(3) Compliance risks

Items in this category serve as the foundation of the organization and are essential for effectively controlling the organization and ensuring its continued acceptance by society. We therefore identified all items as material company-wide.

Future Business Strategies

Based on Results of a Company-wide Risk Review

Contributing to National Resilience

The increase in the number and severity of natural disasters are challenging social structures to formulate disaster prevention and mitigation actions. We will contribute to national resilience by enhancing the stable supply of cement and other construction materials for strengthening infrastructure and supporting rapid disaster restoration.

Supporting the Creation of a Recycling-based Society

We have recently been recycling disaster waste as raw materials and fuels for cement production as well as industrial waste, by-products, municipal waste and incineration ash. We will play our role in establishing a recycling-based society by applying and developing the necessary expertise and technologies.

Advancing the Creation of a Low-carbon Society

Viewing the challenge of reducing CO_2 emissions as a positive opportunity to advance the creation of a low-carbon society through our operations, we will expand our efforts to efficiently replace fossil fuels with alternative energy derived from waste and promote technological progress in such areas as the development of low-CO_2 cement and innovative technologies for CO_2 capture, utilization and storage (CCU and CCS).

Summary of the Collection, Evaluation and Identification of Company-wide Risks

Step 1	Step 2	Step 3	Step 4	Step 5
Compile anticipated changes in social and environmental conditions over the next ten years.	**Evaluate the impact of collected changes on the group.**	**Review the results of the evaluation of the impact.**	**Identify company-wide material risks (Risk Management & Compliance Committee).**	**Determine company-wide material risks.**
List the anticipated changes in social and environmental conditions over the next ten years as a scenario and produce a list of changes by categorizing and organizing them by keywords.	Review and evaluate the listed changes for their impact in relation to uncertainties of group corporate management.	Review the uncertainties identified by each business unit.	Determine the level of materiality of the uncertainties, summarize the results of the identification and review changes.	Report the results of the review to the CSR Management Committee.

We collect, evaluate and identify company-wide risks, including those of group companies, every three years and conduct an annual review of those risks. FY2020 was the third year of the company-wide risk review since it was first conducted in FY2017. The purpose of identifying risks is to understand the impact of anticipated changes in social and environmental conditions over the next ten years in relation to uncertainty of group management and then formulate measures to avoid and reduce that uncertainty. We review risks with reference to the corporate risk management guidance based on ISO 31000, COSO and WBCSD as well as other risk information. We also consult risk management experts.

We referred to the following risk information:

- **Global Risk Report (2019):** World Economic Forum
- **Regional Risks for Doing Business (2018):** World Economic Forum
- **Enterprise Risk Management (2018):** COSO/WBCSD
- **Top Risk 2019 (2019):** Eurasia Group
- **10 For 2019: Systematic Risks Loom Large (2019):** Sustainalytics
- **SDGs**

For more information see "Risk Management and Compliance." ▶ P. 50

Materiality of the Taiheiyo Cement Group

GRI102-29, 32, 40, 42, 43, 44, 46, 47, 103-1, 2, 3, 203-1

STEP 01 | Identification of Issues

Key Stakeholders' Expectations and Demands Related to CSR Issues

We strive to fulfill our responsibilities in response to the expectations and demands of stakeholders while directly and indirectly maintaining sound relationships with them. Listed below are Taiheiyo Cement Group's key stakeholders, identified through consideration of our business characteristics and environment.

	Shareholders	Customers	Employees	Society			Suppliers	
Stakeholders	Shareholders, investors and financial institutions	Sales agents, ready-mixed concrete companies, ordering parties and waste disposal companies		Local communities in which we do business	Local governments	NGOs and NPOs	Business partners (procurement)	Partner companies (facilities operation)
Major Opportunities for Engagement	● Publication of various reports (financial statements and CSR reports, etc.) ● Website and IR site ● IR activities ● Response to surveys	● Sales contact at the head and branch offices ● User societies and industry associations ● Technical journal and product catalogue ● Technical workshop ● Website	● Labor-management consultation and briefing sessions ● Training programs ● Setting up contact points for consultation and whistleblowing ● Website and intranet ● In-house newsletter ● CSR report	● Briefing sessions, debriefing sessions, tours and environmental monitoring system ● Social contribution activities ● CSR reports ● Dialogue	● Notifications to local governments ● CSR reports ● Dialogue	● Meetings and gatherings ● Surveys ● Dialogue ● Social contribution activities	● Procurement briefing sessions	● The Health and Safety Cooperative Committee

Stakeholder Expectations and Demands

Economy	● Management stability and growth potential ● Stable redistribution of profits ● Information disclosure	● Stable supply of products ● High value-added products ● Improved economic efficiency of waste disposal	● Payment of reasonable price	● Sharing social costs	● Tax payment	● Activity support and sponsorships	● Payment of reasonable price
Environment	● Effective allocation of management resources ● Information disclosure	● Provision of environmental products ● Reduced environmental impact from waste treatment	● Promotion of environmentally sound management	● Reduced environmental impact on the community ● Countermeasures to mitigate climate change ● Contribution to resource recycling ● Improved energy efficiency ● Appropriate use of water resources ● Conserving biodiversity ● Information disclosure			● Fair evaluation of environmental considerations ● Support for environmental measures ● Promotion of environmentally sound management
Society	● Effective allocation of management resources ● Information disclosure	● Maintaining product quality and safety ● Provision of information on product use ● Technical support for product use ● Response to complaints ● Improved resource circulation in the community	● Respect for human rights ● Respect for diversity ● Elimination of discrimination; fair evaluation and equal opportunity ● Secured occupational safety and improved work environment ● Support for skill and career development ● Ensuring opportunities for conversation	● Contribution to infrastructure development ● Maintaining the quality of product and service safety ● Job creation ● Respect for human rights and the community ● Social contribution activities ● Information disclosure			● Equal and fair relationships ● Respect for human rights ● Secured work safety and improved work environment

Risks and Opportunities for Our Business Operations

The Taiheiyo Cement Group recognizes and evaluates Group risks and opportunities from the perspective of ESG (environment, society and governance). Furthermore, it strives to reduce potential, medium- to long-term business risks, fully utilize its resources and create social value and expand business opportunities.

Risks and Opportunities for Our Business Operations

Recognition and Evaluation

▶P. 16

Key Directions for the Group

- Stable provision of products and services
- Efforts to mitigate and adapt to climate change
- Creation and development of a recycling-oriented society
- Expansion of strategic business domain
- Construction of new business model
- Retention and development of capable human resources
- Enhancement of group governance
- Strengthening of corporate governance

Relationships between SDGs and Our Business Operations

5 goals most closely related to our business operations

Low — Medium — High

STEP 02 | Prioritization

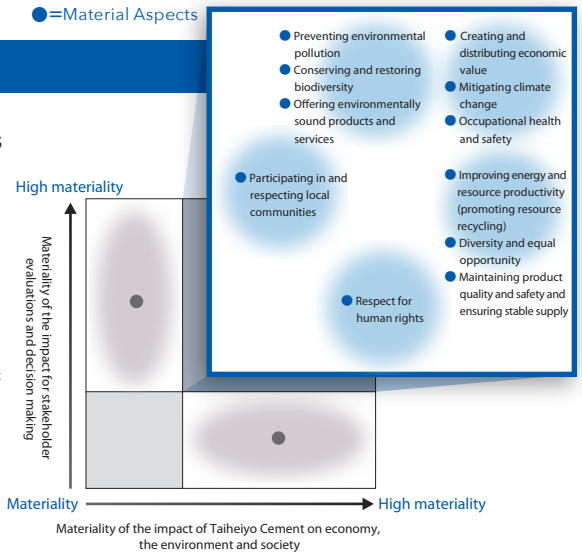
We identified sustainability issues while referring to international guidelines and stakeholder feedback in the context of our business. Through internal meetings we then held discussions on the priority themes for the Taiheiyo Cement Group, resulting in 11 priority aspects of the material issues.

In the process of steps 1 and 2 we referred to:

- GRI Sustainability Reporting Standards (GRI Standards) 2016/2018
- ISO26000
- SDGs, SDG Compass, SDGs Industry Matrix
- AA1000SES (AA1000 Stakeholder Engagement Standards)
- SASB
- ESG surveys and evaluations
- Internal questionnaire and feedback surveys
- Stakeholder Dialogue
- CSR report questionnaire survey
- Opinions and advice from outside experts and advisors

●=Various sustainability issues

- Appropriate use of water resources
- Appropriate management of chemical substances
- Compliance with environmental laws and regulations
- Mitigation of environmental impacts of transfer and transport
- Human resource development
- Work-life balance management
- Sound labor-management relations
- Fair trade
- Corruption prevention
- Marketing communication
- Personal information protection
- Information disclosure
- Protection and use of intellectual property



Material Issues and Approaches of the Taiheiyo Cement Group

Categories	Material Aspects	Boundaries of Major Impact: Taiheiyo Cement	Boundaries of Major Impact: Value chain		Management Approaches	Report Page
Economy	Creating and Distributing Economic Value	✓	✓	Society	Policy: • Conducting business activities in accordance with our 20 Medium-term Management Plan (FY2019 to FY2021)	P. 8, PP. 20-21, PP. 30-39, PP.89-91
Environment	Improving Energy and Resource Productivity (promoting resource recycling)	✓	✓	Industry and regional waste-related facilities	Policy: • Environmental management policy • WBCSD Membership conditions • GCCA Sustainability Charter System: • Setting up Environmental Management Committee • All plants, head office, branches and the Central Research Laboratory are operating in compliance with ISO 14001 Evaluation: • Our Long-term Vision of Greenhouse Gas Emissions Reduction toward 2050 • CSR Objectives for 2025 • Group environmental targets and KPIs based on the WBCSD Membership conditions and the GCCA Sustainability Charter • Monitoring and review by the Environmental Management Committee	PP. 62-67, PP. 72-73
	Mitigating Climate Change	✓	✓	Industry and regional waste-related facilities		PP. 24-27, PP. 62-65, P. 73
	Preventing Environmental Pollution	✓	✓	Areas around plants		PP. 70-71
	Conserving and Restoring Biodiversity	✓	✓	Areas around plants		PP. 68-69
	Offering Environmentally Sound Products and Services	✓	✓	Society		PP. 36-37, PP. 40-41, PP. 76-78
Society	Occupational Health and Safety	✓	✓	Contractors	Policy: • Occupational Health and Safety Policy System: • Establishment of the Environmental Management Committee • OSHMS has been running in all plants and mines Evaluation: • CSR Objectives for 2025 • Monitoring of data on health and safety including information from contractors	PP. 86-88
	Diversity and Equal Opportunity	✓		—	Policy: • The Basic Policy Concerning the Development of Human Resources System: • The Basic Policy Concerning Diversity • Development of a long-term human resource development system, a fair evaluation system and comfortable working environments Evaluation: • CSR Objectives for 2025 • Quantitative targets for diversity • Monitoring various kinds of personnel data	PP. 79-83
	Maintaining Product Quality and Safety and Ensuring Stable Supply	✓	✓	Cement users Society	Policy: • Quality Policy System: • A unified ISO 9001-based management system for product development, design and production • Technical support in the framework of Taiheiyo Brand Cement/Concrete (TBC) activities Evaluation: • Analyzing suggestions and inquiries related to quality • Regularly disclosing safety-related data on our website	PP. 76-78
	Participating in and Respecting Local Communities	✓	✓	Areas around plants	Policy: • Identifying communication with communities as a material issue in the Mission of the Taiheiyo Cement Group and the Basic Policy of CSR System: • Promoting company-wide activities by the Stakeholder Communication Committee Evaluation: • Managing progress and sharing information under the company-wide action plan	PP. 89-91
	Respect for Human Rights	✓	✓	Contractors	Policy: • Basic Policy Concerning Human Rights and Labor Practices System: • Promoting company-wide activities under the Human Rights Committee • Contact points for counseling Evaluation: • Managing progress according to the company-wide action plan and facilitating the exchange of opinions and negotiations at labor-management consultations	P. 79

STEP 03 | Validation

We confirmed the Principles of Completeness and Stakeholder Inclusiveness are applied to finalize the identification of the report content.

➡ Discussion at the Taiheiyo Cement report task force meeting
➡ Reporting and approval at the CSR Management Committee

STEP 04 | Review

We implement a review every fiscal year for the report issued.

● Internally ➡ Report booklets are distributed to all employees of Taiheiyo Cement Corporation and a questionnaire survey is conducted.
● Externally ➡ Third-party opinion by experts ➡ Questionnaire survey
➡ Review by external advisors

Progress of the Medium-Term Management Plan and CSR Objectives

GRI102-11, 15, 29, 103-2

Fundamental Policies of the 20 Medium-Term Management Plan (FY2019-2021)

Fundamental Policies

To become an enterprise group that anticipates future changes in the business environment and seeks innovations on all fronts, thereby advancing along a pathway of growth.

To contribute to the establishment of a sense of safety and security in society through the stable provision of high-quality products, solutions and advanced technology development, in order to build national resilience as a member of the social infrastructure industry.

To push ahead with the strengthening of our earnings base for businesses, and further improve our financial structure through exhaustive cost reductions as well as by actively executing investments in promising fields that will contribute to the Group's sustainable growth.

Strategy for Research and Development	Business Strategies	Strengthen Management Foundations
▶ P. 40 Research and Development	▶ PP. 30–39 Business Activities	▶ PP. 42–59 Governance ▶ PP. 60–75 The Environment ▶ PP. 76–91 Collaborating with Society

Establish a solid business foundation.

The 20 Medium-Term Management Plan: Management Targets

	FY2019 Result	FY2020 Result	FY2021 Target
Operating income on sales	7.2%	6.9%	9% or more
ROA (ordinary income)	6.3%	5.9%	8% or more

20

The 20 Medium-Term Management Plan

FY2019-2021
(second step)

17

The 17 Medium-Term Management Plan

FY2016-2018
(first step)

Group's management foundation (human resources, technologies, R&D capabilities, sales, resources, knowhow, etc.) as pillars of growth

Future Vision and Direction

(toward the mid-2020s)

To become an enterprise group that provides a sense of safety and security to societies in the Pacific Rim by demonstrating the group's overall capabilities

CSR Targets 2025

(Objectives to Be Achieved by FY2026)

Ⅰ	Prevention of Accidents	Zero fatalities Scope of implementation: Employees of the Taiheiyo Cement Group including overseas business sites and contractors
Ⅱ	CO_2 Reduction of Greenhouse Gas Emissions	Reduce by at least 10% specific net CO_2 emissions per tonne in comparison to FY2001 levels Scope of implementation: Cement production sites of Taiheiyo Cement and group companies, including overseas sites
Ⅲ	Workplace Diversity	Ratio of female to male employees among new hires at least: 30% (those under "G Course" categories) Ratio of female to male employees at least: 10% Ratio of newly appointed female to male managers at least: 10% Scope of implementation: Non-consolidated (including employees on loan to group companies and other companies)

Next Medium-Term Management Plan

(third step)

The 20 Medium-Term Management Plan

Financial Indicators (Guidelines)

(Billions of yen, unless otherwise stated)

	FY2018 Result	FY2019 Result	FY2020 Result	FY2021 (Planned)
Net sales	871.1	916.0	884.3	950.0 or more
Operating income	65.1	66.0	61.0	85.0 or more
EBITDA*	111.6	110.5	109.9	140.0 or more
Net debt/equity ratio (DER) (times)	0.6	0.5	0.5	0.5 or less
Net interest-bearing debt/EBITDA (times)	2.1	2.02	1.95	1.5 or less

*Operating income + depreciation (including goodwill amortization)

Financial Strategy and Shareholders' Returns

① Capital expenditure and investment and financing

We plan to invest 230 billion yen, including 120 billion yen in growth investment, over the three years. In FY2019 and 2020 we decided to invest around 60 billion yen domestically and overseas as growth investment. This includes the amount invested for a planned capital alliance with the PT Semen Indonesia (Persero) Tbk group as announced in April 2020.

② Returns to shareholders

We have stated that we will consider flexibly repurchasing shares toward achieving a total return ratio of around 30%. In FY2019 we achieved a total return ratio of around 34% by paying commemorative dividends for the 20th anniversary of the company's founding and repurchasing our shares in addition to ordinary dividends. In FY2020, although we only paid ordinary dividends, the inclusion of repurchased shares announced in May 2020 and concluded in July 2020 in FY2020 financial figures would bring the total return ratio to around 32%. Thus, our total return ratio exceeded 30% in those two years.

③ Further strengthening our financial structure

We have set a target of a net DER of 0.5 or less at the end of FY2021 as a guideline. The financial structure has been steadily improving, as seen at the end of FY2020 by the equity ratio of 42.3% (an improvement of 3.6% from the end of FY2018) and the balance of interest-bearing debt of 266.1 billion yen (a reduction of 22.4 billion yen from the end of FY2018). Moreover, we achieved our net DER target of 0.5 times or less, ahead of schedule at the end of FY2020.

Our Commitment to:

CONTENTS

Nghi Son Cement Corporation (Vietnam)

Taiheiyo Cement Group Efforts to Mitigate Climate Change

GRI102-11, 103-2, 201-2, 203-1

Significantly reducing CO_2 and other greenhouse gas emissions toward mitigating climate change has been underway following the adoption of the Paris Agreement at the COP21 in 2015 as a common challenge across the world. The cement industry, which by-produce not a less amount of CO_2 in the course of manufacture, must take action. The Taiheiyo Cement Group is developing and introducing technologies to reduce their CO_2 emissions from a medium- to long-term perspective in order to mitigate global warming and ensure its sustainable development.

CO_2 Emissions Reduction Roadmap for Achieving Long-term Vision

2020
Formulating a long-term vision

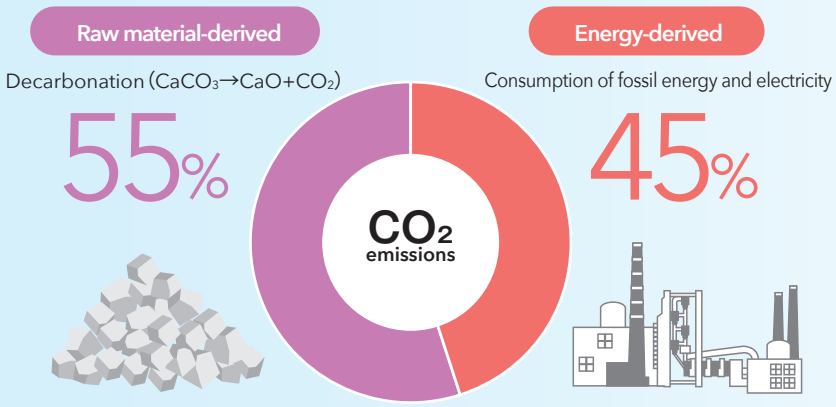
Scenario for Contributing to Avoided CO_2 Emissions through the Value Chain

Use/reuse of cement	Development of concrete technology to contribute to CO_2 reduction/evaluation of the amount of CO_2 absorbed by cement products
Power generation for cement production	Biomass power generation and waste heat power generation
Transportation	Continuously encouraging the introduction of energy-efficient equipment and energy-saving technologies in the raw materials/products transportation divisions
Others	Promoting measures and products for absorbing CO_2 such as the conservation of biodiversity and technology to grow algae

Applications Scenario (Maximum Application of Existing Technologies)

Energy-derived	Promoting the introduction of energy-efficient equipment and increased use of alternative energy sources
Raw material-derived	Design of low-CO_2 cement within the current standards (e.g., improvement of clinker and use of admixtures)

CO_2 Emissions from Cement Production Process



Taiheiyo Cement's Countermeasures to Mitigate Climate Change

The cement industry is estimated to generate CO_2 emissions equivalent to about 6% of total man-made greenhouse gas emissions. Of the CO_2 produced in the course of cement manufacture, approximately 45% is derived from the thermal energy used to heat the raw materials and the consumption of electricity for cement, and 55% from the decarbonation of limestone used as raw material during the calcination process. We must therefore focus on those two areas in order to reduce CO_2 produced in the course of cement manufacture.

Since the 1990s we have focused on introducing energy-efficient equipment to reduce our CO_2 emissions. We have also promoted the use of recycled resources without decarbonation as raw materials and are aggressively responding to the demands of the international community. We added the CSR Objectives for 2025 to the Medium-Term Management Plan in 2015, the year the Paris Agreement was adopted. Included in the objectives is the goal of reducing greenhouse gas emissions. Having declared our support for the Task Force on Climate-related Financial Disclosures (TCFD) in June 2019, we are committed to a strategic implementation of countermeasures to reduce CO_2 emissions. In addition, we formulated a framework in July 2019 for our long-range vision of greenhouse gas emissions reduction toward 2050 and positioned it as a group-wide goal.

Formulating Our Long-term Vision toward 2050

In March 2020 the Taiheiyo Cement Group published details about its measures stated in its Long-range Vision of

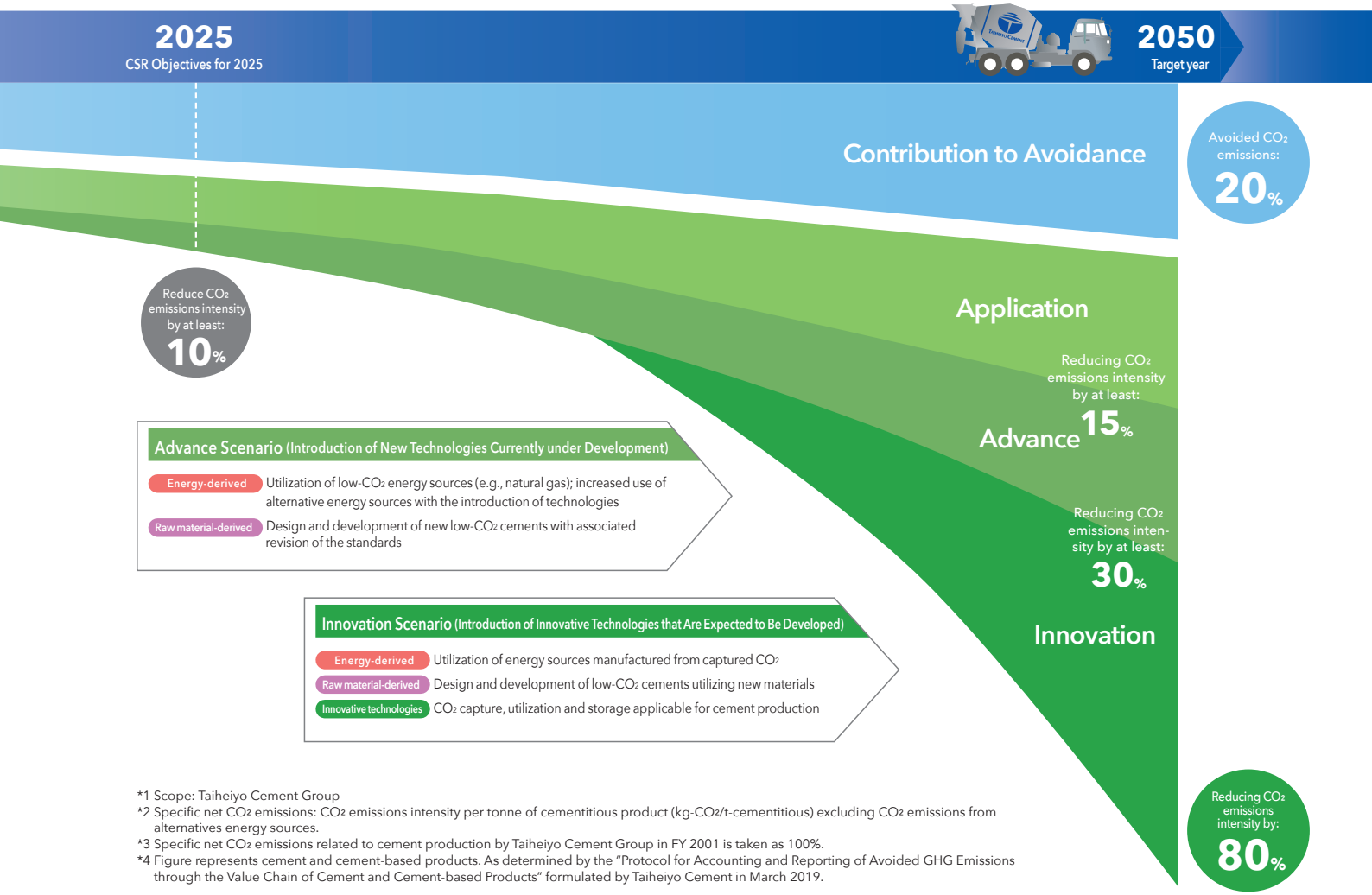
Our long-term vision of greenhouse gas emissions reduction toward 2050[*1]

Reduced specific net CO_2 emissions in cement production[*2]

80%[*3] reduction by 2050

Contributing to avoided CO_2 emissions through the value chain[*4]

Avoided emissions equivalent to **20%**[*3] CO_2 emissions by 2050



*1 Scope: Taiheiyo Cement Group
*2 Specific net CO_2 emissions: CO_2 emissions intensity per tonne of cementitious product (kg-CO_2/t-cementitious) excluding CO_2 emissions from alternatives energy sources.
*3 Specific net CO_2 emissions related to cement production by Taiheiyo Cement Group in FY 2001 is taken as 100%.
*4 Figure represents cement and cement-based products. As determined by the "Protocol for Accounting and Reporting of Avoided GHG Emissions through the Value Chain of Cement and Cement-based Products" formulated by Taiheiyo Cement in March 2019.

Greenhouse Gas Emissions Reduction toward 2050. In order to achieve the goal of an 80% reduction in CO_2 emissions by 2050, we need to develop innovative technologies as well as to advance the application and development of existing technologies. To this end, the group formulated three reduction scenarios for lowering CO_2 emissions in cement production. Specifically, we will continue to develop and expand the technologies we currently own to reduce energy-derived and raw materials-derived CO_2 emissions whilst also developing and introducing new innovative technologies. Furthermore, we aim to avoid emissions equivalent to 20% of CO_2 emissions through the value chain of cement and cement-related products. These reductions will be in the areas of use/reuse of cement, power generation for cement production and transportation, and the reductions evaluated based on the "Calculation and Reporting Protocol for Accounting and Reporting of Avoided GHG Emissions through the Value Chain of Cement and Cement-based Products" which we formulated in 2019.

In order to realize the Long-term Vision, we must address challenges such as social acceptance of our businesses and the development and implementation of new technologies to avoid, capture, utilize and store CO_2. The associated financial burden of such technologies will need to be shared as will the technologies themselves. We have positioned the Long-term Vision as a goal we must achieve, and we will continue our efforts in light of our future sustainable growth as well as changes in social systems.

The Ofunato Plant Launching the Biomass Power Generation Business to Brighten the Future of the Community

Contribution to Avoided CO_2 Emissions

308 thousand tonnes/year

Electric power generation **520** GWh/year

Equivalent to the electricity consumption of approximately **119,000** ordinary households

Company	Ofunato Power Inc.
Total project costs	23.5 billion yen
Capital contribution ratio	65% Taiheiyo Cement, 35% erex Co., Ltd.
Output	75 MW

The Ofunato plant, in Ofunato City, Iwate Prefecture, began producing cement in 1937 as one of the company's major manufacturing sites and it has reliably supplied high-quality cement products since then. It installed a waste heat power generation system in 1986 and has actively taken action to save energy. Unfortunately, the plant was significantly damaged by the tsunami following the Great East Japan Earthquake in March 2011. While it was able to quickly resume cement production, including restarting of the waste heat power generation system, its in-house power generation system was severely damaged and did not resume operation. To address this the Ofunato Power Generation Project Team was set up in 2016.

The Ofunato Biomass Station was constructed on the premises of the Ofunato cement plant over a period of three years and started commercial operations in January 2020. The power station can supply all of the electricity required by the plant as well as for the community. It uses palm kernel shell (PKS) and a small amount of coal as fuels with an output of 75 MW, making it one of Japan's largest biomass power stations. Annual electric power generation is approximately 520 GWh, equivalent to the electricity consumption of around 119,000 ordinary households, and the associated CO_2 emissions reduction is 308,000 tonnes/year.

The Ofunato Biomass Power Station is environmentally sound. The plant concluded an Agreement on Environmental Conservation with the Ofunato City government in 2017, under which it constrains NOx and SOx emissions to below specified values. Furthermore, the exhaust chimneys are twice the height of ordinary facilities to minimize the effects of the emissions on the surrounding environment. The design of the power station minimizes its environmental impacts such as by recycling industrial water for cooling. In terms of fuel, the small amount of coal currently used will be reduced in the future to make the plant solely dependent on biomass fuel.

The Taiheiyo Cement Group is working to increase the use of environmentally sound, renewable energy through the launch of its biomass power generation business while also contributing to job creation and the economic revitalization of the local community.

VOICE

Working Together to Realize a Sustainable Society

Kimiaki Toda
Mayor of Ofunato City

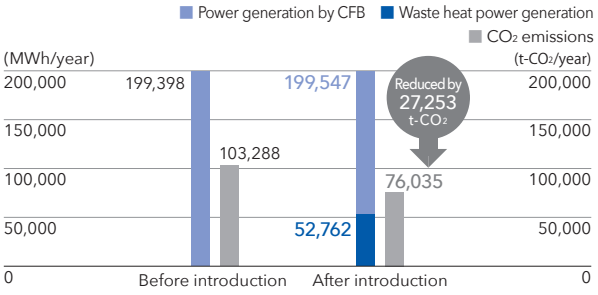
When I learned the Taiheiyo Cement Ofunato plant would be a biomass power station using palm kernel shells as fuel I was deeply impressed with the company's decision to carry out an environmentally sound project. I have always believed that the problems associated with climate change were our responsibility, not those of someone else. With the designation of Ofunato City as a Future City by the national government, we have been working to create a sustainable community through such efforts as introducing renewable energy with a focus on solar power. Reducing carbon emissions is an urgent concern for all humankind, and governments and businesses must cooperate to address it. We hope Taiheiyo Cement's biomass power generation business will serve as a foundation for creating a prosperous future.

The Saitama Plant

WHR (Waste Heat Recovery) Power Generation System that Help Reduce CO_2 Emissions

Since introducing a WHR power generation system at its Kumagaya plant in Kumagaya City, Saitama Prefecture in 1982, the company has installed similar facilities in its other plants in Japan. These systems generate power by recovering thermal energy from high-temperature exhaust gas generated in the cement calcination process and contribute significantly to the reduction of CO_2 emissions. In October 2019 the company decided to install a WHR power generation facility incorporating a cutting-edge waste heat recovery boiler at its Saitama plant in Hidaka City, Saitama Prefecture. This facility is scheduled to begin operations in September 2022, marking the completion of the initiative to install waste heat power generation systems at all six company plants. The operation of these facilities is expected to help reduce CO_2 emissions by approximately 27,000 tonnes per year, and the percentage of energy generated by waste heat of the total power consumption at all six company's plants is estimated to be 18.4%.

Reduction in CO_2 Emissions by Introducing a Waste Heat Power Generation System at the Saitama Plant



In our overseas operations we completed the installation of waste heat generation systems in all our joint ventures plants in China in 2012. Also, in December 2019 we made a decision-making to conduct a feasibility study to install WHR power generation at Nghi Son Cement Corporation, Vietnam, and we consider this a first step toward installing WHR power generation systems at all our cement plants in North America and South East Asia. The introduction of WHR power generation systems is one scenario for contributing to reliable and significant CO_2 reductions throughout the entire value chain. We will complete the installation of these systems in our plants and continue our efforts to realize our vision for the future of the cement business.

WHR power generation system (waste heat boiler on the kiln preheater system at the Kamiiso plant H-8)

FOCUS

Promoting the Regional Treatment of Disaster Waste

Cement plants are contributing to regional restoration by accepting waste such as the debris generated by natural disasters. We started to accept disaster waste following the Chuetsu Earthquake in Niigata Prefecture in 2004. Since then we have concluded a comprehensive partnership agreement with several local governments in areas where our plants are located to prepare for future disasters.

In June 2019 we concluded a comprehensive partnership agreement with the Miyagi prefectural government where the company does not operate any plants. Taking into consideration the maximum use of prefectural port facilities along with additional new routes, more of our plants would be able to accept disaster waste. Three months after the conclusion of the agreement, typhoon No. 19 made landfall in October 2019 and caused severe damage in the Tohoku region. Under the agreement with the Miyagi prefectural government, our Ofunato plant accepted a large volume of waste rice straw that had been generated immediately after the harvest and treated 23,000 tonnes by the end of March 2020. Our Saitama and Kumagaya plants also treated materials such as straw mats and quail droppings that were destined after use in a digester after drying but had become sodden in the typhoon. We plan to establish a system for treating disaster waste regionally by leveraging our plants across Japan as well as our land and marine transport network.

Waste rice straw in Miyagi Prefecture

Waste tatami mats at Higashimatsuyama City in Saitama Prefecture

Special Feature 2

Developing Business in Southeast Asia and China

Leveraging Our Cement Technology to Contribute to a Stable Food Supply and Preservation of the Water Environment

While engaged in the stable supply of cement as a basic material for infrastructure, the Taiheiyo Cement Group has broadened its scope of business by developing products that capitalize on its cement technology. This project, which started with the water treatment business, has evolved into the development of overseas markets and new products while also improving our domestic aquaculture technology. Moreover, it has rapidly grown into a business that contributes to a stable food supply and preservation of the water environment in Southeast Asia and China.





Products Derived from Cement Technology for Diverse Applications

We are cultivating markets in the aquaculture, agriculture and livestock sectors for our products that contribute to solving food and environmental problems by capitalizing on technologies we have verified in the water treatment sector. These products help preserve the water environment, recover the purifying capacity of nature, and ultimately contribute to ensuring a stable food supply while creating a sustainable society. They have been sold in Japan and overseas through our Group companies. In our overseas operations we started production in Thailand in 2018 and Indonesia in 2019. We also conducted demonstration tests for the products and launched them in Southeast Asia and China.

Applications		Product Name	Raw Material	Characteristics
Aquaculture	Japan	Ceraclean	Porous fine-grained calcium silicate (Main Raw Materials) Cement, limestone, silica	•Release of silicates and calcium •Phosphorus absorption capacity •Ammonia adsorption capacity •Oxygenating •Alkaline •High water absorption capacity •Bacteria-supported
	Overseas	Ceraclean		
Agriculture	Japan	Inenica*1		
	Overseas	SILICANITE		
Livestock	Japan	Escariu*2		
	Overseas	Healthy bed		

*1 Inenica is a trademark of Clion Co., Ltd., who developed and distribute this product.
*2 Escariu is a trademark of Clion Co., Ltd., who developed and distribute this product.
Onoda Chemical Industry Co., Ltd. and some other companies are also distributor of this product.

VOICE

Establishing a Business Scheme to Address Social Problems

Environmental Business Development Department
Nutchaya Kaewrassamee

I am from Thailand and have always had a strong interest in food supply and environmental issues in Southeast Asian countries. Therefore, I am very grateful to have been a part of this project in Japan and to expand the introduction of Ceraclean to Thailand in 2018 and Indonesia in 2019.

A three-year business viability study started in 2016 with support from the Ministry of the Environment, and the Ministry of Economy, Trade and Industry has proved the feasibility of Ceraclean's production system because of the easy procurement of raw materials and high potential demand for the product, which has led us to expand the market in Southeast Asia. I would like to contribute to solving food and environmental problems in Southeast Asia and China through the provision of Ceraclean and by building up our business scheme as soon as possible.

Aquaculture

Stabilizing Water Quality with Ceraclean and Improving the Productivity of Shrimp Aquaculture

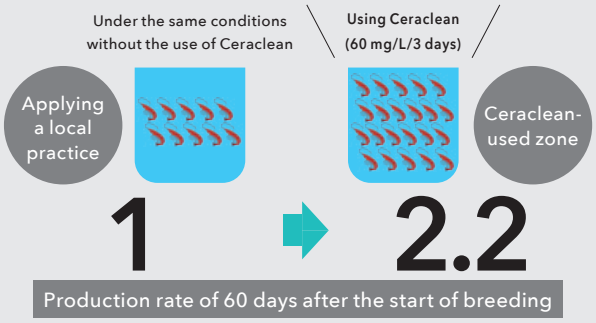
Water Quality Stabilizer "Ceraclean" for Aquaculture

The aquaculture industry is drawing worldwide attention as a stable source of fishery resources since global consumption of seafood is increasing with the changes in food habits due to advances in the internationalization of food distribution and economic growth. The production of shrimp and similar resources is rising due to the high feed conversion ratio (FCR) of 1 to 1.5. On the other hand, in China, the world's largest shrimp producer and consumer, the construction of new aquaculture ponds is restricted due to the impact on the water environment. And in Southeast Asia, the production volume of shrimp is falling as a result of the degradation of water quality caused by excessively high-density aquaculture.

Sorting and preparing to ship shrimp at an aquaculture farm in Surat Thani province (Thailand)

Verifying the impact of Ceraclean on aquaculture, in a partnership with Tokyo University of Marine Science and Technology and Walailak University (Thailand), we confirmed that it improved the shrimp survival rate. It is thought that stable water quality and the increase of phytoplankton that is non-toxic and serves as shrimp food are attributable to the absorption of phosphorus and release of silicic acid, which are characteristic features of Ceraclean. It is already being used at shrimp farms in Taiwan, Thailand and Vietnam.

Effects of the Use of Ceraclean (Laboratory Test)



Applying a local practice

Using Ceraclean

Marketing Products with a Focus on Water Purification

Environmental Improvement of Mudflats and Lakes

Product used: Ceraclean

A healthy mudflat is restored by applying Ceraclean to the bottom sediment, where there are fewer fish and shellfish due to deterioration of the water environment in relation to that sediment. In FY2018 the effect of this technology on improving that mudflat environment was confirmed by the Environmental Technology Verification (ETV) Program, sponsored by the Ministry of the Environment.

Obtained ETV mark certification

Improving the Landscape of a Golf Course Pond

Product used: Ceraclean Golf

Spraying Ceraclean Golf in an artificial pond at a golf course in an enclosed environment can fix the level of phosphorus in the water and curb the accumulation of sludge as well as the growth of blue-green algae, which releases odor. The use of the product made it easy to manage the pond of a golf course, around which the beautiful landscape is valued highly.

Water Purification at a Carp Farm

Product used: 恋水 こいみず (Koimizu)

Koimizu prevents the accumulation of residual feed and excrement, keeps the water clear and suppresses both odor and a decrease in food intake. It is already widely used in Japanese carp (Cyprinus carpio) production areas such as Niigata, Hiroshima and Okayama Prefectures. The product is highly valued because it makes easier the breeding of carp and control of water quality.

Agriculture

Increasing Rice Production Capacity in Southeast Asia

Siliceous Fertilizer "SILICANITE"

SILICANITE releases silicic acid in the soil. As rice absorbs silicic acid, it generates silicified cells, which strengthen the plant. These characteristics give resistance to rice against pests, diseases, heat and strong winds, thereby contributing to a higher yield of high-quality rice. Major demand for the product is expected in Southeast Asia, where rice production is seriously affected by rice blast. We selected Vietnam, Malaysia and Indonesia for the promotion of a wider use of the product, and we are presenting it to the relevant ministries and agencies in those countries while applying for its registration as a fertilizer. Major demand for the product is expected in Southeast Asia, where rice production is seriously affected by rice blast. We selected Vietnam, Malaysia and Indonesia for the promotion of a wider use of the product, and we are presenting it to the relevant ministries and agencies in those countries while applying for its registration as a fertilizer.

Field test of rice

Livestock

Keeping Livestock Healthy by Improving Their Bedding Environment

"Healthy bed" Sanitary Material for Dairy Farms

Demand for dairy products has recently been growing in Southeast Asian countries along with the development of their economies. The low productivity of raw milk requires the region to import it from Australia and other countries. Improving productivity will require reducing cow stress and preventing the occurrence of mastitis, which in turn depends on sanitary breeding conditions. The use of Healthy bed enables dairy farmers to maintain dry, low-alkaline bedding while suppressing the growth of pathogens and ammonia odor. Given that demand for raw milk is expected to grow in Southeast Asia and China, we will conduct local demonstration tests of the product toward quickly achieving commercialization.

The use of Healthy bed in an cattle shed

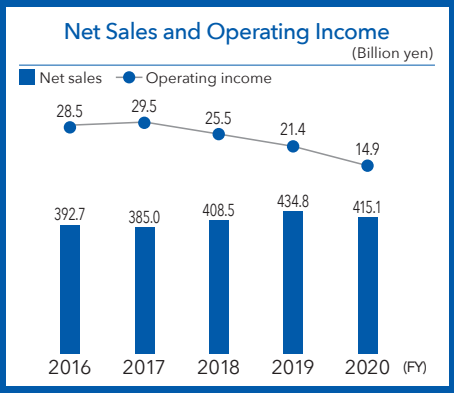
Cement Business (Japan) GRI102-6, 15

Our cement business engages in the manufacture and sales of cement and ready-mixed concrete. Both are essential construction materials for infrastructure development such as high-rise buildings, housing, roads, airports and ports. We also manufacture and sell special cements, blended cements and soil stabilizers for a diverse range of applications.

Yukimasa Nakano
Managing Executive Officer & Senior General Manager of Cement Business Division

Net sales
415.1 billion yen
down 19.7 billion yen from the previous year

Operating income
14.9 billion yen
down 6.4 billion yen from the previous year



Achieving Sustainable Growth with Our Solid Supply Infrastructure and Improved Customer Satisfaction

In our cement business in Japan we stably supply our products to users through our solid foundation in manufacturing, transportation and supply chains, which includes 9 cement plants, 106 service stations and 36 cement tankers. In the future, as measures for national resilience are implemented, a larger number of projects will adopt diversified construction methods and call for soil stabilizers and specialty cement such as medium-heat cement. We will therefore further enhance our logistics network to meet these demands.

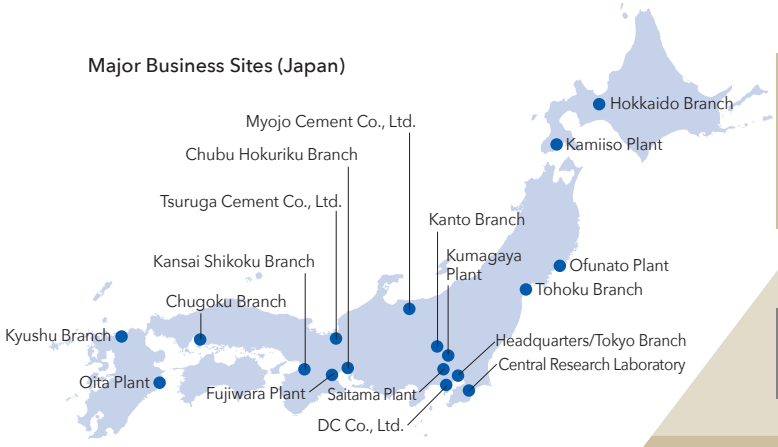
To support our customers we organize our user societies by business sector such as ready-mixed and concrete product manufacturers. We provide them with technical services based on knowledge acquired by the group's technical and R&D divisions. Along with our stable supply and high product quality we believe our enhanced technical services are one of the main reason for users to select our products. Thus, we will strengthen initiatives such as the activities of user societies to improve customer satisfaction.

Results of Operations and Principal Initiatives for FY2020

Both public and private sector demand for cement in Japan declined in FY2020 following the completion of preparations for the Tokyo Olympics and Paralympics, and also the reconstruction projects in the areas affected by the Great East Japan Earthquake. Furthermore, extended construction periods due to labor shortages at construction sites across Japan has had an impact. As a result, the group's domestic cement sales by volume, including sales in conjunction with toll-manufacturing agreements, fell by 5% to 14.47 million tonnes year-on-year. As a result, net sales for FY2020 declined by 19.7 billion yen to 415.1 billion yen year-on-year. Operating income for FY2020 dropped by 6.4 billion yen to 14.9 billion yen year-on-year due to the decrease in sales volume and an increase in fixed expense such as repair expense.

Under such a business environment, we were able to reach agreements to revise prices with around 80% of our customers. We started supplying cement to Hitachi Cement Co., Ltd. based on a toll-manufacturing agreement with the company in April 2019. In addition, we duly responded to regulations on sulfur oxide (SOx) contained in fuel for cement tankers, which were enforced in January 2020. With regard to major capital investments for plants, we installed a bag filter system and a high-efficiency cooler to No.5 kiln at Oita Plant. We also expanded the chloride bypassing capacity for the No. 6 kiln and installed a facility to accept biomass ash at the Kamiiso plant.

Major Business Sites (Japan)



Efforts to Address Social Issues

- Stable provision of cement products
- Efforts to mitigate and adapt to climate change
- Further contribution to recycling-oriented society
- Technological development to reduce environmental impacts
- Addressing the reinforcement of environmental regulations

Closely Related SDGs

Risks and Opportunities in Our Business Environment

Risks	Decline in domestic demand due to declining birth rates and an aging population
Opportunities	New demand created by a commitment to national resilience and development of advanced infrastructure
Risks	Reinforcement of regulations on GHG emissions
Opportunities	Development of innovative technology for utilizing CO_2

Business Strategies for the Cement Business (Japan) Based on the 20 Medium-Term Management Plan

- Strengthen profitability by quickly realizing fair prices and thoroughly cutting costs
- Contribute to national and other projects by strengthening and expanding our capacity for reliably supplying products
- Actively pursue measures toward mitigating climate change

Outlook for FY2021

Following the state of emergency declared by the government to prevent the spread of COVID-19, many ministry-controlled infrastructure construction projects under the Ministry of Land, Infrastructure, Transport and Tourism, and private investment projects by major contractors and others, have been suspended or delayed. Under such difficult circumstances we will strive to maximize profits while reducing costs by implementing the key strategies shown on the right. We plan to achieve net sales of 397.0 billion yen (down 18.1 billion yen year-on-year) and operating income of 13.0 billion yen (down 1.9 billion yen year-on-year).

Key Strategies for FY2021

1. Sales
   - Continue price negotiations; respond to increasing costs
   - Maintain a stable supply of special cement (low-heat, moderate-heat and blended cement)
2. Ready-mixed concrete
   - Establish a production system best suited for regional cement demand
   - Improve recognition of high-strength concrete and concrete pavements to encourage wider use
3. Concrete products
   - Support an improvement in the workability of precast products in enhanced collaboration with our construction materials business and R&D divisions
4. Acquire more large-project orders
   - Provide total solutions that integrate other businesses and the products of other group companies
5. Develop the soil stabilizers business
   - Improve the supply system; reinforce the transport system

MESSAGE

Making Every Effort to Reduce CO_2 Emissions and Achieve Eradication of Occupational Accidents

Yoshiyuki Uenoyama
Managing Executive Officer, Overseeing Production Department and Maintenance & Engineering Department

We are actively addressing the key challenges of reducing CO_2 emissions and achieving zero work-related accidents in cement manufacturing.

To reduce CO_2 emissions, we will work on using less fossil energy by doubling the annual amount of waste plastic used from 200,000 tonnes by the middle of the 2020s, based on the CSR Objectives for 2025 that the group formulated in 2015. We will both maintain the stable operation of kilns and save energy by fully operating an AI-enabled operating support system by FY2021. Moreover, we decided to install a WHR power generation system at the Saitama plant, the only one of our six directly managed plants not equipped with the system. Installation work is scheduled for completion in 2022.

Every employee must fully comply with safety rules to eradicate occupational accidents. The group achieved zero fatalities over two consecutive years, FY2019 and 2020, although we still had a number of occupational accidents with no leave of absence. We will strengthen measures to improve the situation. To create a safe workplace for our employees we will also take action to prevent heatstroke and COVID-19 infection.

Cement Business (Overseas)

GRI102-6, 15

Overseas, we manufacture and sell cement products from nine plants in the Pacific Rim: three in the U.S. West Coast, three in China (including Qinhuangdao Asano Cement Co., Ltd., which was excluded from the consolidation after the Group had transferred all equity interests of the company in September 2020), and one each in Vietnam, the Philippines and Papua New Guinea. In addition to exporting product from Japan we also conduct a variety of trading activities, including trilateral trade.

Yoshifumi Taura
Managing Executive Officer
Senior General Manager of International Business Division

Net sales

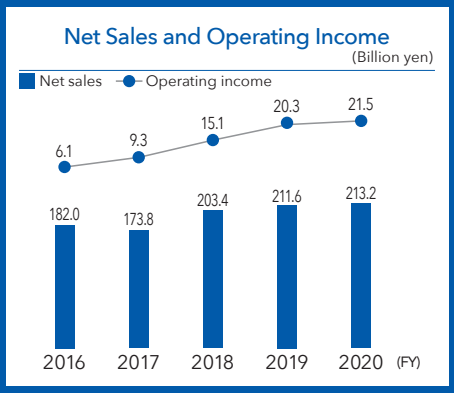
21.3 billion yen

up 1.6 billion yen year-on-year

Operating income

21.5 billion yen

up 1.2 billion yen year-on-year



Providing Environmental Solutions as Our Added Value

Ensuring the stable supply of products and meeting quality requirements unique to the region are prerequisites for providing customers with solutions as a cement company.

We will focus on providing environmental solutions as our added value. Various initiatives for reducing CO_2 emissions are being implemented in California in the U.S. We have promoted the use of natural gas as a fuel for concrete mixer trucks while increasing the use of natural gas as kiln fuel, enabling us to reduce environmental impact at a minimum cost. In Dalian, our contribution to the community through the efficient treatment of sewage sludge was recognized by the government, thereby allowing us to continue operations.

We will also provide environmental solutions for municipal waste and sewage sludge to countries in Southeast Asia and other regions by properly combining existing and new technologies. We believe this is a time when our continued contributions to solving environmental issues are highly valued, even if each alone is relatively small in countries that face the challenge of improving their environments.

Results of Operations and Principal Initiatives for FY2020

In the U.S., prices increased despite minimal growth in shipment volume for both cement and ready-mixed concrete, which was partly due to bad weather on the West Coast. In China the market held solid due to improved supply and demand conditions as a result of the government's policy to curb cement production nationwide. In Vietnam our business was affected by the entry of a new manufacturer. In the Philippines the level of demand and market conditions stayed the same as in the previous year mainly due to the temporary suspension of and delays to public investments during the campaigning for the unified regional and national elections. As a result, net sales for FY2020 were 213.2 billion yen (up 1.6 billion yen year-on-year) and operating income for the year was 21.5 billion yen (up 1.2 billion yen year-on-year).

Given this business environment, in the U.S. we completed the construction of a finish mill at the Oro Grande plant. In the Philippines we are constructing a belt conveyor system that links the port and the plant, and in Vietnam we established a local subsidiary to handle products related to resources and the environment.

Outlook for FY2021

The spread of COVID-19 has affected our business in the U.S., China, Vietnam and the Philippines to varying extents by region. Under these circumstances we will strive to

Efforts to Address Social Issues

- Contribution to infrastructure improvement
- Efforts to mitigate and adapt to climate change
- Contribution to creating recycling-oriented society
- Addressing the reinforcement of environmental regulations

Closely Related SDGs

Risks and Opportunities in Our Business Environment

Risks	Reinforcement of environmental regulations in the countries where we operate
Opportunities	Contributing to the creation of a recycling-oriented society in the countries where we operate
Risks	Climate change in the countries where we operate
Opportunities	Providing innovative technologies for utilizing CO_2

Business Strategies for the Cement Business (Overseas) Based on the 20 Medium-Term Management Plan

- Expand our strategic business domain in the Pacific Rim regions
- Establish a brand image that expresses our quality, technology and environment-oriented values, thereby further reinforcing our regional presence

earn profits based on key strategies, shown on the right, while reducing costs and properly responding to the environmental regulations in each region.

We plan to achieve net sales of 213.0 billion yen for FY2021 (down 0.2 billion yen year-on-year) and operating income of 20 billion yen for the year (down 1.5 billion yen year-on-year). In April 2020 we concluded a basic agreement on a capital and business alliance with an Indonesian company, PT Semen Indonesia, that will allow us to expand our business area. We will explore the possibility of collaborating with the company in areas such as cement exports as well as the resources, environmental and construction materials businesses. Our representative office was set up in Jakarta, the capital of Indonesia, to collect information and support our business.

Key Strategies for FY2021

1. Boost earnings capacity of businesses

(1) U.S.
- Promote investments to increase production capacity and maximize the production volume of clinker and cement
- Improve the operating rate of cement plants through an effective equipment maintenance system

(2) China
- Improve the utilization rate by properly responding to environmental regulations
- Promote the environmental business

(3) Vietnam
- Enhance logistics sites to address a shift toward high-end markets
- Improve profit margins by offering a broader selection of products

(4) The Philippines
- Boost supply capacity capacity
- Accelerate efforts to stabilize production process and reduce costs

2. Expand and increase the sophistication of the trading business
- Develop markets for our high value-added products; enhance shipping bases
- Strengthen trading of cementitious materials

3. Expand the regions where we operate
- Expand business in Indonesia

MESSAGE

Making Full Use of Our Global Network of Plants by Mutually Introducing Domestic Environmental Technologies and New Technologies Overseas

Yoshiyuki Uenoyama
Managing Executive Officer, Overseeing Production Department and Maintenance & Engineering Department

Overseas operations represent a group strength that we must fully capitalize on in applying environmental technologies developed in our cement plants. We are providing environmental technologies that we have developed in Japan to our overseas plants. On the same token, some of our overseas plants have taken the lead in introducing advanced technologies to satisfy stricter environmental regulations. We will introduce those technologies into our domestic plants as appropriate. For instance, our domestic plants are introducing a NOx reduction technology used in China and another for preventing the discharge of mercury used in the U.S. Other innovative environmental technologies will be introduced into our plants in Japan as soon as they are applicable.

In our plants in Japan we are accelerating the use of alternative raw materials and thermal energy by applying a technology for recycling waste containing high-concentration chlorine. We will also see a shift toward a recycling-oriented society in emerging markets, for which group technologies will be significantly beneficial to users, and we will continue to expand them into our global operations.

Mineral Resources Business GRI102-6, 15

We own quarries across Japan and supply abundant, high-quality limestone as a raw material for cement. We also sell them for a variety of industries such as construction, civil engineering, steelmaking and chemicals. In addition, we also sell high value-added products made from inorganic minerals and operate a business for the treatment of contaminated soil.

Kunihiro Ando
Director & Senior Managing Executive Officer
Mineral Resources Business Department

Net sales

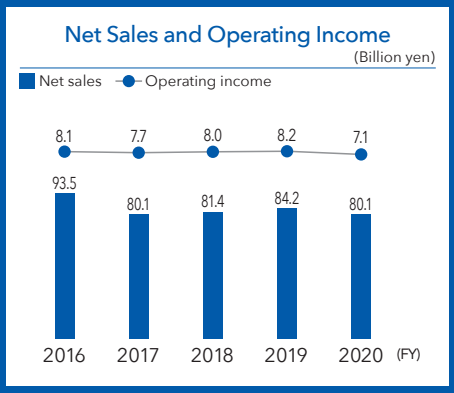
80.1 billion yen

down 4.1 billion yen year-on-year

Operating income

7.1 billion yen

down 1.0 billion yen year-on-year



Achieving Sustainable Growth through the Full Use and Appropriate Development of Group Mineral Resources

Limestone is one of the few mineral resources in which Japan is self-sufficient; however, ongoing quarry development is becoming increasingly difficult. The aggregates and mineral products businesses, our division's core businesses, largely rely on the mineral resources that the group owns so we are therefore developing quarries with a long-term perspective.

The characteristics and quality of every mineral varies by quarry so we need to establish an optimum supply system for the most effective use of resources. To ensure stable supply, we are strategically implementing capital investments to establish a smarter and more flexible logistics system.

The geo-solutions business significantly contributes to society through the sales of the heavy metal immobilizer focusing on large infrastructure projects and the treatment of construction soil and surplus soil. In view of this we will strive to ensure the stable operations of this business.

Our growth strategy will remain centered on expanding the overseas mineral resources business and achieving the early commercialization of the functional materials business. We will also continue to maximize earnings and achieve sustainable growth through business operations in collaboration with the production and sales divisions in cooperation with group companies.

Results of Operations and Principal Initiatives for FY2020

The sales of limestone aggregates for ready-mixed concrete declined in FY2020 due to the end in demand related to preparations for the Tokyo Olympics and Paralympics and restoration projects in the areas affected by the Great East Japan Earthquake. Limestone sales for the domestic steel industry were also sluggish, due to a reduction in the domestic production volume of steel. Our geo-solutions business steadily achieved the target sales of the heavy metal immobilizer for highway construction projects in the Greater Tokyo Area. As a result, net sales for the business in FY2020 were 80.1 billion yen (down 4.1 billion year-on-year) and operating income was 7.1 billion yen (down 1.0 billion yen year-on-year).

Under such a business environment we are expanding production equipment for crushed limestone sand at the Shin-Tsukumi Quarry of Tsukumi City in Oita Prefecture. Additionally, we are conducting environmental assessments for the development quarry site for cement raw materials at the Yato area of Shin-Tsukumi Quarry. In the field of functional hollow particles, we began a trial mass production of CellSpheres, which are expected to increasingly be used for paints and electronic devices. This was conducted in the demonstration plant we had installed at the group company Chichibu Taiheiyo Cement Corporation. In overseas operations, we established a subsidiary in Vietnam and started to handle mineral resource products.

Efforts to Address Social Issues

- Stable provision of mineral products
- Further contributions to a recycling-oriented society
- Provision of environmentally friendly products

Closely Related SDGs

Risks and Opportunities in Our Business Environment

Risks	Quarries subject to large-scale natural disasters associated with climate change
Opportunities	Reinforcing our supply chain, leveraging our abundant mineral resources from quarries
Risks	Triggering the deterioration of concrete by alkali-aggregate reaction
Opportunities	Developing more sophisticated mining technology

Business Strategies for the Mineral Resources Business based on the 20 Medium-Term Management Plan

- Establish a robust system for ensuring the stable supply of resources
- Take full advantage of the group's abundant resources to boost the profitability of our businesses
- Focus on developing future-oriented businesses as well as creating an overseas resource business

Outlook for FY2021

We expect ongoing projects at construction sites across Japan to be temporarily suspended in response to the spread of COVID-19. Due partly to this, the sales volume of our limestone aggregates for ready-mixed concrete will decline in FY2021. In the mineral products business, we expect a decline in sales volume given the projected reduction in the production volume of crude steel. Despite this severe environment, we will strive to maximize earnings based on the following key strategies while strengthening collaboration with group companies and driving cost reductions. We plan to achieve net sales of 78.0 billion yen for FY2021 (down 2.1 billion yen year-on-year) and operating income of 6.0 billion yen for the year (down 1.1 billion yen year-on-year).

Key Strategies for FY2021

1. Maximize profits from core businesses

Aggregates business
- Reinforce the supply and sales system for limestone aggregates in the Greater Tokyo Area
- Establish the Taiheiyo-Brand Sand business in the Tokyo Bay area

Mineral products business
- Establish the optimal limestone supply system for steelmaking
- Improve the profitability of the crystalline limestone business and strategically expand sales, including exploring the possibility of quarrying crystalline limestone at the Horoshi area of the Ofunato Quarry

Geo-solutions business
- Further develop the heavy metal immobilizer and construction soil business by promoting their specification and utilization in large scale construction project

2. Formulate and implement a growth strategy
- To secure stable income sources for the limestone business in Vietnam, we will formulate and implement growth investments in Southeast Asia
- Early commercialization of ultra high-purity silicon carbide and functional hollow particles, including the establishment of low-cost, mass production technology; development of new customers

Development of a Next-generation Quarry Site at the Ofunato Quarry
The Ofunato Quarry is providing limestone to the Ofunato plant and is developing the Horoshi area for its next-generation operations toward the start of quarrying in 2021. Its limestone deposits amount to around 250 million tonnes, equivalent to more than 100 years of limestone consumption as a raw material for cement in Ofunato. The new site also includes a deposit of crystalline limestone, used in paper manufacturing, and is expected to become a new shipment base for the product.

Aggregates Yard for the Greater Tokyo Area
Concrete made with limestone aggregates is less susceptible to alkali-aggregate reaction and exhibits low drying and self shrinkage, thereby helping to prevent cracks. Demand is therefore rising for limestone aggregates, particularly in the Greater Tokyo Area where there are many high-rise buildings. We operate an aggregates yard with a storage capacity of 230,000 tonnes, the largest in the Greater Tokyo Area in Sodegaura City, Chiba Prefecture to ensure the stable supply of aggregates.

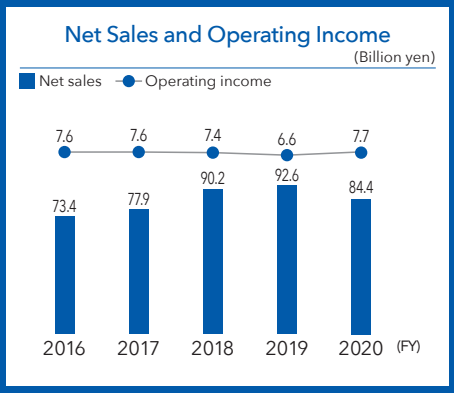
Environmental Business GRI102-6, 15

In the Environmental Business we are contributing to the realization of a recycling-oriented society by recycling waste and by-products generated at thermal power stations, steelmakers and chemicals manufacturers, as well as municipal waste incineration ash and sewage sludge at the request of municipalities, capitalizing on the diverse environmental technologies we have cultivated in cement production. We also engage in the aquatics business by supplying water purification materials.

Kunihiro Ando
Director & Senior Managing Executive Officer
Environmental Business Development Department

Net sales
84.4 billion yen
down 8.2 billion yen year-on-year

Operating income
7.7 billion yen
up 1.0 billion yen year-on-year



Aiming to Achieve Sustainable Growth and Contribute to Society by Maximizing the Earnings Capacity of Our Businesses and Commercializing New Technologies

We have established and operate our recycled-waste-to-cement system to treat a large volume of industrial waste and by-products as well as municipal waste, and reusing the recycled waste for cement production. We have striven to create and expand a recycling-oriented society through this system. Efforts to reduce greenhouse gas emissions have recently been accelerating across the world. Taking action to address this is becoming vital for every industry.

The Taiheiyo Cement Group formulated its long-term vision for reducing greenhouse gas emissions by 80% by 2050. Our efforts in the Environmental Business include increasing the use of alternative fuels. We are also focusing on establishing technologies to recycle discarded lithium-ion batteries and for the recycling and recovery of materials using low-temperature embrittlement technology, as well as conducting R&D for the recovery of precious metals and phosphorus from municipal waste incineration ash.

We plan to continue developing the environmental business by making progress in these new fields and building up the new businesses to the same level as our current e-materials and recycling businesses.

Results of Operations and Principal Initiatives for FY2020

The volume of waste plastic treated increased following stricter restrictions by China and Southeast Asia on the import of waste plastic. In addition, more disaster waste was treated such as straw mats and rice straw generated by tropical cyclones such as Typhoon No.19. Sales of biomass fuel also rose as the Ofunato Biomass Power Station started operation. The operation of coal-fired power stations in Japan has declined due to a global shift toward a low-carbon society, resulting in a drop in the availability of coal ash, the mainstay of our environmental business. Sales of calcium carbonate for scrubbing systems at power stations declined proportionally, as did the trade in by-product gypsum. As a result, net sales for the business in FY2020 was 84.4 billion yen (down 8.2 billion yen year-on-year), although operating income was 7.7 billion yen (up 1.0 billion yen year-on-year).

Given this business environment, we introduced an ash washing system for cleaning municipal waste incineration bottom ash to allow its use in cement production at the Kumagaya plant. We also launched our container liner service (Tokyo-Hakodate) to transport waste plastic to the Kamiiso plant.

In addition, we concluded a comprehensive partnership agreement with the Miyagi prefectural government and launched the regional treatment of disaster waste such as waste rice straw generated by Typhoon No. 19 and other disasters.

Efforts to Address Social Issues

- Further contributions to a recycling-oriented society
- Establish a new model for recycling resources
- Provision of environmentally friendly products and solutions

Closely Related SDGs

Risks and Opportunities in Our Business Environment

Risks	Changes in environmental regulations in countries to which we export waste
Opportunities	Growing use of blended cement in Southeast Asia and other regions
Risks	Decline in the volume of coal ash generated due to fewer coal-fired power stations in operation
Opportunities	Development and deployment of technologies to use alternative by-products

Business Strategies for the Environmental Business based on the 20 Medium-Term Management Plan

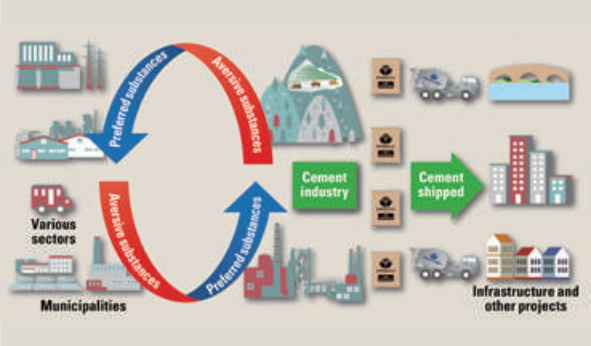
- Maximize the earnings capacity of our businesses while constructing a new business model by developing advanced technology
- Contribute to creating a new recycling system for unutilized resources

Outlook for FY2021

We expect demand for waste plastic treatment in Japan will remain high. The treatment of disaster waste generated by the typhoons in 2019 will also accelerate. Given formal enforcement of the Paris Agreement this year the volume of our business related to coal-fired power stations, such as the treatment of coal ash, our core business, will continue to decline in FY2021. Moreover, steelmakers are being forced to reduce production volume due to the spread of COVID-19. Thus, the volume of our business with steelmakers, such as the acceptance of blast furnace slag, is also likely to drop. Despite this difficult business environment we hope to maximize earnings based on the following key strategies while reducing costs. We plan for 85.0 billion yen in net sales for FY2021 (up 0.6 billion yen year-on-year) and operating income of 6.0 billion yen for the year (down 1.7 billion yen year-on-year).

Key Strategies for FY2021

1. **Accept a larger volume of waste plastic**
   - Reinforce capital investments and transport routes to ensure the acceptance of a larger volume of waste plastic at our major plants
2. **Appropriate treatment of disaster waste**
3. **Establish a new model for recycling resources through a resource complex initiative in which the cement industry plays a central role**
4. **Establish a new business model through the development of advanced technologies such as low-temperature embrittlement**



A resource complex initiative
All of the waste and by-products treated at our cement plants is recycled to manufacture cement. We proposed the Materials Recovery Complex initiative, under which each of the various industries such as non-ferrous metal, scrap smelting, chemicals and recycling sells to others the waste materials that it does not reuse and purchases waste materials from other industries that it can recycle. We are now working with the government and academia to establish a working complex model.

Lithium-ion Battery Recycling
As large lithium-ion batteries become more widely used for electric vehicles and other purposes, we will soon face the challenge of treating a large quantity of end-of-life lithium-ion batteries. We jointly established a technology to recycle large-sized lithium-ion batteries with Matsuda Sangyo Co., Ltd., leveraging the cement production process, and launched the lithium-ion batteries recycling business in April 2020.

Construction Materials Business GRI102-6, 15

We manufacture and sell a wide range of materials that are essential for construction through our extensive network encompassing all of Japan. We also manufacture and sell various cement-related products such as high-performance premix products, concrete admixture, and concrete products such as autoclaved lightweight concrete (ALC) panels and paving blocks. In addition, we engage in ground improvement and other civil engineering projects. These businesses enable us to address diverse customer needs expeditiously and effectively.

Katsuhide Fukuhara
Managing Executive Officer
Construction Materials
Business Department

Net sales

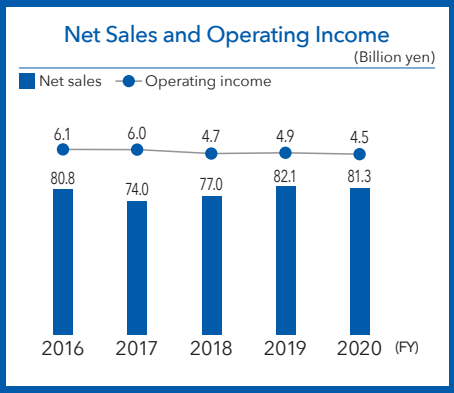
81.3 billion yen

down 0.8 billion yen year-on-year

Operating income

4.5 billion yen

down 0.4 billion yen year-on-year



Enhancing Our Earning Bases by Developing New Business Domains such as Southeast Asia and Promoting Labor Savings

As part of our efforts to develop new business domains we established a local subsidiary in Vietnam to engage in ground improvement projects, and we are focusing on taking orders for large projects such as subway construction to achieve the vision of expanding business operations to new horizons overseas as symbolized by our corporate logo. We also recruit local employees in Myanmar and Vietnam where we operate representative offices, and provide on-the-job training for them in Japan.

In response to the need to save labor at construction sites and concrete products manufacturing plants, we developed a dry spraying method for repair materials and introduced truck-mounted mixers for supplying materials at road repair sites. To ensure the stable supply of products, we have carefully identified manufacturing sites and products to focus on, while also promoting collaboration with other companies on a toll-manufacturing basis and by other means.

Governance is a prerequisite and foundation for our business operations. We call the representatives of companies that our department oversees and hold a president's meeting to discuss business performance as well as risk management and compliance.

Results of Operations and Principal Initiatives for FY2020

Sales of construction materials and buiding exterior construction materials increased due partly to the progress of urban redevelopment projects related to The Tokyo Olympics and Paralympics. Sales of autoclaved lightweight concrete (ALC), however, declined due to weak demand. The start of some ground improvement projects were delayed and, as a result, the department's net sales were 81.3 billion (down 0.8 billion yen year-on-year) and operating income was 4.5 billion yen (down 0.4 billion yen year-on-year).

In the Construction Material Business we have focused on making capital investments and developing new construction methods to save labor at construction and manufacturing sites in accordance with priorities of the 20 Medium-Term Management Plan. For instance, we are working on visualizing the state of underground work using information and communications technology (ICT) in carrying out ground improvement work. We are also developing material technologies for pre-cast concrete products to improve productivity at construction sites, and implementing countermeasures for the deterioration of production facilities and reducing environmental impacts to enhance the foundation of our businesses.

To deal with a significant increase in the volume of construction work for national projects such as the Tokyo-Gaikan Expressway and the Chuo Shinkansen, we are fully prepared to provide related products, materials and services such as the deployment of engineers.

Efforts to Address Social Issues

- Provision of environmentally friendly products and technical services
- Provision of labor-saving products

Closely Related SDGs

Risks and Opportunities in Our Business Environment

Risks	A shrinking domestic construction market due to a declining population
Opportunities	Expanding into new business domains such as overseas markets
Risks	Decline in the competitiveness of our businesses
Opportunities	Providing competitive, high value-added products and technologies

Business Strategies for the Construction Materials Business based on the 20 Medium-Term Management Plan

- Establish a sustainable business foundation capable of adapting to changes in the business environment and strengthen the competitiveness and financial structure of our businesses
- Cultivate new earnings sources in growth fields and maximize synergies between our businesses

Outlook for FY2021

FY2021 is the final year of the 20 Medium-Term Management Plan. Many construction projects are being suspended or delayed due to the COVID-19 pandemic and the Construction Materials Business is expected to remain stagnant during the year.

Under these circumstances we will pursue three pillar strategies in FY2021: 1. Labor savings in all aspects of our business activities, 2. Enhancing the earnings bases of our existing businesses, and 3. Accelerating development of new businesses in growth areas.

We plan to achieve net sales of 80.0 billion yen for FY2021 (down 1.3 billion yen year-on-year) and operating income of 4.0 billion yen for the year (down 0.5 billion yen year-on-year).

Key Strategies for FY2021

1. Achieve labor savings in all aspects of our business activities
- Develop and bring to market products and services that provide solutions that address construction site needs
- Enhance the provision of products to pre-cast concrete manufacturers

2. Enhance the earnings bases of our existing businesses
- Promote labour saving by reviewing how well our manufacturing sites leverage toll-manufacturing and the shared delivery of products in logistics operations
- Improve deteriorating production facilities

3. Accelerate development of new businesses in growth areas
- Respond appropriately to the demand for the maintenance and repair of infrastructure equipment
- Enhance business operations in overseas markets with a focus on Southeast Asia

Ground Improvement Project by Barge (Onoda Chemico Co., Ltd.)
In the Tokyo Metropolitan Area ground improvement projects are underway to reinforce river banks and prevent liquefaction in preparation for future inland earthquakes. We can now obtain the necessary information on site conditions in real time from excavators equipped with an advanced work progress control unit and consequently expect improvements in the quality of construction work.

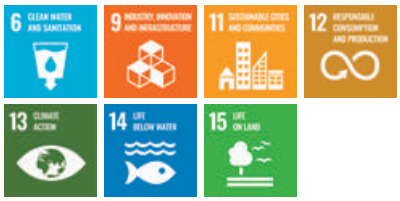
Diverse Pre-cast Concrete Products
A variety of admixtures are being used to improve the performance of pre-cast concrete products. High early strength expansive additive Taiheiyo N-EX (manufactured and sold by Taiheiyo Materials Corporation) prevents the concrete from cracking and makes it strengthen faster. It also reduces the need for steam curing in concrete products manufacture.

Research and Development

GRI102-15

Our research and development activities provide the technological support for high product quality and ensures that the company contributes to protecting the global environment through new technologies for resource conservation and CO_2 emissions reduction.

Closely Related SDGs



Takayoshi Okamura
Managing Executive Officer
Intellectual Property Department and Central Research Laboratory

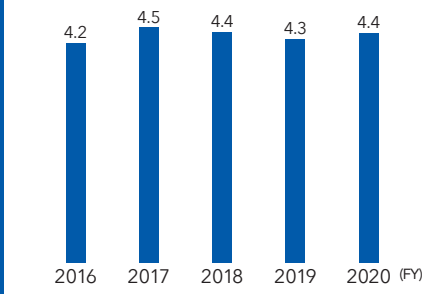
R&D expenses

4.4 billion yen

up 120 million yen year-on-year

Changes in R&D Expenses

(Billion yen)



Creating the Future by Developing Carbon Recycling Technology

The R&D division supports our business divisions by maintaining and improving product quality, and developing technologies for reducing manufacturing costs. It also develops new materials and technologies that will lead to the growth of the Group.

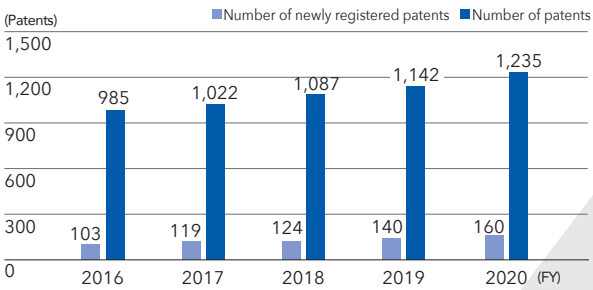
The shift toward a low-carbon society is accelerating. People now expect businesses to go "carbon neutral" and even "beyond zero." Given this trend we are fully aware that the value of our businesses largely derives from our achievements in reducing CO_2 emissions.

The Taiheiyo Cement Group published its long-term vision and specific measures for reducing greenhouse gas emissions toward 2050. To achieve this long-term goal we must not only apply and develop technologies, but create innovative technologies applicable in financial, technical and societal terms. We are especially focusing on a practical technology to recover and recycle CO_2 emissions applicable to cement kilns as a top-priority project that will preserve the future of the cement industry.

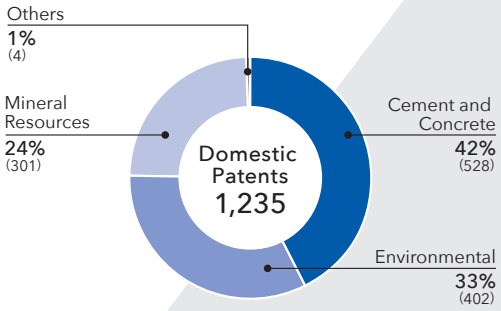
Number of Newly Registered and Current Domestic Patents

The number of new domestic patents registered by the Company has recently increased with a total of 160 new patents registered in FY2020. As a result, the Company currently owns 1,235 patents. The number of patents for Environmental and Mineral Resources has particularly grown.

Number of Domestic Patents Non-consolidated



Domestic Patents (by Segment; as of the End of FY2020) Non-consolidated



Research and Development Strategies

Based on the 20 Medium-Term Management Plan

Focus on research and development that contributes to Group-wide growth and sustainable development

- Develop infrastructure technologies for each business while contributing to reducing environmental impact
- Quickly establish technologies in growth fields and contribute to commercializing them
- Research and Development that addresses national projects

Cement

- Maintain and improve quality (Material design/hydration characteristics/new quality control technology)
- Reduce manufacturing costs (Maximize use of difficult-to-process waste)

Existing businesses

Interactive actions

Concrete

- Refine infrastructure technologies (Thermal stress analysis/thermal crack control)
- Grow demand and improve customer satisfaction (Paving/stabilizer/higher performance)

Growth fields (four pillars)

- **Overseas:** Development and sales expansion of cement for overseas markets
  Enhance the overseas technical assistance system.
- **Mineral Resources:** Development of functional materials
  Support for commercialization 3D mold making technology
- **Environmental:** Materials Recovery Complex initiative (recovery of precious metals)
  Waste materials recycling technology
- **Construction Materials:** Enhance cooperation within the Group

National projects

- Contribute to restoration and reconstruction efforts in the disaster-stricken areas
- Address demand related to the Tokyo Olympics and Paralympics
- Technological development for construction work for the Chuo Shinkansen
- Other large infrastructure projects (including countermeasures for deteriorating infrastructure)

Reducing environmental impacts

- Development of technologies for reducing CO_2
- Development of technologies for utilizing recycled resources
- Development of technologies for saving energy
- Development of technologies for effectively utilizing water resources and technologies for preserving biodiversity

Development and enhancement of infrastructure technologies

- Prediction of hardened concrete properties
- AI prediction technology for concrete slump

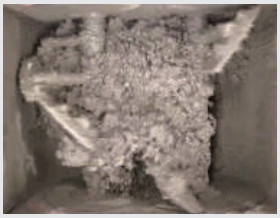
Recently Developed Technologies

Technologies for Recovering and Recycling CO_2 Emissions

We must develop revolutionary carbon recycling technologies to achieve our long-term vision. Our technology for CO_2 separation and capture from cement kiln exhaust gas was adopted as a project sponsored by the New Energy and Industrial Technology Development Organization (NEDO) and will be demonstrated in FY2021 and 2022.

AI Prediction Technology for Concrete Slump

We developed an AI technology to instantly predict slump from images of mixing inside the concrete mixers during the production process. Its use in the production of ready-mixed concrete and concrete-related products will further stabilize the quality of concrete and save labor through process automation.



Low-temperature Embrittlement Technology for Difficult-to-process Waste Plastic

This new technology allows us to accept a larger volume of difficult-to-process waste plastic and increase our use of alternative energy, dechlorination and recover precious metals. We installed a commercial-scale demonstration of the equipment (7,840 tonnes/year) at the Kawasaki Plant of the Group company DC Co., Ltd. in FY2020.

Environmentally Sound Products Developed by Group Companies

Heat Barrier Coat Heat-shielding Colored Cement Resin Mortar for Road Surfaces (Chichibu Concrete Industry Co., Ltd.)

Heat Barrier Coat is a heat-shielding colored cement resin mortar containing specialized pigments for application on road surfaces. It inhibits the rise of road surface temperature by reflecting heat sources such as infrared rays from the sun. It is expected to mitigate the urban heat island effect and improve the environment along sidewalks and roadsides. It can be applied across a wide range of settings, including sidewalks and parks in urban areas, and the rooftops of condominiums and office buildings. The product can be sprayed on both concrete and asphalt road surfaces. As a highly elastic cement-type material developed using the company's proprietary technology, it firmly adheres to the road surface with high durability. Its muted color harmonizes with the surroundings and provides a comfortable daily living environment.

Heat Barrier Coat application work

Taiheiyo Cement Group Corporate Governance

Messages from Outside Directors and Outside Corporate Auditors

Outside Corporate Auditor	Outside Corporate Auditor	Outside Director	Outside Director
Yoshio Fujima	Wakako Mitani	Yoshiko Koizumi	Shinhachiro Emori

The Taiheiyo Cement Group is striving for highly transparent management by enhancing its corporate governance. What issues does the group need to clear in order to maintain sound management and continue to grow further? Two outside directors and two outside corporate auditors talked about the group's governance from their points of view.

Outside Director

Yoshiko Koizumi

I will shed light on unrecognized issues to help promote the group's governance.

Since assuming this position in 2015 I have always had the impression that this company is solid. I regularly receive a large volume of documents that are prepared for outside directors as well as frequent explanations from the drafting and other departments. The company's expectations of me as an outside director are high and, while that places a lot of pressure on me, I believe that is why we have maintained a relationship in which I can speak frankly. The company employs a self-evaluation system in which all directors fill out a questionnaire to assess the effectiveness of the Board of Directors. A new process has been added in which the chairman of the board and outside directors analyze and evaluate effectiveness based on the results of the questionnaire. I feel that this new process also demonstrates the company's willingness to listen to the candid opinions of outsiders.

In fulfilling my role as an outside director, I have valued the importance of interacting with employees onsite through direct communication. These experiences have made me realize that the spirit of valuing people and communities continues to be alive and well in the company, and that the cement industry is built on people and communities. As the company expands its business across the Pacific Rim it will face the challenge of instilling this spirit in regions with different history, climates and cultures, while practicing effective governance. My role as an outside director would be analysis and provision of advice on corporate legal affairs, applying my many years of experience as an international lawyer, and openly expressing my opinions based on my experience as an outside director and outside auditor at other companies—even in relation to matters that the company has not recognized as issues. Since the company has so many outstanding personnel, if we can understand the essence of an issue, we will naturally find a solution.

Outside Director

Shinhachiro Emori

I plan to have effective discussions by using my practical experience as a corporate manager.

Having worked for a chemical manufacturer that also makes cement, I know the company's business environment well and can provide advice leveraging my practical experience as a corporate manager. Having only recently been appointed to the post I am not yet ready to make detailed observations but I intuitively sense that management of a large group with approximately 120 consolidated subsidiaries will be difficult. Since group companies differ in history, business formats and corporate culture, a great deal of effort will be required to check, every day, on whether or not governance has permeated throughout the group. This important task should be carried out no matter what it takes, in order to provide prompt, effective guidance in times of emergency. Fostering a relationship of trust between the headquarters and each group company is key for establishing and instilling group governance, and this depends on daily communication. As for creating a governance system in line with the real situation, I believe that I will be able to provide advice based on my own experience.

In FY2021 the number of the company's board members was changed from 15 to 10. This was intended to increase the ratio of outside officers and strengthen the monitoring function, and I feel this was a very reasonable action. Going forward, each director must take responsibility for attending board meetings and enriching the content of discussions to enable effective and thorough discussions. As an outside director who understands corporate management practices, I think my role is not only to apply brakes on management but also to step on the accelerator once in a while. I hope to effectively contribute as an outside director who can offer helpful advice when the company faces difficult decisions.

Outside Corporate Auditor

Wakako Mitani

I will strive to strengthen the group's internal controls to meet its expectations.

Two years have passed since I became an outside corporate auditor. During that time I attended various important meetings in addition to the Board of Directors and Audit and Supervisory Board meetings, and I deepened my understanding of the company's strategy. I participate in visits to as many branches, plants and group companies as possible, both in Japan and overseas. When I speak with local employees I am provided with specific and direct information. They constantly amaze me with their level of activity and openness.

I have also had direct discussions with employees on important matters and compliance issues. The company is the largest in the Japanese cement industry and maintains hundreds of group companies of different sizes. Therefore, while it maintains a high level of compliance as a leading company, it needs to have an internal control system that matches the business format and scale of each group company, and a level of internal control that lives up to the name of the Taiheiyo Cement Group. From a lawyer's point of view, striking this balance can be difficult, but I believe that the group will continue to instill a vision of what it should be across the entire organization. One issue I point out in this regard is that I feel the need to establish a group internal control system that enables group companies to share information and roll out countermeasures so that when a compliance problem arises, they can prevent the same problem from reoccurring anywhere else in the group.

While the role expected of outside corporate auditors and the level of expectation differs from company to company, I strongly feel that this company actively seeks and reflects external opinions. I will continue to work hard to meet their expectations.

Outside Corporate Auditor

Yoshio Fujima

I will conduct higher quality audits to help develop the group.

The company makes outside corporate auditors work in what we consider as "a good way." It has been only a year since I was appointed as outside corporate auditor but I have already visited many sites in Japan and abroad. At every work site I felt they tried to conduct effective audits relevant to the current business environment rather than "pro-forma" reviews. Furthermore, compared to my previous auditing experience, no other company has provided so much information, making this a very refreshing experience for me.

Also, when I assumed this post, I was very interested in how the group, which consists of approximately 300 subsidiaries and affiliated companies, can instill and maintain the basic spirit of its internal control system group-wide. When conducting audits as an outside corporate auditor, I paid attention to this point while also exchanging opinions based on explanations received about management and the operations of each department at the headquarters, plants and subsidiaries. As a result, I realized that group employees share a common understanding. I feel this is due to the significant contribution of over 130 years of group history and pride which have fostered human resources who understand and practice the spirit of internal control and have nurtured an environment that maintains that spirit. However, the group went through a period of limiting new hires in the past so to continue consistently conveying this spirit and fostering awareness will be among its management challenges.

I also think that it is important for the group's sustainable growth to enhance the disclosure of corporate information related to non-financial information, which has recently been attracting attention, while at the same time creating an environment that secures human resources and maintains a sound internal control system. I would like to increase the impact of auditor's audits from a professional perspective as a certified public accountant while also offering appropriate advice as an outside corporate auditor.

Corporate Governance

Basic Policy on Corporate Governance

In keeping with the Group's mission we established the Basic Policy on Corporate Governance with the aim of meeting the expectations of all stakeholders, including shareholders, and helping to achieve sustainable growth while maximizing our corporate value over the medium to long term. Under the policy we also work toward further enhancing our corporate governance.

WEB Taiheiyo Cement Corporation Basic Policy on Corporate Governance
Corporate Governance Report

Our website https://www.taiheiyo-cement.co.jp/english/

About Us → Corporate Governance

■ Status of Compliance with Japan's Corporate Governance Code

Principles		Disclosure by		
		Website *1	Basic Policy*2	Report *3
Principle 1.4	Cross-shareholdings		Article 22	●
Principle 1.7	Related party transactions		Article 23	
Principle 2.6*4	Roles of corporate pension funds as asset owners			●
Principle 3.1 Full disclosure	Company objectives (e.g., mission), management strategies, management plans	●		
	Basic concepts and policies on corporate governance			●
	Policies and procedures in determining the compensation of senior management and directors		Article 15	
	Policies and procedures on the appointment of senior management, and nomination of director and corporate auditor candidates		Article 5 Article 9 Article 12	
Supplementary Principle 4.1.1	Board of Directors' decisions and scope of matters delegated to management		Article 3	
Principle 4.9*5	Independence standards and qualification for outside directors		Article 4	●
Supplementary Principle 4.11.1	Views on appropriate balance between knowledge, experience and skills of the Board of Directors as well as on diversity and appropriate board size		Article 4	
Supplementary Principle 4.11.2	Status of concurrent positions at other listed companies held by directors and corporate auditors of the Taiheiyo Cement Group		Article 7 Article 14	
Supplementary Principle 4.11.3	Analysis and evaluation of the overall effectiveness of the Board of Directors and summary of results		Article 19	●
Supplementary Principle 4.14.2	Training policy for directors and corporate auditors		Article 18	
Principle 5.1	Policy for constructive dialogue with shareholders		Article 24	

*1 Our website
*2 Our Basic Policy on Corporate Governance
*3 Reports related to our corporate governance
*4 Principle to be disclosed under the revised Corporate Governance Code (June 1, 2018)
*5 In addition to the above three methods of disclosure we disclose information in our securities reports and materials for our general shareholders' meeting.

Taiheiyo Cement Group Management Organization

GRI102-18, 19, 22, 23, 24, 28, 29, 30, 33

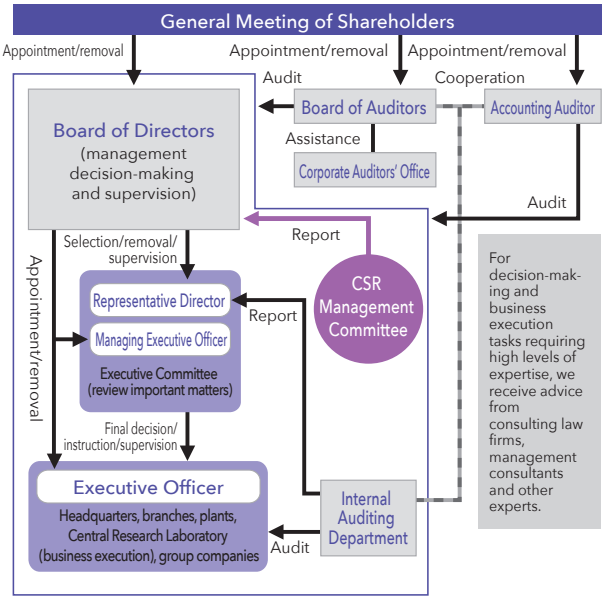
■ Corporate Governance System

Our organizational structure is anchored by our Board of Directors and Board of Auditors. We have also introduced an executive officer system in order to separate management decision-making and monitoring/supervisory functions from business execution. Our Corporate Auditor's Office consists of one manager and two subordinates, which comprehensively supports corporate auditors in performing their duties. Our Internal Auditing Department conducts internal audits, identifies issues that require improvement and reports audit results to the president to increase the effectiveness of internal audits.

Also, our CSR Management Committee determines the ideal direction for our business activities from the perspective of CSR and promotes the strengthening of corporate governance.

In FY2020 we held 14 board meetings, with all directors and auditors in attendance.

Corporate Governance System



Overview of Corporate Governance System (as of June 30, 2020)

Area	Number of People
Organizational structure	Company with board of auditors
Board chairman	Chairman and director
Number of board directors (female board directors) (one-year term)	7 (1)
Number of outside directors (independent directors)	2 (2)
Number of executive officers (concurrent directors)	21 (2)
Number of corporate auditors (female corporate auditors)	4 (1)
Number of outside directors (independent directors)	2 (2)

Major Meetings in FY2020

Meetings	Meetings Held	Attendance Rate of Outside Directors
Board of Directors	14	100%
Board of Auditors	12	100%
Executive Committee	23	-

■ Evaluating the Effectiveness of the Board of Directors

In accordance with the Basic Policy on Corporate Governance, we analyze and evaluate the overall effectiveness of the Board of Directors on an annual basis. We also have all directors take part in a self-assessment survey by filling out a questionnaire on the composition of the Board of Directors, operational status, decision-making process and external communication. The results are analyzed and evaluated by the board chairman and outside directors and reported to the Board of Directors for future discussion and confirmation on improvements from the previous fiscal year as well as on issues and measures. In FY2020 the Board of Directors was considered to be generally well managed and its overall effectiveness ensured.

In addition, after reviewing the results and opinions presented by each director, we are working to raise the level of board effectiveness through such efforts as reducing the number of directors to strengthen management oversight and accelerate decision-making.

■ Appointment of Board Members

The president proposes candidates for board directors and auditors to the Board of Directors, including outside directors, in accordance with the Basic Policy on Corporate Governance. After deliberation and decision by the Board of Directors candidates are presented to the General Meeting of Shareholders and appointed based on its resolution. For nomination of auditors, the president proposes candidates to the directors with prior approval from the Board of Auditors, including outside auditors.

Outside Officers

GRI102-22

■ Appointment of Outside Directors

We appoint outside officers in accordance with the Independence Criteria for Outside Officers and the Taiheiyo Cement Corporation Basic Policy on Corporate Governance. These individuals must not have any conflicts of interest with general shareholders but be fully independent, and possess broad insight and experiences in terms of corporate legal affairs and corporate management.

WEB Independence Criteria for Outside Officers (Taiheiyo Cement Corporation Basic Policy on Corporate Governance, Appendix 1)
Our website https://www.taiheiyo-cement.co.jp/english
About Us → Corporate Governance

■ Major Areas of Experience of Outside Officers

Outside officers must be capable of supervising our directors and management from an independent, external standpoint, and provide proper and appropriate advice based on their wealth of experience and insight. Our current appointed outside officers include lawyers with experience in corporate legal affairs, a corporate manager from the manufacturing industry and a certified public accountant, all of whom have the requisite experience, achievements and insight.

Major Areas of Expertise of Outside Directors and Auditors

	Name	Attribute	Major Areas of Expertise				
			Management Strategy	Finance/ Accounting	HR/ Labor	Legal/ Internal Control/ Compliance	Global
Outside Director	Yoshiko Koizumi	Lawyer			○	○	○
Outside Director	Shinhachiro Emori	Corporate manager	○		○		
Outside Auditor	Wakako Mitani	Lawyer			○	○	
Outside Auditor	Yoshio Fujima	Certified public accountant		○		○	

Board Member Remuneration

GRI102-35, 36, 37

■ Board Member Remuneration

Resolutions of the General Meeting of Shareholders determine the upper limits of remuneration for board directors and auditors. The board of directors, including outside directors, has resolved that the level of remuneration for individual board directors is decided by the representative director. The level of remuneration for individual auditors is determined by the Audit and Supervisory Board members. The remuneration system for directors consists of fixed compensation and performance-based compensation, while the remuneration system for the outside directors and auditors consists solely of fixed compensation.

■ Determining Board Member Remuneration

Fixed compensation is set according to position. Performance-based compensation for directors is calculated by multiplying profit attributable to owners of parent for the fiscal year under review by 1% (up to 400 million yen) and a coefficient by position, although this can be reduced depending on business and other conditions. If the annual dividend for the fiscal year under review is less than 30 yen per share, in principle no performance-based compensation will be paid. The ratio of performance-based compensation to total compensation in FY2020 was 37%, and the profit attributable to owners of parent in FY2019, the basis for calculation, was 43.4 billion yen.

Annual Remuneration of Board Members (FY2020)

	Board Members Who Received Remuneration	Amount of Remuneration Paid (Million Yen)
Board directors	18	853
Corporate auditors	6	72
Total	24	926

Note:
- The above counts of board members and corporate auditors who received remuneration include 4 board directors and 2 corporate auditors who retired or resigned at the conclusion of the 21st Ordinary General Meeting of Shareholders held on June 27, 2019.
- Of the above, the total amount of compensation for outside officers was 51 million yen, and the number of paid outside officers was 5.

Initiatives to Enhance Governance Functions

GRI102-27

■ Support System for Outside Officers

The Corporate Planning Department assists outside directors with the execution of duties by, for example, explaining in advance Board of Directors meeting agendas and regularly reporting on important matters concerning business execution.

Full-time auditors regularly report to outside auditors on the matters deliberated in major internal meetings regarding business execution. In addition, our Corporate Auditor's Office provides support to corporate auditors.

■ Training for Directors and Corporate Auditors

Internal directors, internal corporate auditors and executive officers receive training on corporate law, corporate governance and other key issues upon assuming their posts. They also receive training from external organizations to acquire the knowledge they need for their respective roles.

As for outside directors and outside corporate auditors, their initial training includes business, finance, organization and corporate governance. They are also given opportunities to visit our business sites and affiliated companies in Japan and overseas to bolster their understanding of our company.

Internal Control System

GRI102-30

In accordance with our Basic Policy for Building an Internal Control System, we are creating a system that will enable us to enhance various activities from the following three perspectives: (1) efficiency of business operations, (2) risk and compliance, and (3) financial reporting. Under this policy our Internal Control Report has confirmed that internal control over financial reporting for FY2020 was effective. An auditing firm we appoint has expressed its opinion that the report was appropriate. In the Business Report for FY2020 we have presented an overview of system operation to ensure the proper execution of operations in accordance with the basic policy.

Board of Directors and Auditors

❶ Shuji Fukuda Chairman and Director

Career Summary

Apr. 1974	Joined Onoda Cement Co., Ltd.
Jun. 1999	General Manager, Accounting & Finance Department of Taiheiyo Cement Corporation
Apr. 2004	General Manager, Accounting & Finance Department and General Manager, Accounting & Finance Business Operation Center
Apr. 2006	General Manager, Hokuriku Branch
Apr. 2008	Executive Officer and General Manager, Human Resources Department and General Manager, Personnel Business Operation Center
Oct. 2008	Executive Officer and General Manager, Human Resources Department
Aug. 2010	Director, Managing Executive Officer and General Manager, Human Resources Department
Oct. 2010	Director and Managing Executive Officer
Apr. 2012	President and Representative Director
Apr. 2018	Chairman and Director (to present)

Experience and Knowledge

Since 2010 Mr. Shuji Fukuda has engaged in the management of the company as a director and after serving as president and representative director was appointed as chairman and director in April 2018. He possesses a wealth of managerial experience, achievements and knowledge. While striving to enhance the function of the Board of Directors as chairperson, he has also effectively served as a director, striving to continuously increase the corporate value of the group, such as identifying key management issues, and supervising business execution.

❷ Masafumi Fushihara President and Representative Director

Career Summary

Apr. 1978	Joined Onoda Cement Co., Ltd.
Apr. 2007	General Manager, Business Promotion Department of Environmental Business Company of Taiheiyo Cement Corporation
May. 2009	General Manager, Sales Department of Environmental Business Company
Oct. 2010	General Manager, Environmental Business Development Department
Apr. 2012	Executive Officer and General Manager, Environmental Business Development Department
Apr. 2015	Managing Executive Officer
Jun. 2015	Director and Managing Executive Officer
Apr. 2016	Director, Managing Executive Officer and Senior General Manager, Cement Business Division
Apr. 2017	Director, Senior Executive Officer and Senior General Manager, Cement Business Division
Apr. 2018	President and Representative Director (to present)

Experience and Knowledge

Since 2015 Mr. Masafumi Fushihara has engaged in the management of the company as a director and was appointed as president and representative director in April 2018 after serving as senior general manager of the Cement Business Division. He therefore possesses a wealth of managerial experience, achievements and knowledge. He continuously strives to increase the corporate value of the group as he leads its management, identifies key management issues and supervises business execution.

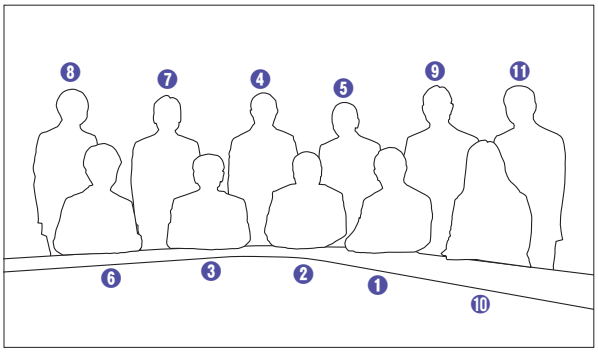
❸ Yuuichi Kitabayashi Vice President and Representative Director

Career Summary

Apr. 1978	Joined Nihon Cement Co., Ltd.
May. 2009	General Manager, Kamiiso plant of Taiheiyo Cement Corporation
Apr. 2011	Executive Officer and General Manager, Production Department
Apr. 2013	Managing Executive Officer
Jun. 2013	Director and Managing Executive Officer
Apr. 2016	Representative Director and Senior Executive Officer
Apr. 2017	Vice President and Representative Director Overseeing Corporate Planning Department (to present)

Experience and Knowledge

Since 2013 Mr. Yuuichi Kitabayashi has engaged in the management of the company as a director and was appointed as vice president and representative director in April 2017. He possesses a wealth of managerial experience, achievements and management insights. He continuously strives to increase the corporate value of the group and significantly contributes to its development, while also identifying key management issues and supervising business execution.



GRI102-22

④

Masahiro Karino Director and Senior Executive Officer

Career Summary

Apr. 1980	Joined Nihon Cement Co., Ltd.
Apr. 2004	General Manager, Legal Department of Taiheiyo Cement Corporation
Apr. 2013	Executive Officer and General Manager, Legal Department
Apr. 2016	Managing Executive Officer
Jun. 2016	Director and Managing Executive Officer
Apr. 2019	Director and Senior Executive Officer (to present)

Experience and Knowledge

Mr. Masahiro Karino was appointed director in 2016 and has since been engaged in the management of the company. He was appointed director and senior executive officer in April 2019. He is effective in the role of a director in striving to continuously increase the corporate value of the group as he significantly contributes to its development while also identifying key management issues and supervising business execution.

⑤

Kunihiro Ando Director and Senior Executive Officer

Career Summary

Apr. 1980	Joined Onoda Cement Co., Ltd.
Apr. 2011	General Manager, Ofunato plant of Taiheiyo Cement Corporation
Apr. 2013	Executive Officer and General Manager, Oita plant
Apr. 2015	Executive Officer and General Manager, Mineral Resources Business Department
Apr. 2016	Managing Executive Officer
Jun. 2016	Director and Managing Executive Officer
Apr. 2020	Director and Senior Executive Officer (to present)

Experience and Knowledge

Since 2016, Mr. Kunihiro Ando has engaged in the management of the company as director and was appointed as director and senior executive officer in April 2020. He is effective in the role of a director in striving to continuously increase the corporate value of the group as he significantly contributes to its development while also identifying key management issues and supervising business execution.

⑥

Yoshiko Koizumi Outside Director

Career Summary

Apr. 1972	Registered as a lawyer (Daini Tokyo Bar Association)
Jan. 1980	Partner, Masuda and Ejiri Law Office (predecessor of Nishimura & Asahi)
Jan. 2008	Counsel, Nishimura & Asahi
Apr. 2009	Partner, City-Yuwa Partners (to present)
Jun. 2015	Director of Taiheiyo Cement Corporation (to present)
	Outside Director, Dowa Holdings Co., Ltd. (to present)
Jun. 2016	Outside Director, Sumitomo Bakelite Co., Ltd.
Sep. 2017	Outside Corporate Auditor, Nippon Koei Co., Ltd. (to present)

Experience and Knowledge

After working as counsel and partner at law firms Yoshiko Koizumi was appointed as a director of the company in June 2015. She has a wealth of corporate law experience, and provides precise recommendations and advice from an objective standpoint, independent of the management team that executes business in the Board of Directors, and also monitors and supervises overall management.

⑦

Shinhachiro Emori Outside Director

Career Summary

Apr. 1975	Joined Toyo Soda Manufacturing Co., Ltd. (currently Tosoh Corporation)
Jun. 2010	Director of Tosoh Corporation
Jun. 2011	Managing Director of Tosoh Corporation
Jun. 2012	Representative Managing Director of Tosoh Corporation
Jun. 2015	President and Representative Director of Taiyo Vinyl Corporation
Jun. 2020	Director of Taiheiyo Cement Corporation (to present)

Experience and Knowledge

After serving as representative managing director of Tosoh Corporation and president and representative director of Taiyo Vinyl Corporation, Mr. Shinhachiro Emori was appointed as director of the company in June 2020. He possesses a wealth of experience, achievements and insight as a corporate manager. He provides precise recommendations and advice from an objective standpoint, independent of the management team that executes business in the Board of Directors, and also monitors and supervises overall management.

⑧

Toshihide Nishimura Corporate Auditor (Standing)

Career Summary

Apr. 1979	Joined Onoda Cement Co., Ltd.
Apr. 2006	General Manager, Construction Materials Business Department of Taiheiyo Cement Corporation
May 2009	General Manager, Accounting & Finance Department
Apr. 2012	Executive Officer, General Manager of Related Business Department
Apr. 2015	Managing Executive Officer
Jun. 2015	Director and Managing Executive Officer
Apr. 2017	Director
Jun. 2017	Corporate Auditor (standing) (to present)

Experience and Knowledge

After serving as director and managing executive officer of the company, he was appointed as corporate auditor in June 2017. In addition to his extensive knowledge and insight in the Accounting & Finance Department he has a wealth of experience as a director in construction materials, building construction and civil engineering businesses, as well as the supervision of business execution. With the intention of continuously increasing the corporate value of the group, he properly audits the execution of duties by directors.

⑨

Shigeru Matsushima Corporate Auditor (Standing)

Career Summary

Apr. 1979	Joined Nihon Cement Co., Ltd.
May. 2009	General Manager, Hokkaido Branch of Taiheiyo Cement Corporation
Apr. 2011	Executive Officer and General Manager, Hokkaido Branch
Apr. 2012	Executive Officer, Deputy General Manager and General Manager of Cement Business Division
Apr. 2013	Managing Executive Officer
Jun. 2013	Director and Managing Executive Officer
Apr. 2017	Director and Senior Executive Officer
Apr. 2019	Director
Jun. 2019	Corporate Auditor (standing) (to present)

Experience and Knowledge

After serving as director and senior executive officer of the company Mr. Shigeru Matsushima was appointed corporate auditor in June 2019. As a director of the company, he has taken charge of a wide range of operations in the general affairs and accounting departments and environmental business, and has considerable insight as well as the experience of supervising business execution as a director. He effectively audits the execution of duties by directors to continuously improve the corporate value of the group.

⑩

Wakako Mitani Outside Corporate Auditor

Career Summary

Apr. 2000	Registered as a lawyer (Daiichi Tokyo Bar Association)
Jul. 2001	Joined TANABE & PARTNERS
Apr. 2012	Partner, TANABE & PARTNERS (to present)
Feb. 2018	Corporate Auditor (to present)

Experience and Knowledge

After working as a partner at a law firm, Ms. Wakako Mitani assumed the position of corporate auditor in February 2018. As a lawyer she has considerable experience, achievements and insights in the field of corporate legal affairs, and effectively audits the execution of duties by directors from an independent, objective and fair standpoint.

⑪

Yoshio Fujima Outside Corporate Auditor

Career Summary

Nov. 1974	Joined Chuo Audit Corporation (currently MISUZU Audit Corporation)
Mar. 1980	Registered as a certified public accountant
Sep. 1990	Employee, Chuo Shinko Audit Corporation (currently MISUZU Audit Corporation)
Aug. 1996	Representative Partner, Chuo Audit Corporation (currently MISUZU Audit Corporation)
Jul. 2007	Retired from MISUZU Audit Corporation
Jun. 2011	Outside Auditor, JIEC Co., Ltd.
May. 2012	Outside Auditor, Prime Works Co., Ltd. (currently Neos Corporation)
May. 2016	Outside Director (Audit and Supervisory Committee Member), JIEC Co., Ltd.
Jun. 2019	Corporate Auditor (to present)

Experience and Knowledge

After serving as a representative partner of an auditing firm and an outside director and auditor of operating companies, Mr. Yoshio Fujima became corporate auditor of the company in June 2019. As a certified public accountant, he has abundant experience, achievements and insights, including many years of practical experience in corporate accounting. He effectively audits the execution of duties by directors from an independent, objective and fair standpoint.

Risk Management and Compliance

Closely Related SDGs

Basic Risk Management and Compliance Policies

GRI102-16

■ Basic Risk Management Policy and Regulations

In our Business Principles we declare "we will strive to anticipate the changing business environment to assess new opportunities for growth." We consider risk management as a foundation for reducing management uncertainties and achieving management objectives. We manage risks that make the achievement of management goals uncertain, such as social change, changes in the global environment, natural disasters, accidents and scandals, based on our basic risk management policy. In addition, we have established risk management regulations to incorporate the risk management policy into specific risk management activities. Risk management regulations include emergency responses.

Basic Risk Management Policy

1. We prevent and reduce risks in order to ensure the quality and safety of our products and services, protect the lives and safety of our employees and their families, and earn greater trust from our stakeholders.
2. We create a system to appropriately manage a wide range of risks associated with our business activities.
3. We promote risk management through a plan-do-check-act cycle.
4. We quickly and appropriately deal with risks as they are identified.
5. In collaboration with group companies we build a system for immediately detecting new risks arising from changes in our business environment and for quickly and appropriately dealing with risks at the group level.

■ Basic Compliance Policy

Under our Business Principles we pledge that we will act in strict compliance with the law and in accordance with social mores. Fully aware that compliance is the foundation of CSR management, we published the Basic Compliance Policy and simultaneously created compliance rules in March 2005. 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 and enlightenment activities
- Establishing appropriate responses and policies for when problems occur
- Timely and appropriate disclosure and communication of necessary information
- Compliance with international standards and rules, and respect for local cultures and customs
- Rejection of illegal and unwarranted demands from antisocial forces or organizations

WEB Standard of Conduct (Casebook)

Our website http://www.taiheiyo-cement.co.jp/english

CSR → Corporate Social Responsibility at Taiheiyo Cement → Corporate Framework for CSR

WEB Taiheiyo Cement Group Tax Policy

Our website https://www.taiheiyo-cement.co.jp/english

CSR → Risk Management and Compliance → Compliance Guidelines

Please see below for more information.
Antimonopoly Law Compliance Manual
Anti-Bribery Basic Principle (Policy) ▶ P. 84-85

Risk Management and Compliance Promotion System

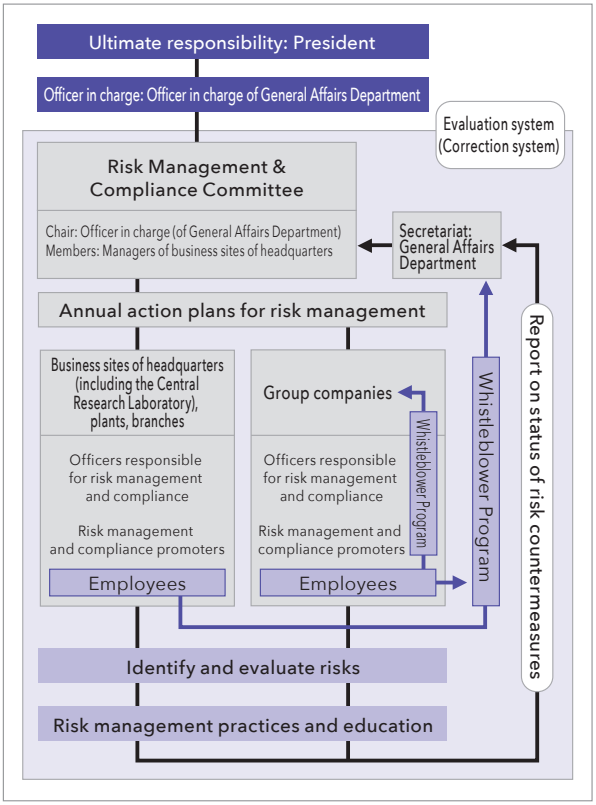
GRI102-17, 30, 31

Our president has ultimate responsibility for risk management and compliance promotion. The officer in charge of both areas (officer in charge of the General Affairs Department) is appointed by the president to preside over and run the Risk Management & Compliance Committee and systematically promote organized activities.

The committee plays a core role in our risk management and compliance promotion for the entire group. It deploys the policy, identifies, evaluates and specifies company-wide risks, implements risk management activities based on PDCA cycles and promotes compliance. Moreover, it studies and proposes the creation and revision

of rules for risk management and compliance, and provides instructions for advancing the awareness and education of employees. Under the guidance of this committee, each business site and group company has an officer responsible for risk management and compliance, and a risk management and compliance promoter, who carry out specific duties. We held four Risk Management & Compliance Committee meetings in FY2020.

Risk Management and Compliance Promotion System

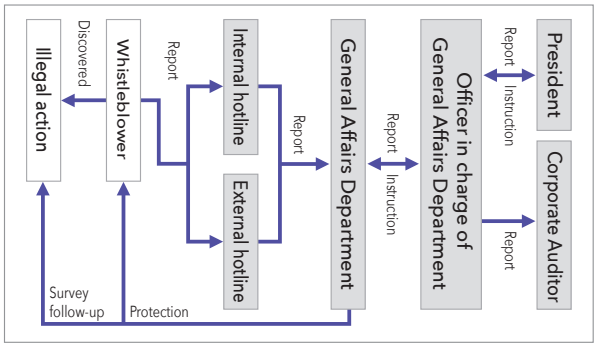


Note: Subject to risk management: 103 group companies (as of April 2020)

■ Whistleblower Program

We properly handle reports and proposals in accordance with normal company procedures while directly receiving reports without the need for usual company procedures. Whistleblowers have the option of either disclosing their identity, including their name and department, or reporting anonymously to mitigate any potential psychological constraint. We have whistleblower hotlines both internally (at the CSR Group of our General Affairs Department) and externally (at a law firm). Our internal hotline is in a dedicated, locked room equipped with dedicated phone and fax lines as well as a computer with a dedicated address in order to safeguard the privacy of those submitting reports. Our external hotline is also available to all employees of group companies in an effort to strengthen group governance, improve program effectiveness and reduce the burden on individual companies. Moreover, we created the Whistleblower Program Regulations so whistleblowers using the program are not subject to unfavorable treatment.

Whistleblower Program



Results* of the Whistleblower Program (FY2020)

Hotline	Reports
Internal (CSR Group of General Affairs Department)	2
External (Kajitani Law Offices)	1

*These should be regarded as reports according to the Whistleblower Program Regulations.

Risk Management and Compliance Promotion Activities

GRI102-11, 17, 201-2, 205-2

■ Identifying, Evaluating and Specifying Company-wide Risks

We identify, evaluate and specify group-wide risks every three years and conduct annual reviews of those risks.

FY2020 was the third year of the company-wide risk review since the first was conducted in FY2017. The purpose of identifying risks is to identify the impact of anticipated changes in social and environmental conditions over the next ten years in relation to uncertainty of group management and then formulate measures to avoid and reduce that uncertainty. We reviewed risks.

Please see below for more information.
Awareness of Business Environment (Risks and Opportunities)
▶P. 16

Risk Management and Compliance

■ Risk Reduction Countermeasures

With the evaluation results of identified company-wide risks, our Risk Management & Compliance Committee takes the lead in specifying those to be addressed every year and implementing activities to reduce risk impact through PDCA cycles.

Issues addressed in FY2020 were: (1) Leakage of pollutants and hazardous substances, (2) Enhancement of information security, (3) Product/service accidents, (4) Aging of facilities and equipment, (5) Prevention of traffic accidents, (6) Strengthening of overseas crisis management measures, (7) Enhancement of group corporate governance including risk management and the compliance system, (8) Work-related accidents, (9) Response to shortage of human resources, and (10) Respect for intellectual property rights and strengthening risk prevention.

■ Examples of Overseas Risk Countermeasure Activities

We created and regularly revise the Riot/Terrorism Response Manual. In addition, regarding high-risk countries to which our employees are dispatched, we stipulate an outline for deciding on local evacuation as necessary, create a tool for evaluating the emergency evacuation level according to changes in local situations, and provide training using the tool. We also list and secure supplies (food, clothes, hygiene supplies, and medicines), as well as cash and other resources needed, in the event of evacuation or an emergency at each overseas business site.

■ Emergency Task Force

When any event such as a disaster, accident or misconduct has occurred, the affected business site informs the general manager of the General Affairs Department. The general manager determines the appropriate countermeasure from the following options while considering the severity of the event: establish the Emergency Task Force or delegate site leadership to respond to the event. Action is then taken through the chosen countermeasure.

Although we received 25 reports in FY2020, none required action by the Emergency Task Force. Major information, including its handling, is deliberated by the CSR Management Committee. In addition, as preparation for responding to disasters and accidents, we conducted Shake Out drills for earthquakes at each business site, and workshops on a business continuity plan for the headquarters and branches in case of an earthquake. Moreover, we provided training for plant staff so they would understand how to appropriately handle complaints if an accident occurs.

■ Response to the Spread of the Novel Coronavirus (COVID-19)

In response to the government's declared state of emergency on April 7, 2020 due to the spread of the novel coronavirus COVID-19, we set up the Emergency Task Force as of the same date and announced the company's "Our emergency measures."

Specific measures introduced by the emergency task force included our strong promotion of working from home, staggered work hours and the use of video conferencing systems depending on the COVID-19 infection situation. We also prohibited domestic and overseas business trips, and implemented other measures to prevent the spread of the virus and ensure business continuity.

In addition, each overseas office has taken measures against COVID-19 in line with local circumstances as soon as receiving an announcement from the Emergency Task Force. The head office has supported delivering masks and medical supplies to all overseas offices.

■ Risk Management and Compliance Promotion Training

We provide training for managers and promoters for risk management and compliance of the company's business sites and group companies to ensure effective risk management and compliance.

In November 2019, we presented a lecture by a risk management consultant for group company managers based on two themes: "Unconscious bias management required for leaders" and "Creating an organizational climate that does not cause compliance problems," with 100 companies participating, and including a lecture titled "How to conduct PDCA for risk management and compliance promotion" followed by case study discussions for promoters, with 80 companies participating.

■ Compliance Training

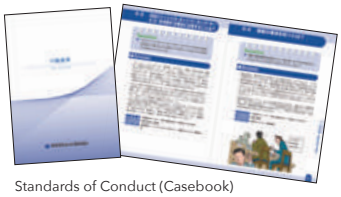
To fulfill our mission and uphold our business principles we formulated the Standards of Conduct to guide all officers and employees of Taiheiyo Cement in the performance of their daily duties. The standards consists of 35 items in 6 categories and gathers together Taiheiyo Cement's policies, regulations and president's messages delivered within and outside the company.

We created and distributed to all our employees, as well as all those of our main group companies, the Standards of Conduct (Casebook), which describes specific examples on how to act in line with the Standards of Conduct.

We regularly revised The Standards of Conduct (Casebook) to reflect the latest information.

In addition, for all company employees including those on loan to group companies, we conduct monthly quiz tests as part of e-learning programs to provide education on the Standards of Conduct (Casebook) and other materials so they learn how to act in individual situations.

In FY2020, 73.3% of employees participated in the program.



Standards of Conduct (Casebook)

WEB Standards of Conduct (Casebook)

Our website https://www.taiheiyo-cement.co.jp/english/

CSR → Corporate Social Responsibility at Taiheiyo Cement → Corporate Framework for CSR

■ Legal Roundtables for Group Companies

Since FY2006 we have been holding roundtable discussions attended by management and legal affairs representatives from our group companies. These provide opportunities to share legal information (mainly responses to revisions of laws) in order to further our understanding of major laws relating to corporate management and to assist in the creation of our group's compliance regime. In FY2020 we discussed the following topics.

Group Legal Round Tables (FY2020)

No.	Date	Attendees	Topics
29th	July 2019	19 (11 companies)	·Legal issues concerning labor
30th	November 2019	86 (84 companies)	·Communication with authorities in response to corporate scandals (criminal plea bargains, antimonopoly leniency and commitment procedures) ·Practical responses to civil law revisions (contract clause examples)

Information Security

■ Information Security Promotion System

To ensure and maintain the security of information assets, we have established the Basic Information Security Policy and the Information Security Management Regulations. Under the management system in accordance with these regulations, we are actively working to maintain information security.

Our president has ultimate responsibility for information security. Appointed by the president is the officer in charge of information security (officer in charge of the Corporate Planning Department), who presides over and runs the Information Security Committee in order to advance organized and planned activities to promote information security.

Information Security Structure

WEB Basic Information Security Policy
Privacy Policy

Our website https://www.taiheiyo-cement.co.jp/english/

CSR → Risk Management and Compliance

■ Information Security Promotion Activities

In FY2020 we alerted and enlightened all employees

Risk Management and Compliance

through a portal site on our intranet and also conducted an email drill to respond to targeted attacks. In addition, we held a gathering for the information departments of group companies in which we distributed the Information Security Measures Guide and explained measures to promote it. In addition, we conducted disaster recovery drills, a security level survey of group companies and information security training. No serious incidents related to information security have occurred.

We will continue our efforts to improve the security levels of our domestic and overseas group companies.

Protection and Use of Intellectual Property

■ Intellectual Property Policy

Our fundamental intellectual property policy is to contribute to management through intellectual property activities that support our business, ensuring our competitive advantages by strategically conducting intellectual property activities. Under this policy we are developing our intellectual property activities in collaboration with business and R&D divisions to contribute to increasing the corporate value of the Taiheiyo Cement Group.

■ In-house Intellectual Property Management System

The company has established the Rules for Handling Intellectual Property Rights. Under the management system based on these rules, we are working on intellectual property activities. The Intellectual Property Department assigns staff members to the headquarters mainly to perform planning and administrative tasks, and to the Central Research Laboratory to handle applications for and protect rights and research efforts. In addition, intellectual property promoters are assigned as contact points to the major business divisions and the Central Research Laboratory to actively promote the effective and efficient creation, protection and use of our intellectual property in collaboration with the Intellectual Property Department.

■ Intellectual Property Management System for the Group

In March 2018 we formulated and began applying the Taiheiyo Cement Group Intellectual Property Management Guidelines, which apply to the entire group, to promote the use of our intellectual property and reduce associated risks. We have also established a committee consisting of those related to intellectual property at the main group companies in order to promote and vitalize our intellectual property activities corresponding to the scale and industry of each group company, by sharing issues, exchanging information and holding workshops. Our company headquarters was previously used as the venue, but since FY2019 we have created new opportunities to use group companies for that purpose. As a result, the management of each company has begun to attend the venues and further enhancements have been made.

■ Outline of Our Intellectual Property

As of the end of March 2020 the company owned 1,235 domestic patents and 216 overseas, 273 domestic trademarks and 132 overseas, and 11 domestic design rights. (See the "Research and Development" section for graphs by segment.)

The cement segment accounts for the largest share of patents owned by the company. However, over the past several years the share of patent applications in the environmental and mineral resources segments has been growing in line with our business and R&D strategies. In order to increase business revenue from patents, we must obtain patents for technologies including peripheral technologies, considering the company's business conditions. With this understanding we are firmly establishing a wide collection of strong, advanced patents from the perspective of retaining a competitive advantage in terms of intellectual property.

As a technology-oriented manufacturer we have recently focused on raising the percentage of inventors among all employees. We believe this would further cultivate a mindset of valuing corporate intellectual property and develop the originality and portfolio of each business by protecting effective inventions, leading to the continued strengthening of our competitiveness.

Please see below for more information.
Research and Development ▶P. 40

■ Licensing Activities

While the company applies for and acquires rights primarily to ensure competitive advantages in our business activities, we also proactively license rights that we do not use to other companies. In some cases we also license technologies from other enterprises if they are likely to contribute to our business.

■ Risk Management for Intellectual Property

Our acquisition and control of intellectual property is conducted under the Rules for Handling Intellectual Property Rights stated above. This intellectual property rights strategy is intended to ensure that implementation corresponds with the reality of our individual businesses.

Intellectual property, including pending patent applications, is handled through a centrally controlled database by the Intellectual Property Department.

We strive to prevent infringements of competitors' patents and strictly manage risks by ascertaining recent developments of issues through the periodic circulation of patent information, a problematic patent watch system and an intellectual property review service with the utmost attention paid to setting our own criteria. Moreover, we are educating employees and increasing their awareness by holding in-house training, intellectual property strategy promotion meetings with various divisions and so forth. To date, we have never been sued for infringing intellectual property rights and therefore not suffered any business interference as a consequence.

To manage trade secrets and prevent leaks of know-how and technology, we formulated and enforce Information Security Management Regulations and Document Management Rules that cover the entire group. In addition, we use the guidelines stipulated in the Rules for Handling Intellectual Property Rights to determine whether we will file a patent application for a technology or keep it secret as internal expertise in order to prevent technology leaks.

Group companies have formulated or reinforced various intellectual property rules while completing the execution of agreements with each inventor. Given that we are strategically licensing our core technologies overseas from the perspective of our projected global management stance, we also address the risks of overseas licensing. The legal systems of emerging Asian countries are different from the system in Japan. For example, licensors are responsible for quality/performance assurance in those countries. In addition to internal information dissemination, we are implementing risk management in cooperation with specialized lawyers who are familiar with situations in those countries.

■ Intellectual Property Award Program

We have paid specified compensation to inventors for their patent applications and for registered patents that have significantly contributed to the business profits under our regulations. Furthermore, in FY2018 we started to operate an Intellectual Property Award Program to strengthen employee awareness of intellectual property. In FY2020, achievements were recognized through the Excellent Invention Award (1 award, 7 individuals), the Largest Number of Patent Applications Award (1 individual and 1 team) and the Intellectual Property Contribution Award (2 awards, a total of 8 individuals).

■ Training and Awareness Raising

To raise awareness of intellectual property and increase its potential, the company encourages employees, especially members of the research division and the technology development division, to take the Intellectual Property Management Skills Test, a national licensing examination. We have continued other employee training and awareness-raising efforts such as external workshops held by the Japan Intellectual Property Association and Japan Institute for Promoting Invention and Innovation, in addition to in-house training at our headquarters, Central Research Laboratory, branches and plants. In FY2020 we implemented the training programs described below, with 90 attendees including employees from affiliated companies. We have also partially introduced an e-learning program. Furthermore, through efforts such as information exchange gatherings and study meetings for those related to the intellectual property of each company stated above, we strive to duly protect and use intellectual property across the group while respecting other companies' intellectual property and preventing infringement, focusing primarily on intellectual property as a source of profit.

Session on patent descriptions

Number of Internal Attendees at Intellectual Property Training Sessions Held in FY2020

Training Content	Taiheiyo Cement Corporation Employees	Affiliated Company Employees	Total
Basic	24	31	55
Description	18	17	35
Total	42	48	90

CSR Management

Closely Related SDGs

Corporate Framework for CSR

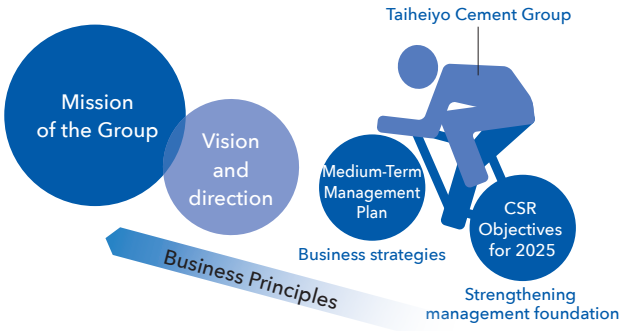
GRI102-15, 16

The Mission of the Taiheiyo Cement Group is the highest level concept and guiding principle of our business activities. Our Business Principles present more specific guidelines for action based on the Mission.

The vision and direction targeting the mid-2020s has been established as our vision for the future based on the Mission to present the value and direction of the group in qualitative terms.

The Medium-Term Management Plan sets forth our management strategy and targets for the next three years, while the CSR Objectives for 2025 are long-term, quantitative CSR targets. We strive to realize our vision and direction based on these targets.

*The Mission of the Taiheiyo Cement Group: 01; Business Principles: page 01; CSR Objectives for 2025: page 21



Basic Policy for Promoting CSR Management

GRI102-16

We promote CSR management in accordance with our CSR guidelines which specify actions that are essential for realizing the Mission of the Taiheiyo Cement Group and implementation of our Business Principles. The guidelines direct the company in conducting activities in and outside of the business that fulfill our social responsibility while we pursue sustainable growth for both the company and society as a whole. Moreover, they lay down basic policies for promoting CSR management.

Basic Policy 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.

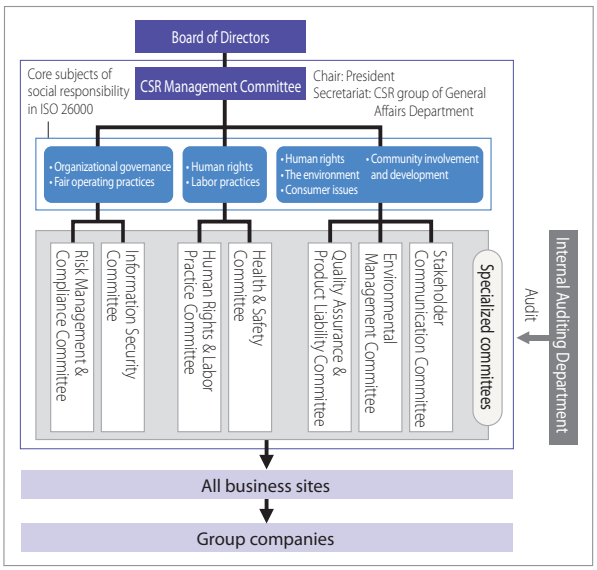
CSR Management Promotion System

GRI102-18, 19, 20, 21, 28, 29, 30, 32

To promote our CSR management we have created a cross-departmental CSR Management Committee, chaired by the president with all board directors and all managing executive officers as members, under the direct oversight of the Board of Directors.

The CSR Management Committee's role is to screen CSR action plans and other material items, and review their progress. Reporting to this committee are seven specialized committees for individual CSR subjects, each chaired by the director responsible for that area. The department most closely associated with any given issue acts as the secretariat for the related committee.

CSR Management Promotion System (CSR Management Committee and Specialized Committees)



CSR Training and Education

GRI102-27

We provide CSR education through training programs for each position, including sessions for newly hired employees, follow-up courses for second-year employees, career development (around ten years after joining the company) and training for newly appointed managers. For education on specific issues such as human rights, each specialized committee provides the relevant training programs. We also conduct executive-level CSR training once a year, including for group companies. Moreover, in order to enhance their understanding of the 2019 CSR Report, we created and distributed a report summary.

Executive-level CSR Training (FY2020)

Date	Companies in Attendance	Topic
November 2019	100	· Unconscious bias management necessary for leaders · Creating an organizational culture that does not lead to compliance issues

Collaboration with External Organizations

G102-11, 12, 13

■ Global Cement and Concrete Association

The Global Cement and Concrete Association (GCCA) was founded in 2018 as a CEO led initiative for the industry. As a founding member company Taiheiyo Cement is the sole Japanese cement and concrete manufacturer participating in the initiative. The association succeeded the activities of the Cement Sustainability Initiative (CSI), a sector project of the World Business Council for Sustainable Development (WBCSD), in January 2019. Under the strategic partnership, the GCCA collaborates with the WBCSD toward sustainable development.

The GCCA established six working groups to develop various guidelines on the themes of responding to climate change, a long-term roadmap for CO_2 reduction, low-carbon concrete, biodiversity, and health and safety. Through the GCCA we are working on building a sustainable society by setting and disclosing CO_2 emission reduction targets for each member company.

In addition, the GCCA launched a research network called Innovandi in 2020 and is expanding research worldwide on sustainable concrete and cement, which are characterized by low CO_2, as well as the separation and recovery of CO_2. We have also participated in Innovandi since its establishment.

The challenges that the GCCA and Innovandi are working on are recognized as one of our management issues and we are making efforts to take action.

■ The World Business Council for Sustainable Development (WBCSD)

As a core member of the WBCSD Cement Sustainability Initiative (CSI) since 2000, we have been engaged in international activities for sustainable development. Even after the activities of CSI have been succeeded to the GCCA, we continue to work as a WBCSD member and exchange the latest information on ESG with member companies from a broader perspective.

In addition, we dispatch one person every year to the WBCSD Leadership Program. So far we have dispatched eight people thereby contributing to the development of global human resources.

■ 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 123 companies (representing about 1.5 million employees as of July 2020), most of which are headquartered in Tokyo. Under its basic philosophy of voluntary management and full participation, the federation endeavors to resolve the issue known as Dowa, a discrimination issue in Japan, and other human rights issues.

CSR Management Main Results of FY2020 CSR Efforts GRI102-11, 44

Organizational Governance and Fair Operating Practice

Plan	Results	Evaluation	See Also
Organization Risk Management & Compliance Committee			
1. Strengthen promotion activities by executing a plan for company-wide risk countermeasures			
● Leakage of pollutants and dangerous substances	● Responded to by the Environmental Management Committee, which conducted a review during the meeting	○	PP. 50-52
● Enhancement of information security	● Completed a smooth transition to Windows 10 at the company level ● Conducted information security level surveys across the entire group and strengthened follow-ups and countermeasures based on the results ● Conducted training on response to the risk of theft of confidential information by targeted attacks as well as to suspicious emails	○	PP. 53-54
● Product/service accidents	● Amended and distributed each quality assurance standard for cement, cement-related products, and mineral resources products ● Monitored the data transition of each existing product and continued to follow up in order to prevent abnormal values ● Completed the establishment of a voluntary inspection system for group companies and received and approved a report on inspection results from the department in charge	○	PP. 50-52
● Aging of facilities and equipment	● Dismantled idle equipment	○	PP. 50-52
● Preventing traffic accidents	● Responded to by the equipment division and relevant division of non-operating business units; the committee conducted a review during the meeting	○	PP. 50-52
● Strengthening measures for overseas crisis management	● Secured supplies in high-risk dispatched countries ● Completed updating evacuation judgment standards and evacuation execution tools in Papua New Guinea and the Philippines	○	PP. 50-52
● Enhancement of group corporate governance including risk management and the compliance system	● Formulated the Bribery Prevention Regulations (Draft), which we plan to start administering soon while also continuing to discuss the draft ● Conducted a compliance session at a lecture meeting for top executives of the group in November and at a workshop for risk compliance promotors in November ● Conducted education and awareness-raising training for branch managers and those in charge of environmental business at branches in order to continue their waste business	△ ○ ○	PP. 50-52
● Work-related accidents	● Achieved zero fatalities; however, the number of accidents was the same as previous years due to the frequent occurrence of heat stroke and rule violations	○	PP. 50-52
● Response to shortage of human resources	● Exchanged opinions on various measures to secure and retain employees	○	PP. 50-52
● Respect for intellectual property rights and strengthening risk prevention	● Conducted basic training on intellectual property rights and posted teaching materials and Q&A on copyrights for all business site managers and employees	○	PP. 54-55
2. Continuous improvement of risk management using PDCA cycle			
● Continuous improvement of promotion activities using a PDCA cycle	● Implemented a PDCA cycle at our business sites and group companies ● Provided training on practical PDCA implementation for risk compliance promoters ● Revised the PDCA implementation entry form to better detect one's own risk and implement efforts	○	PP. 50-52
Organization Information Security Committee			
1. Enhance Information Security Management System (ISMS) and ensure its ongoing operation and improvement			
● Maintain and manage the company's information security	● There were no cases that required the holding of the committee's extraordinary meeting ● Revised the Mobile PC User Guidelines and created the Cloud Service User Guide ● Conducted an annual disaster recovery drill	○	PP. 53-54
● Strengthen group information security structure	● Result of information security level survey: 2.8 (average) (last year: 2.8) ● Explained the Information Security Countermeasure Guide and the Cloud Service User Guide at a meeting of group companies' information divisions ● Made follow-up visits to two group companies: Taiheiyo Rikuso Corporation and Oita Taiheiyo Mining Corporation ● Presented improvement measures to each overseas group company based on the FY2019 survey results in order to improve the information security level of those companies	△	
2. Implement countermeasures for security, accidents and failures based on the plan			
● Improve the security level by implementing information security-related projects	● Upgrading the company system to Windows 10 is expected to be completed within FY2020 ● Vulnerability diagnosis was conducted by external experts, and we implemented training on targeted attack emails	○	PP. 53-54
3. Conduct education/training/awareness-raising programs			
● Raise employee awareness of security across the group	● Conducted information security training in position-specific courses ● Published security news ● Provided security news materials and in-house security education materials to group companies	○	PP. 53-54
4. Monitor and assess the status of information security			
● Promote the appropriate use of information through periodic monitoring	● Following the change of the anti-virus software, the number of cases of detection and preventing the opening of attachments in viral emails improved ● Monitored file transmissions to external parties and monitored suspicious application transmissions by exit countermeasures; no incidents were found	○	PP. 53-54
● Conduct an internal audit on information security	● Neither paper audits nor on-site audits were conducted	×	
5. Continue operation and improvement of the Personal Information Protection Management System			
● Set up a task force and respond to issues when necessary ● Verify and respond to the state of compliance, education and audits	● Loss of company smartphones: 0 in 1st half, 1 in 2nd half (discovered immediately, so there was no possibility of leakage.) ● Enabled SSL for our website and revised the content of the "Handling of personal information" on the site	○	PP. 53-54

Human Rights and Labor Practices

Plan	Results	Evaluation	See Also
Organization Human Rights & Labor Practices Committee			
1. Raise human rights awareness and continue training programs throughout the group			
● In-house training and awareness raising	Human rights training courses by position and other training type (attendees included group company employees): (1) A lecture for CSR executives in November on creating an organizational climate that does not cause compliance issues (lecturer: Shigetaka Matsumoto, Business Consultants, INC.): 138, (2) Training for new employees in April: 108, (3) Communication + on-the-job training (employees with a three-year career: 91, those with a four-year career: 81 (5) Career development training (leader and sub-leader): 43, (6) Training for newly appointed managers in August: 42, (7) Training for foremen in February: 20, and (8) Techno-school special lecture in July: 5	○	PP. 79-80
● Consider and implement measures to prevent the recurrence of harassment	Conducted a variety of seminars: (1) Video seminar to clarify the roles of human rights awareness promotion committee members and harassment consultation members (2) "Unconscious bias seminar" to make all business site managers and those in management and non-management positions aware of unconscious bias (3) Anger management video seminar ● Established a new way to use the consultation service on our portal site to increase the transparency and awareness of the process after a harassment consultation ● Created a pocket-sized list of don'ts that comprise standards of harassment and distributed it to all employees in July	○	P. 79
● Training and raising of human rights awareness for group companies	(1) Supported seminars for employees in each position by lending DVDs (a total of 15) (2) Regularly provided related materials: distributed the public relations magazine by the Industrial Federation for Human Rights, Tokyo to each business office and group company in June and December	○	PP. 79-80
● The Industrial Federation for Human Rights	● Actively participated in various seminars and group meetings of the Industrial Federation for Human Rights and the Corporate Federation for Dowa and Human rights issue, Osaka	○	P. 79
2. Continue to achieve statutory employment ratio for persons with disabilities and promote their working opportunities			
● Hire new persons with disabilities based on the Medium-term Employment Plan for Persons with Disabilities	● Carried out recruitment in cooperation with recruitment sources, public employment agencies, special-needs schools for people with disabilities, and employment support agencies	○	P. 81
● Respond to issues related to special purpose subsidiaries	● Number of hires by each company: Taiheiyo Service Corporation (1 person), Kamiiso Kogyo Corporation (Expected to hire 1 person in April 2020), Nippo Onoda Corporation (1 person, counted as 2 due to severity)	○	P. 81
3. Report the state of initiatives to address issues related to human rights and labor practices			
● Report the latest state of initiatives for the empowerment of women, work style reform, and group-wide improvement of operational efficiency and efforts with regard to human rights and various labor-related issues in the promotion of group human resources	● Conducted an initiative to change summer lifestyles from June to October ● Promoted the wider use of the flextime system and Early Leaving Office Day (Wednesday and Friday) throughout the year, and conducted the Premium Friday initiative ● Held the fourth Diversity Forum (October) ● Conducted a work-from-home trial (July to December) ● Revised the Elder Temporary Employee Regulations (September)	○	PP. 79-82
● Report the state of implementation of education/training and global human resource development programs based on the new training system	Dispatched employees based on our new global human resource development program: ● Overseas technical trainee program: 4 from the Philippines, 4 from Vietnam and 2 from the U.S. ● Overseas language study program: dispatched 2 employees to the U.S. ● Overseas internship program: Malaysia in June (6 people), Malaysia in November (7 people)	○	P. 80
● Report the state of initiatives to promote the health of employees	● Working to operate and develop data for the selected health management system ● Working to reduce the risk of lifestyle diseases and prevent mental health diseases	△	PP. 82-83
● Progress of CSR Objectives for 2025	● Increase the ratio of female employees under "career track" categories to at least 30%; FY2020 20.3% (14 of 69 new recruits); FY2021 20.9% (14 of 67 new recruits) ● Increase the ratio of female employees to at least 10%: 9.0%, as of February 11, 2020 (210 of 2,346 employees) ● Increase the ratio of newly appointed female managers to 10%: 3%, (1 of 33 employees) as of March 11, 2019; 8% (2 of 25) as of March 11, 2020	○	P. 09 PP. 80-83

Human Rights and Labor Practices

Quality, the Environment, Consumer Issues, Community Involvement and Development

Plan	Results	Evaluation	See Also
Organization Health & Safety Committee			
1. Companywide Health & Safety Committee—Objectives			
(1) Fatalities for the group: zero (CSR Objectives for 2025) (2) Lost-time injuries for the group: 30 or less (3) Number of work-related accidents for the group: 80 or less (4) Absence rate (non-consolidated): 0.6%	● Held the company's Health & Safety Committee every quarter and verified statistical data. ● To prevent the recurrence of accidents, discussed and developed measures to be rolled out horizontally while taking into account the frequency and seriousness of accidents; FY2020: (1) Fatalities: 0, (2) Lost-time injuries: 29, (3) Number of work-related accidents: 94 (4) Absence ratio: 0.580%	△	P. 09 PP. 86-88
2. Promote health and safety activities			
● Group-wide basic safety activities to achieve CSR Objectives for 2025 ● Promote concrete activities to reduce accidents ● Provide and share information quickly after an accident occurs ● Horizontal roll-out of countermeasures taken by the business site where an accident occurred ● Prevent the occurrence of serious or frequent work-related accidents at specific business sites and affiliates	● Conducted safety patrols at group companies. ● Results: (1) Domestic: 3 ready-mixed concrete companies, 2 building materials companies and 2 other companies, (2) Overseas: 1 ready-mixed concrete company and 3 plants ● Distributed messages about National Safety Week, National Occupational Health Week and the no-accident campaign at year-end and during the New Year holidays, horizontal roll-out of safety and health measures throughout the group ● Disseminated information and alerts using the company-wide bulletin board, reported on accidents at the committee, and shared information using an accident information database. ● Supported accident prevention measures implemented by the business site where an accident occurred, sent safety notifications under the chairperson's name, and conducted patrols onsite to prevent recurrence ● Enhanced management by designating business sites that required special attention in the areas of safety and security, and conducted surveys and provided guidance about safety to business sites and affiliates that were designated as requiring special attention	○	PP. 86-88
3. Review the health and safety system			
● Standardize countermeasures taken after an accident occurs	● Although the standardization of countermeasures was carried out, similar or recurrent accidents occurred; it is therefore necessary to sustain the measures going forward	△	PP. 86-88
4. Promote compliance			
● Ensure that the requirements of the central government and administrative bodies are met	Results: conducted stress checks, performed a risk assessment when handling chemical substances, and established health information management guidelines	○	PP. 82-83
Organization Quality Control Committee			
1. Quality assurance system			
● Improve the system: establish an assurance system to reduce risks	● Reviewed and revised each of the regulations on cement and cement-related and mineral resources products	○	PP. 76-77
● Ensure the operation of QMS (ISO 9001) related to the cement business and continue external examination and certification	● Conducted group training to ensure smooth operations of the QMS system in July and September ● Reviewed and formulated the rules of the method to manage business sites positioned as subcontractors in line with the streamlining of operations	○	P. 76
2. Quality Risk Management			
● Establish quality standards that meet customer needs	● Reviewed the quality standards in Quality Assurance Regulations	○	PP. 76-77
● Appropriate response when a serious quality problem occurs	● Reviewed the creation of the Manual for Emergency Response for all products	○	P. 52 P. 76
3. Quality Compliance Management			
● Ensure product safety	● Conducted product safety tests and appropriately reviewed test contents to ensure 100% compliance with in-house standards for minor components and radioactivity concentrations	○	PP. 77-78
● Be sure to comply with revisions to standards, notifications, etc.	● Shared information on plans and revised notifications with related departments and promptly responded to revised regulations and new standards	○	PP. 76-78
4. Countermeasures for quality deficiency and complaints			
● Initiatives to improve customer satisfaction	● Implemented thorough corrective and preventive measures and promoted measures to prevent solidification and foreign material contamination in plants, SS and logistics	○	PP. 76-78
● Quality deficiencies of cement products, cement-related products, and mineral resources products For FY2020 results, *() indicates target values.	[Cement products] / [Mineral resources products] / [Cement-related products] (1) Serious claims: 0 (0) / (1) Serious claims: 0 (0) / (1) Serious claims: 0 (0)	○	PP. 76-77 PP. 84-85
	(2) Claims: 11 (10) / (2) Claims: 4 (0) / (2) Claims: 0 (0)	△	
	(3) Quality deficiency: 16 (15) / (3) Quality deficiency: 6 (0) / (3) Quality deficiency: 0 (0)	△	
5. Response related to group companies			
● Improve quality assurance system for group companies	● Established an appropriate quality data management system through voluntary inspections of group companies and held briefing sessions on data fraud prevention		PP. 76-78
Organization Environmental Management Committee			
1. Promote company-wide EMS			
● Set EMS objectives and targets, and plan, operate and evaluate EMS	● Formulated an environmental management policy and company-wide environmental goals ● Formulated compliance plans and assessed compliance ● Formulated an internal environmental audit plan and conducted an internal audit ● Appointed and educated EMS personnel, conducted EMS internal auditor training and follow-up training	○	PP. 60-61
2. Countermeasures to mitigate climate change			
● Reduce greenhouse gas emissions (CSR Objectives for 2025): reduce CO_2 emission intensity by 10% or more from FY2001 levels by FY2026	● Clarified the FY2019 results by dividing domestic and overseas cement manufacturing bases ● Clarified the actual results of energy consumption per unit of cement production and achieved the budget ● Introduced energy-saving equipment and supported investment ● Supported an alternative waste expansion plan for fossil energy	○	P.09 PP.24-25 PP.62-63
● Formulate and publish a long-term climate change vision	● Considered a menu and announcement method for further reduction measures	○	PP.24-25 PP.64-65
3. Measures for environmental risk (mercury)			
● Support compliance	● Continued to measure and deal with mercury based on the law and continued to control the amount of mercury input from raw materials	○	P.70
● Start consideration for legal revision	● Considered and proposed a management method through a long-term evaluation of continuous measurement data	○	P.70
4. Education, awareness raising and information dissemination regarding the environment			
● Collect and provide information on global environmental issues	● Conducted initiatives related to Environmental Month (distributed the president's message; enhanced the environmental portal site; reduced electricity consumption; raised awareness of biodiversity; and reported these initiatives in an in-house newsletter)	○	P.61
5. Promote initiatives across the group			
● Establish and enhance the development of an environmental management group	● Promoted the reporting of emergency information, rolled out recurrence prevention measures across the group, and developed the response to legal changes affecting group companies	○	—
Organization Stakeholder Communication Committee			
1. Activate communication within the company			
● Instill the management policy	● Held discussion sessions with executive officers at all business sites with 1,168 participants; the session at the headquarters was held in a talk format with a freelance announcer	○	P. 83
● Disseminate company activities	● Distributed a summary of the CSR Report 2019 to all employees	○	P. 57
2. Develop and publish the CSR report			
● Publish CSR Report 2019 in Japanese at the end of September and in English at the end of October	● Disclosed the report in accordance with the GRI standards and improved our disclosure based on DSJI results; published the CSR report in Japanese at the end of September and in English at the end of October; received the award for excellence in the Environmental Reports category of the Environmental Communication Awards	○	P. 01
3. Response to the SRI Survey, etc.			
● Respond to principal CSR-related external surveys such as the ESG investment survey	● Responded to DJSI, CDP, the Japan Research Institute, Toyo Keizai, the Good Bankers Co., Ltd., etc., and was selected as an excellent company in the Asia Pacific region in the DJSI survey for the sixth consecutive year; and acquired the DBJ environmental rating Grade A for the fifth consecutive year	○	—
4. Promote communication with society			
● Promote activities to communicate with local communities	● Participated in volunteer activities for cleaning the Daiba Ward district where the headquarters was located	○	PP. 89-91
5. Promote Committee's activities at group companies			
● Create means to exchange information on group companies' activities.	● Created a section for introducing group companies in our in-house newsletter and started to exchange information	○	—
Organization Others			
● Hold a CSR Workshop for group executives	● Held in November (100 companies participated)	○	P. 57
● Periodically report relevant information about group companies to local communities (twice per year)	● Implemented in April and October	○	—
● Hold group legal roundtables	● Held the 28th roundtable on legal issues related to labor practices in July (19 participants from 11 companies) ● Held the 29th roundtable on communication with authorities in responding to corporate scandals—criminal plea bargains, antimonopoly leniency and commitment procedures—and provided a practical response to the amendment in November (example of contract clause) (86 participants from 84 companies)	○	P. 53

*The content in the "Results" column has been prepared using information reported by specialized committees as of the end of March 2020.

Environmental Management

Closely Related SDGs

Environmental Management Policy

Our environmental management policy declares an active commitment to environmental issues facing society, including not only preventing pollution but also creating a recycling-based society, mitigating climate change, reducing environmental impacts, protecting water resources and conserving biodiversity as key management challenges. Under this policy we are focusing on improving our environmental performance.

Environmental Management Policy

In January 2006 we created an Environmental Management Policy, reflecting the fact that we consider an active commitment to the environmental issues facing society to be key management challenges. In addition to initiatives emphasizing these six items in all business operations, 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 and GCCA (Global Cement and Concrete Association).

Created in January 2006
Revised in April 2019

1. **Pursuing Environmentally Conscious Business Activities**
   In pursuit of zero environmental impacts we target the impacts of our business activities, including those of the value chain, which are emitting GHGs, pollutants, noise and vibration, withdrawing water, degrading forest and others. We promote the introduction of eco-efficient technologies into our business and the development of eco-conscious products as a member of both the regional and global society.
2. **Compliance with Environmental Laws and Regulations**
   As a minimum, we comply with all environmental laws and regulations applicable to our business activities. Furthermore, beyond compliance, we meet environmental commitments undertaken through voluntary agreements.
3. **Contributing to a Recycling-based Society**
   Leveraging the inherent capabilities of the cement industry, we actively recycle industrial and municipal wastes as raw materials and fuels for cement production.
4. **Proactively Addressing the Issue of Climate Change**
   We promote greater energy reduction throughout the whole of our business activities and strive to develop technology to help reduce society's total greenhouse gas emissions.
5. **Promoting Global Technology Transfer**
   Through the worldwide transfer and deployment of our technology, we aid the development of greater energy conservation, environmental preservation and utilization of waste materials.
6. **Ecosystem Conservation**
   We strive to protect the ecosystem, including biodiversity, by providing products and technologies that contribute to harmonious coexistence with nature.

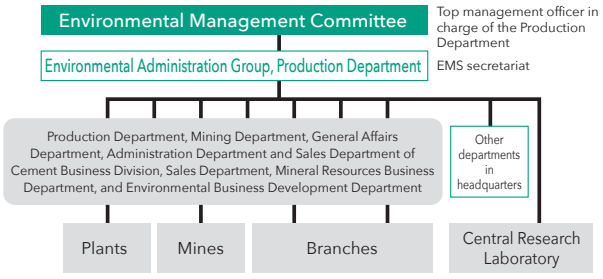
Company-wide Environmental Management System (EMS)

In June 1997 Taiheiyo Cement initiated ISO 14001 certification of each of its plants and attained 100% certification by 1999. Recognizing, however, that plant level management systems alone are insufficient to ensure comprehensive environmental protection through environmental management projects, we built a companywide environmental management system (EMS) and extended it beyond plants to cover our headquarters, branches and Central Research Laboratory. In April 2009 our EMS was ISO 14001 certified by the Japan Testing Center for Construction Materials, an independent third-party testing, standardization and certification authority. As part of the continuing certification the company-wide system underwent a renewal audit for the third time in March 2018.

■ EMS Readiness

Top management (officer in charge of the Production Department) chairs the Environmental Management Committee with ultimate decision-making authority for environmental management. Overseen by the Environmental Management Committee, the relevant headquarters division manages our plants, mines and branches using an "umbrella" system. Each group cement company in Japan and overseas is committed

Company-wide EMS Readiness



Taiheiyo Cement Group's Environmental Targets GCCA

CO_2 Emission Reduction Targets

Cement production-related CO_2 emissions from Taiheiyo Cement and group companies

Reduce specific net CO_2 emissions per tonne of cementitious product by 10% or more from FY2001 levels by FY2026 (CSR Objectives for 2025).

Reduction Target for Main Air Pollutants

Emissions of NOx, SOx and dust from the main stacks of kilns at the cement production sites of Taiheiyo Cement and group companies

Limit NOx, SOx and dust levels per tonne of clinker (g/t-clinker) to the target levels achieved in FY2011

to environmental preservation. Over 90% of the group's total cement output in FY2020 was produced in ISO 14001-certified plants. Facilities in countries where ISO is not adopted as the mainstream standard operate their own EMS.

■ Internal Environmental Audits

In FY2020 we conducted internal environmental audits at all our sites.

As priority items from this year's audit, confirmation of legal compliance reviews, external communications and corrective actions for unachieved items were identified as company-wide concerns. The status of a follow-up, including corrective and preventive actions for nonconformity with environmental requirements, and the status of responses to emergencies were identified as items that plants must deal with. Verifying the compliance status of a service stations was identified as an item that must be dealt with by branches.

The audit identified 21 findings including 6 for which improvements were requested. Corrective actions were taken for all 6 findings for which improvements were requested.

■ Environmental Education

During Environment Month each June we deliver a message from the president and provide educational materials on the environment page of our portal site to increase awareness and encourage learning about the environment, and about environmental preservation activities throughout the group. Each workplace also engages in a number of different activities, such as conducting training sessions related to accident response, viewing environment-related DVDs, holding lectures and taking part in local cleanup activities. In FY2020 more than 370 activities took place, including group companies' activities.

Oil spill training (Kumagaya plant)

Compliance with Environmental Laws

GRI307-1

■ Environmental Accidents

In FY2020 we had no legal or regulatory violations related to the environment that were subject to fines or penalties or significant accidents that affected the environment including animals or plants. However, we had two accidents (cement dust) and took measures to prevent these accidents from recurring.

■ Response to Environmental Accidents

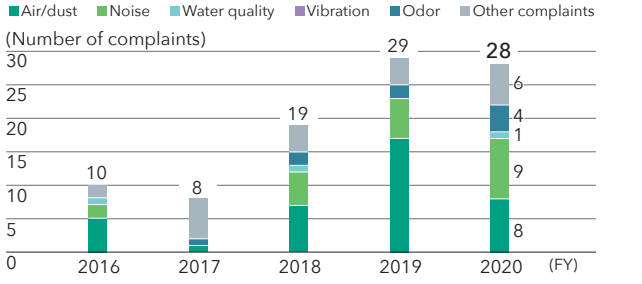
Each plant maintains emergency response plans in preparation for possible environmental accidents. They also conduct training, including periodic fire-fighting training in cooperation with local fire departments. Other training includes how to reduce environmental impact when an environmental accident occurs and how to report it to a government entity.

■ Environmental Complaints

As we increasingly utilize wastes and by-products and they become more diverse, the number of environmental issues we need to consider also increase. Therefore, we are ramping up our efforts to reduce environmental impact through activities such as introducing indoor storage and sealed containers for waste and by-products, and improving our flue gas stacks. When we receive an environmental complaint we quickly travel to the site in question, whenever possible, to check the situation, investigate the cause and provide an explanation. When we find that our activities are the cause, we implement improvements.

In FY2020 our cement plants received 104 environmental complaints. We responded to 28 of these, which were associated with our operations. The number of complaints received in FY2019 increased from the previous year due to a change in the counting method. However, the number in FY2020 remained unchanged from the previous year.

Number of Environmental Complaints Received Non-consolidated



Mitigating Climate Change

GRI103-2, 3, 12

Closely Related SDGs

Greenhouse Gas Emissions and Achievement of Our CSR Objectives for 2025

GRI102-11, 302-3, 305-1, 2, 4, 5

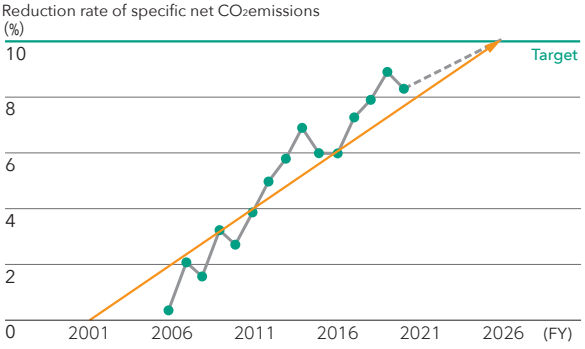
Among the total greenhouse gas emissions generated by our domestic group companies (excluding power generation companies) that are reporting their greenhouse gas emissions by business segment in accordance with the Act on Promotion of Global Warming Countermeasures, about 95% of greenhouse gas emissions were generated from cement production companies in FY2017.* The amount of greenhouse gas emissions associated with our service stations, headquarters, branches and shipping, as well as electricity purchased by the group, was around 5% in FY2020. Under Scope 3 (value chain) calculations for cement, for which downstream value is not calculated since cement is considered an intermediate product at this stage, the emissions were around 5.0% of Scope 1 and Scope 2 (direct air emissions) in FY2019.

The bulk of greenhouse gas emissions associated with the operations of our group companies is CO_2 from cement production. We are therefore working to reduce emissions from cement production, as indicated in our CSR Objectives for 2025, in order to achieve our long-term quantitative target of reducing specific net CO_2 emissions per tonne of cementitious product by 10% or more from FY2001 levels by FY2026.

Some of our plants are taking part in the target setting type emissions trading program for Saitama Prefecture and California's cap-and-trade program, striving to achieve the reduction targets. To support voluntary approaches we are also working in line with Keidanren's voluntary action plan and the measures to reduce greenhouse gas emissions established by the WBCSD and GCCA.

*Most of our overseas affiliated companies are cement production companies so the total CO_2 emissions from production overall is higher than that of domestic companies alone.

Progress in Meeting CO_2 Reduction Targets in our CSR Objectives for 2025



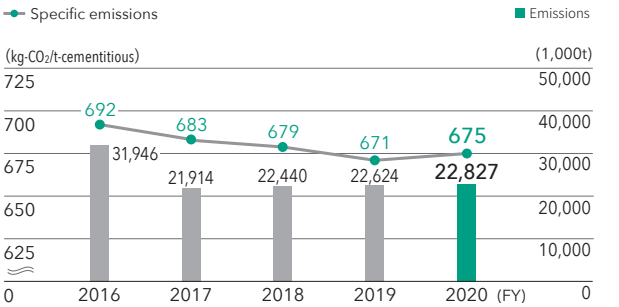
Efforts Related to the Cement Production Process

GRI302-1, 3, 4, 305-4, 5

Not a less amount of carbon dioxide is generated in the course of cement manufacture. 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 ($CaCO_3 \rightarrow CaO + CO_2$). About 35% of CO_2 emissions generated during cement production are from the consumption of energy, about 55% are from the calcination of raw materials and about 10% are from electricity use. To reduce CO_2 emissions we have been working to conserve energy by installing energy-efficient equipment and improving the stability and efficiency of our kiln operations. We have also been implementing measures such as using waste- and biomass-derived energy sources to decrease our rate of use of fossil fuels. Moreover, we are moving toward using recycled resources with less carbonate content to bring down CO_2 emissions from the calcination of the limestone used as raw material, and have started using WHR power generation to tackle CO_2 emissions associated with conventional electricity generation.

Specific heat consumption was reduced in FY2020 delivering a reduction in CO_2 emissions of 4-kg-CO_2/t cementitious product compared to FY2019, mainly as a result of a decrease in the clinker-to-cement ratio.

Specific Net CO_2 Emissions per Tonne of Cementitious Product GCCA

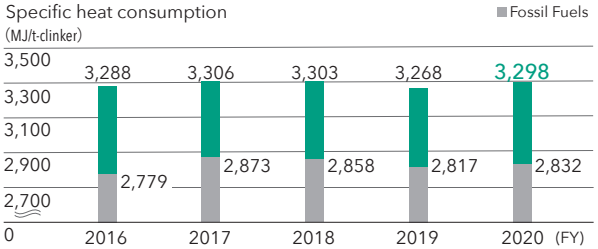


Guidelines: GCCA「GCCA Sustainability Guidelines for the monitoring and reporting of CO_2 emissions from cement manufacturing Ver. 0.1」

■ Efforts to Save Energy

Specific heat consumption of clinker production by the group's cement plants in FY2020 decreased by 30 MJ/t clinker from the previous year's level to 3,298 MJ/t-clinker.

Specific Heat Consumption of Clinker Production GCCA

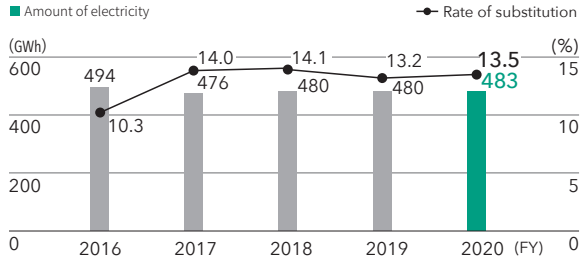


Guidelines: GCCA「GCCA Sustainability Guidelines for the monitoring and reporting of CO_2 emissions from cement manufacturing Ver. 0.1」

■ Use of WHR Power Generation Systems

Total electric power generated by WHR power generation systems at the group's cement production companies in FY2020 increased by 3 GWh from FY2019 to 483 GWh. Its ratio to all electricity consumed in the production of cement was 13.5%. We were therefore able to reduce CO_2 emissions by about 333 thousand tonnes in FY2020 compared to purchased power generated from coal-fired power plants (emission factor: 0.69 t-CO_2/MWh).

Electricity Generated by Waste Heat GCCA

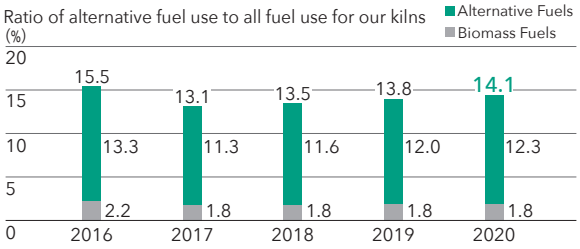


Guidelines: ：GCCA「GCCA Sustainability Guidelines for the monitoring and reporting of CO_2 emissions from cement manufacturing Ver. 0.1」

■ Use of Alternative Energy Resources and Alternative Raw Materials

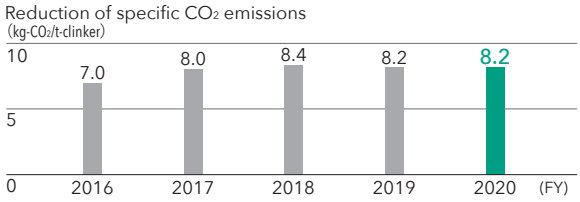
In FY2020 non-fossil energy and biomass energy accounted for about 14.1% of all energy used for group kilns. A decrease of about 8.2 kg-CO_2/t-clinker was also achieved by using alternative raw materials. As a result of using both alternative energy resources and raw materials, reductions in CO_2 emissions are expected to reach 1.47 million tonnes (emission factor for coal: 0.096 kg-CO_2/MJ).

Ratio of Alternative Fuels and Biomass Fuels GCCA



Guidelines: GCCA「GCCA Sustainability Guidelines for the monitoring and reporting of CO_2 emissions from cement manufacturing Ver. 0.1」

Reduction of Specific CO_2 Emissions by Replacing Limestone with Alternative Raw Materials GCCA



Guidelines: GCCA「GCCA Sustainability Guidelines for the monitoring and reporting of CO_2 emissions from cement manufacturing Ver. 0.1」

Reducing CO_2 Emissions during Transportation

GRI305-3

We contract the delivery of our raw materials and products to transportation companies and are striving to reduce CO_2 emissions as a specified consigner designated under the Japanese Energy Saving Act. Major efforts include implementing a plan to transport goods on return trips, encouraging drivers to eco-drive, and promoting energy efficient devices such as digital tachometers and eco-tires on vehicles. In shipping we continue to pursue energy efficiency technologies and operate new ships that are equipped with many energy-saving features. We are also supporting energy-saving operations for conventionally powered ships.

In FY2020 our CO_2 emissions decreased by about 3% compared to FY2019, mainly due to a 3% decrease in both the distance and tonnage transported.

CO_2 Emissions by Mode of Transportation (FY2020)

Non-consolidated

Mode of transportation	Tonnage transported (1,000t)	Average Distance Transported (km)	Transported Tonne × Kilometer (1,000t × km)	CO_2 Emissions (1,000t)
Ship	17,732	454	8,048,146	118
Truck	15,233	53	806,912	46
Railway	5,450	27	147,418	3
Total	38,415	234	9,002,476	167

Information Disclosure Based on the Recommendations of the TCFD (Scenario Analysis)

GRI102-11, 12, 103-2, 3, 201-2

In June 2019 we announced that we support the recommendations of the TCFD*.

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

*Task Force on Climate-related Financial Disclosures: Established in 2015 by the Financial Stability Board (FSB) to promote the disclosure of climate-related financial information. In 2017, for the appropriate investment decisions of investors, the TCFD published recommendations to promote disclosure of information on the financial impacts of climate-related risks and opportunities.

The Taiheiyo Cement Group has identified a response to climate change as a top priority. The Group's efforts are based on three scenarios for reducing CO_2 emissions: application, development and innovation to achieve the reduction target of cement-related CO_2 emissions that we state in our CSR Objectives for 2025 and long-term vision of greenhouse gas emissions reduction toward 2050.

In June 2019 we announced that we support the recommendations of the TCFD. Following its recommendations we conducted an evaluation and separate analyses, including scenario analysis, of the Group's climate-related risks and opportunities.

TCFD Content Index

Recommended disclosures	Our disclosure
Governance The organization's governance around climate-related risks and opportunities	● Corporate Governance (pages 45–46) ● Risk Management (pages 50–52) ● CSR Management Promotion System (page 56) ● Company-wide Environmental Management System (pages 60–61)
Strategy The actual and potential impacts of climate-related risks and opportunities for the organization's businesses, strategy and financial planning	● Top Commitment (pages 11–13) ● Recognition of Our Business Environment (Risks and Opportunities) (pages 16–17) ● Progress of the Medium-Term Management Plan and CSR Objectives (pages 20–21) ● Special Feature 1: Taiheiyo Cement Group Efforts to Mitigate Climate Change (pages 24–27) ● Business Activities (pages 30–41) ● Initiatives Based on the Recommendations of the TCFD (pages 64–65)
Risk Management How the organization identifies, assesses, and manages climate-related risks	● Risk Management (pages 50–52) ● CSR Management Promotion System (page 56) ● Company-wide Environmental Management System (pages 60–61) ● Initiatives Based on the Recommendations of the TCFD (pages 64–65)
Metrics and Targets Metrics and targets used to assess and manage relevant climate-related risks and opportunities	● Progress of the Medium-Term Management Plan and CSR Objectives (pages 16–17) ● Our Long-range Vision of Greenhouse Gas Emissions Reduction toward 2050 (pages 24–25) ● Mitigating Climate Change (pages 62–63) ● Environmental Accounting (page 73) ● GCCA Key Performance Indicators (page 92)

■ Setting Scenarios

We focused our scenarios, evaluation and analysis on the business risks and opportunities that climate change will pose to the Group by the year 2050. We sorted out events that will materially impact climate-related risks and opportunities, based on climate-related, long-term scenarios founded on science, such as the World Energy Outlook (WEO) and Energy Technology Perspectives (ETP) published by the IEA and The Fifth Assessment Report (AR5) published by the IPCC. Then we created two climate-related scenarios, 4°C and 2°C, that will have impact on the business operations of the Group. To follow up, we analyzed the business impacts in every scenario by size and time horizon (short, medium and long).

Process of Selecting Material Climate-related Risks and Opportunities and Scenarios

STEP 1 Conduct a benchmark survey on recognizing climate-related risks and opportunities for the cement sector and identify relevant drivers.

↓

STEP 2 Determine the causal relationships between climate-related drivers, interim outcomes and implications. Then identify key drivers.

↓

STEP 3 Create climate-related scenarios for each key driver, referring to the published climate-related long-term scenarios that were developed based on scientific grounds.

↓

STEP 4 Evaluate the anticipated business impacts in each scenario.

↓

STEP 5 Review responses to the business impacts, which are, in our view, positively or negatively significant to our evaluation.

Scenario Overview

Negative impacts ↓ Large ↓ Medium ↓ Small　Positive impacts ↑ Large ↑ Medium ↑ Small　Unknown —

Category	Drivers	4°C		2°C	
		Negative	Positive	Negative	Positive
Policies for mitigating climate change	● Carbon pricing (carbon taxes, emissions trading program)	↓		↓	
	● Reinforcement of regulations on CO_2 emissions	↓	↑	↓	↑
	● Reinforcement of recycling-related regulations ● Including the regulations on export/import of waste		↑		↑
Technologies	● Progress in the development of technology for CCUS (carbon capture, utilization and storage)		↑	↓	↑
	● Increased competition in developing new cement materials and low-carbon technologies ● Systemize design methods that incorporate CO_2 recovery by concrete	—	—	↓	—
Population, economy and geopolitics	● Growing population in emerging markets; urbanization and trend toward compact cities in Japan due to declining birthrate and aging population. ● Such as dissemination of EVs and autonomous driving	↓	—	↓	—
	● Declining utilization rate of coal-fired power stations		—	↓	
Society and Infrastructure	● Improved awareness of recycling				
Rise in average temperature and changes in rainfall pattern	Long term Rises in average atmospheric temperature and seawater temperature and sea level rise. ● A larger number of animals that transmit infectious diseases in wider areas ● More frequent urban heat island effects due to changes in urban conditions ● Reduction in national land due to sea level rise	↓	↑	↓	↑
	Short term More frequent heavy rains, drought, typhoons and flooding		↑		↑

Policies for Mitigating Climate Change

4°C

Renewable energy is more widely used in developed countries. For example, no new coal-fired power stations have been constructed in those nations. Coal-fired power generation, however, continues to grow globally. Priority is placed on economic activities while restrictions on greenhouse gas emissions stay lax and the cost of emitting greenhouse gases (carbon price) is set low. There is no significant change in cement manufacturing. The recycling of mineral resources, such as fly ash, slag and other by-products further increases at home and abroad.

2°C

Efforts to mitigate climate changes are taken toward realizing a decarbonized society; however, efforts are not sufficient. Greenhouse gas emissions slowly increase. In terms of efforts toward zero greenhouse gas emissions, the operation of coal-fired power stations decline due to system reforms related to energy supply and demand. A shift takes place toward renewable energy and low-carbon energy such as LNG. Carbon taxes and emissions trading programs become popular.

Technologies, Society and Infrastructure

4°C

Global cement demand continues to grow due to growing populations, urbanization and the increased scale and frequency of natural disasters. In renewing cement manufacturing facilities, energy-saving equipment is introduced and capacity for the production of blended cement using less clinker is increased. Moderately low carbon taxes and market emissions prices discourage businesses from introducing CCUS (CO_2 capture, utilization and storage). The process-derived CO_2 emissions* per unit of cement output stay at the same level as the present.

2°C

Costs related to carbon emissions rise due to carbon pricing and the reinforcement of regulations on CO_2 emissions. The cement industry promotes research on low-CO_2 cement production and development of new technologies including those for saving energy while continuing investments to meet demand. The proportion of cement manufacturing facilities featuring CCS (CO_2 capture and storage) increases through the government's policy for promoting CCS. Thus process-derived CO_2 emissions* per unit of cement output drop.

Rise in Average Temperature and Changes in Rainfall Pattern

4°C

Greenhouse gas emissions continue to grow, which makes it difficult to mitigate climate change. Flood damage associated with overflowing rivers and storm surges increases due to the rise in global average temperature and sea level. Flooding occurs more frequently worldwide due to torrential rains and massive typhoons. While our manufacturing and supply systems must be reinforced, demand remains strong for cement and concrete to strengthen urban and national resilience.

2°C

Greenhouse gas emissions are limited to the level that their concentration meets the 2°C target. Physical impacts due to a 2°C rise in average temperature, however, cannot be avoided. Changes in rainfall patterns also continue. Consequently, the production and supply system for cement and concrete must be enhanced. In parallel with mitigation actions, adaptive measures are required for enhancing urban and national resilience as well as the resilience of islands and low-lying coastal areas.

*CO_2 emissions do not include those derived from energy sources since they are generated by the calcination of limestone.

Recycling Waste and Other Materials

GRI103-2, 3, 203-1, 413-1

Closely Related SDGs

Resource Recycling with Industries

■ Electric Power Utilities

We accept coal ash produced at coalfired 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 effectively. We also supply the power plants with 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 the flue-gas desulfurization material with sulfur oxide forms gypsum, which we use effectively as a raw material for cement.

*Ash centers are distribution sites with collection/transportation (transshipment and storage) and intermediate-processing (powder mixing) functions. They receive coal ash from coal-fired power plants and ensure a stable supply to our cement plants, while enabling effective utilization of coal ash and supplying diverse products that meet user needs.

■ Steelmakers

In the iron and 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 mineral components.

■ Construction Soil

Conventionally this soil had been dumped into landfills. By making effective use of it as an alternative raw material for cement we contribute to the material recycling of construction soil as well as to the extension of the lifetime of landfills. We have also set up intermediary facilities that organically link sites where construction soil is produced to our nationwide plants.

Resource Recycling with Communities

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

● Incineration Residues Recycling System

A system for recycling municipal waste incineration ash (bottom ash and fly ash) as a raw material for ordinary Portland cement.

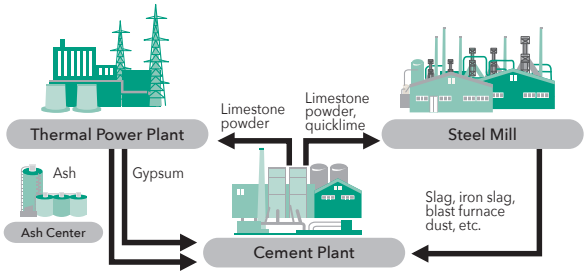
● AK System

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

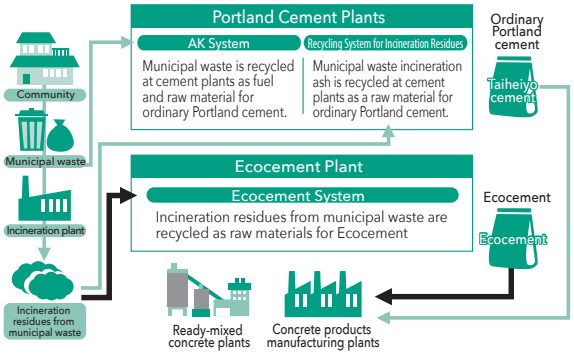
● Ecocement System

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

Mineral Resource Cycle with Electric Power Utilities and Steelmakers



Municipal Waste Recycling Systems for Cement Production



Performance of Recycled-Waste-to-Cement System GRI301-1, 2

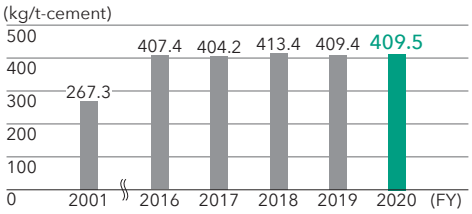
All of our directly operated cement plants in Japan recycle waste and by-products into alternative raw materials and fuels for cement. This helps to extend the lifetime of landfills, prevent the depletion of natural mineral resources, limit greenhouse gas emissions and reduce emissions of pollutants into the atmosphere.

In FY2020 we recycled 6.387 million tonnes of waste and by-products, a decrease of approximately 178,000 tonnes compared to the amount in FY2019 This was due to a decrease in the amounts of blast furnace slag, by-product gypsum, unburned ash, soot and dust we accepted, which offset the increased volumes of coal ash, waste plastic, waste oil, water treatment plant sewage sludge and ash. This means we recycled 409.5 kg of waste and by-products per tonne of cement produced.

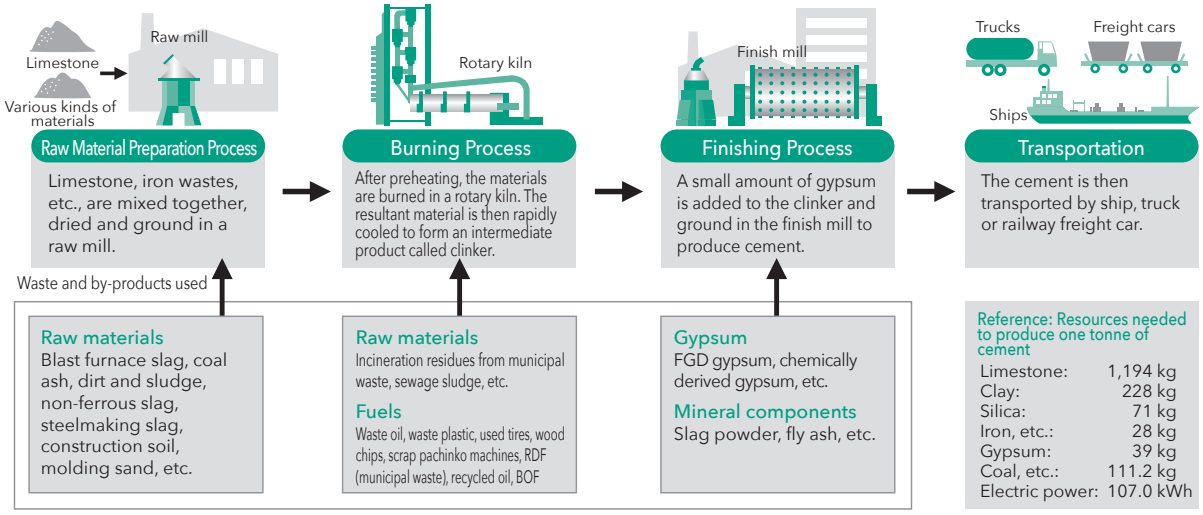
In addition, all of the group's cement plants in Japan accept waste and by-products for recycling.

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

Non-consolidated



Waste and By-products Used in the Cement Manufacturing Process



Reference: Resources needed to produce one tonne of cement

Limestone:	1,194 kg
Clay:	228 kg
Silica:	71 kg
Iron, etc.:	28 kg
Gypsum:	39 kg
Coal, etc.:	111.2 kg
Electric power:	107.0 kWh

Waste and By-products Used in Cement Plants (FY2020)

Non-consolidated

Waste and By-products		Total Amount (t)	Rate (kg/t-cement)
Industrial	Coal ash (including JIS fly ash)	1,988,807	127.5
	Blast furnace slag	1,145,277	73.4
	By-product gypsum	509,220	32.6
	Unburned ash, soot emissions, dust	503,350	32.3
	Dirt and sludge	383,618	24.6
	Construction soil	228,442	14.6
	Waste plastic	180,889	11.6
	Waste oil	155,430	10.0
	Wood chips	73,721	4.7
	Other	666,704	42.7
	Subtotal	5,835,458	374.1
Household	Water treatment plant sewage sludge and ash	380,938	24.4
	Municipal waste incineration residues	142,134	9.1
	Municipal waste, etc.	28,468	1.8
	Subtotal	551,539	35.4
Total		6,386,997	409.5
	Raw material-related	5,808,924	372.4
	Fuel-related	578,073	37.1

Conserving Biodiversity GRI103-2, 3

Closely Related SDGs

Environmental Impact of Our Operations

GRI304-1, 2, MM1, MM2

■ Environmental Impact of Our Operations

Cement production starts with quarrying limestone, the primary raw material for cement. We also quarry other raw materials such as aggregates and other minerals.

Since quarrying requires the removal of topsoil, quarry development has an impact on the biodiversity of the development area. However, the limestone, rocks and sand we quarry only require crushing for particle size adjustment and sorting, and do not require any refining processes. Consequently, our operations are unlikely to cause chemical contamination to surrounding areas. In addition, we minimize the amount of waste stones generated during our limestone quarrying by using them as construction materials.

■ Limestone Quarries of the Group

The group operates 19 major limestone quarries around the world, most of which are near our integrated cement plants. The total site area* of the quarries is 4,327 ha (Japan: 2,409 ha; U.S.A.: 1,281 ha; other regions: 637 ha).

*The area where we conduct quarrying operations as measured by our in-house standard.

Limestone Quarries of the Group

Region	Number of sites	Site area (ha)	Require consideration* (number of quarries)
Japan	11	2,409	1
U.S.A.	3	1,281	0
Other regions	5	637	0

*Require consideration refers to quarries that fall under category IV or higher in terms of the IUCN's Protected Area.

Using the Integrated Biodiversity Assessment Tool (IBAT) provided by BirdLife International, we checked whether any of our limestone quarries are in any of the protected areas defined by the International Union for Conservation of Nature (IUCN). We found that none of our quarries are within or adjacent to Protected Area Category III or lower categories. However, In Japan, one quarry is within a Category IV area and two are adjacent to Category IV areas.

All these quarries have obtained the necessary licenses and conduct environmentally friendly quarrying operations. They have no pending litigations concerning biodiversity or other environmental issues.

Outline of Protected Area Categories of the IUCN

IUCN Categories	Outline
I a: Strict Nature Reserve	Areas that have outstanding or representative ecosystems or have geographical or physiological features or species.
I b: Wilderness Area	Large unmodified or slightly modified areas.
II: National Park	Areas set aside to protect the environmental integrity of the ecosystem.
III: Natural Monument or Feature	Areas that have outstanding features of nature or cultural values.
IV: Habitat/Species Management Area	Areas that require active interventions to maintain habitats or address the requirements of particular species.

Activities to Reduce Environmental Impact

GRI103-2, 3, 304-1, 2, 3, 4, MM1

Throughout the group we believe that balancing the conservation of ecosystems in communities and development of the communities themselves is important in quarry operations. With this belief, we hold discussions with local governments, communities and academics while operating quarries. This helps to ensure we not only prevent pollution but also conserve biodiversity and water resources while minimizing our environmental impact.

■ Environmental Impact Assessment

In developing quarries we conduct ex-ante assessments of environmental impact of the development of quarries based on environmental research of the development area such as on biodiversity and water resources. We then discuss the results of the research with local governments, communities, academics, and other stakeholders toward finalizing a development plan. Moreover, we regularly monitor the surrounding environment during the development and operations of quarries and report to our stakeholders on the environmental impact that the quarries have in these areas.

For instance, in the new development of a quarry in the Ofunato Quarry, Iwate Prefecture, we conducted environmental assessment for approximately ten years. We focused on

Raptors survey

preserving rare wildlife species in cooperation with external experts and local residents. Furthermore, we minimized noise and vibration during the development work and also limited the traffic hours for trucks used in construction work. In addition, even after development work begins, we carry out regular ex-post assessments and environmental protection measures.

■ Biodiversity Protection

When environmental impact assessments determine that protection is required, we protect rare species through the installation of protective measures, transplanting and restricting development work.

Since 1972, at the Minowa Quarry of Chichibu Taiheiyo Cement Corporation, we have been protecting and nurturing rare species of native plants on Mt. Buko, which is on the border of Chichibu City and Yokoze Town in Saitama Prefecture. We created a botanical garden at the quarry and, together with local experts and other people, we preserve 68 native plant species there while increasing the plant population. Additionally, our Central Research Laboratory continues to research and develop ways to preserve and grow endangered plants, and to verify genetic diversity of native plant species using biotechnology. Since 2016, in the course of developing the Ofunato Quarry, we have been working with experts to preserve and cultivate various rare plant species in their native biospheres by creating a botanical garden on the side of the office of Ryushin Mining Co., Ltd.

Botanical garden

Rare plant

■ Greening Quarries

In working quarry areas, rocks and soil are exposed leaving no flora coverage. However, we continuously restore greenery to the quarry slopes on terraces formed during the quarrying process as early as possible, particularly if no quarrying work is expected for some time. We also plant vegetation in stockyards for excavated topsoil where no construction work is expected. At some quarries, at the request of the community, we restore greenery if operations have been suspended for several months.

We usually plant vegetation that is native to the region. Group greening of quarries in Japan in FY2020 involved a 20,630 m² area where seeds were sprayed and 1,726 tree seedlings planted.

Other efforts include participating in an annual tree planting campaign with contractors and local residents to improve awareness of quarry development and greening activities.

Greening quarry slopes

■ Water Resource Conservation

In quarrying we also pay close attention to protecting not only terrestrial plants but also water resources such as rivers and natural springs in an effort to protect biodiversity. From the perspective of conserving water resources, spring water discharged from quarrying and rainwater is directed into retention basins to minimize impact outside of the quarrying area. In some quarries we drill wells for domestic water and supply this water to local communities for everyday use.

■ Use of Old Quarry Sites

We reuse old quarry sites where operations have completely ended after consultation with the local community. When greening a site we strive to restore the original natural environment.

Reducing Environmental Impact GRI103-2, 3

Closely Related SDGs

Preventing Environmental Pollution

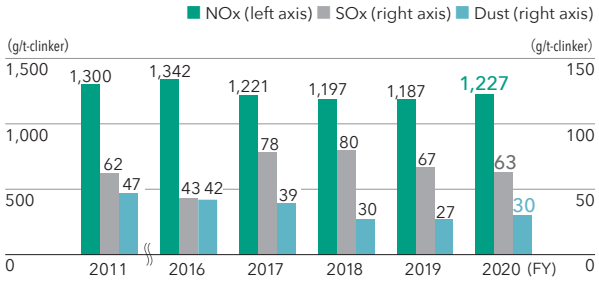
GRI305-7

■ Air Pollution

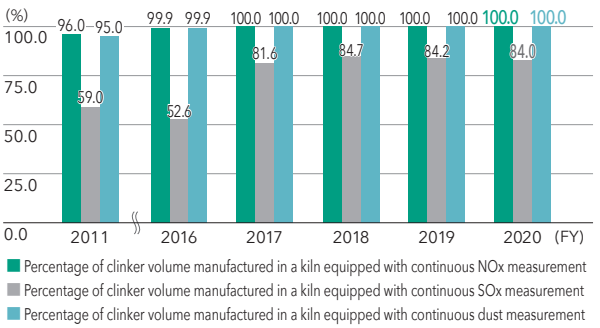
Air pollutants generated from cement production are primarily NOx, SOx and dust in combustion gases emitted from cement kilns. To ensure the proper management of these substances we remain committed to reducing air pollutant emissions through measures such as continuously monitoring emission concentrations, improving NOx reduction systems and installing bag filter equipment to capture dust emissions. With such measures we focus on controlling the emission of air pollutants with the goal of maintaining FY2011 emission levels.

Emissions of NOx and dust in FY2020 were lower than in FY2011, whereas emissions of SOx were higher than in FY2011 (base year) because we accepted waste with high sulfur content. Nonetheless, the level of SOx emissions was very low compared to the limit set under the Air Pollution Control Act.

Specific Emissions per Tonne of Clinker for Selected Pollutants GCCA



Monitoring Rate GCCA

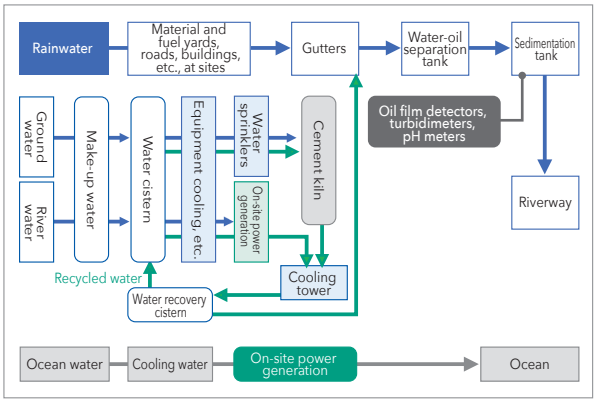


Guidelines: "GCCA Sustainability Guidelines for the monitoring and reporting of emissions from cement manufacturing Ver. 0.1"

■ Water Contamination

Most of the water discharged from our plants to public waterways is cooling water and not polluted as defined in the Water Pollution Control Act. At our cement plants all water resources are reused as circulation water to minimize the impact of water discharge into public waterways. Also, we are working to prevent the leakage of potential pollutants by installing bunds around our oil tanks and acid/alkali tanks. Moreover, we are installing sedimentation tanks, water-oil separation tanks, oil film detectors, pH meters and suspended solid sensors on water discharge routes that connect to public waterways.

Example of Water Circulation Flow at a Cement Plant



■ Soil Contamination

In FY2001 Taiheiyo Cement evaluated the risks associated with cement plants that may be sited on contaminated ground by appointing an expert consultant to undertake a soil history survey. We are continuing to conduct drilling surveys, starting with the higher-risk locations, to verify whether or not the soil is contaminated. Actions have been taken as necessary based on the findings.

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

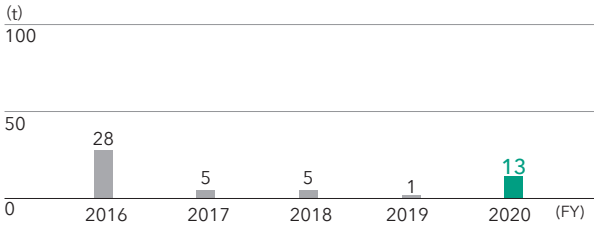
Reducing Waste

GRI306-2

■ Initiatives at Plants and Quarries

Our cement plants and quarries reduce the amount of waste handled by disposal contractors by reusing waste from operations as material for cement production. We also endeavor to reduce the volume of waste to landfill through recycling made possible using chromium-free kiln bricks.

Volume of Waste to Landfill

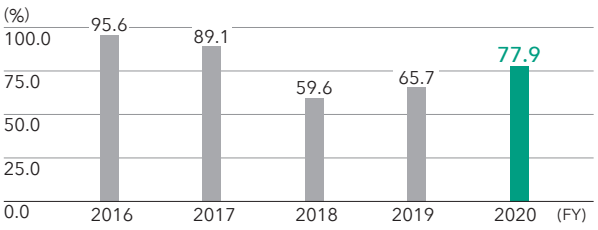


■ Initiatives at Service Stations

Service stations reduce the waste handled by waste disposal contractors by returning any residual cement that remains in silos after switching the cement products. Returned cement is recycled and used as raw material.

In FY2020 the recycling rate was 77.9%, up 12.2% from the previous fiscal year.

Recycling Rate of Residual Cement Non-consolidated



■ Initiatives at Offices

Our special purpose subsidiary, Taiheiyo Service Corporation, installed a paper recycling machine to recycle the company's used copy paper, and in FY2020 we recycled approximately 410,000 sheets of A4 size paper.

Appropriate Management of Chemical Substances

GRI306-2

■ Pollutant Release and Transfer Register (PRTR)

The PRTR Law requires that we report on equipment installed at our Kumagaya plant for the washing of municipal waste incineration ash. This washing process uses water, and our total discharge of dioxins and ferric chloride into public waterways are as follows.

Reported Levels of Dioxins and Ferric Chloride Emissions

Non-consolidated

Emissions	Reported Levels		
	FY2018	FY2019	FY2020
Dioxins (mg-TEQ)	0.0	0.0	0.0
Ferric chloride (kg)	170	170	152

■ Management of PCB Waste

We properly store and dispose of high and low concentrations of PCB waste in accordance with the "Amendment to the Law concerning Special Measures for Promotion of Proper Treatment of PCB Wastes" (revised in 2016).

For high-concentration PCB waste with an early disposal deadline as stipulated by law, we signed a processing contract with the Japan Environmental Safety Corporation (JESCO) in 2006 and have prioritized processing.

In FY2020 capacitors stored in the Saitama plant and our Chubu Hokuriku branch, as well as pollutants such as electrical ballasts stored in the Oita, Fujiwara, Kumagaya and former Chichibu plants, were processed.

In FY2021 pollutants such as electrical ballasts stored in the Fujiwara plant and the former Kawara, Tosa and Osaka plants as well as the Chichibu quarry and a packaging site are scheduled for processing.

Status of High-concentration PCB Waste Disposal Non-consolidated

(Number of machines)

Waste	Stored in FY2019 (as of March 31, 2019)	New Target for FY2020	Processed in FY2020	Stored in FY2020 (as of March 31, 2020)	Planned Processing for FY2021
Capacitors	1	4	5	0	0
Transformers	0	0	0	0	0
Electrical ballasts	2,707	1,487	2,444	1,750	1,117
Total	2,708	1,491	2,449	1,750	1,117

Appropriate Use of Water Resources GRI103-2, 3

Closely Related SDGs

Water Risk Analysis

GRI303-1

According to the results of the water risk analysis conducted using the Water Risk Filter*, the average score for the total basin risk for all our plants (weighted average taking into account the cementitious production volume) was 2.8 (the maximum score is 5.0, with a higher score indicating a greater risk). The highest total basin risk score was 3.5, higher than that of the previous year. The volume of cement produced at the plant with the highest score accounted for about 15% of the production volume of all the plants. However, when we analyzed conditions at that plant, no imminent issues were identified.

*This is a water risk mapping tool developed by the World Wide Fund for Nature and used to evaluate impacts on businesses related to water scarcity, flooding, drought, seasonal variation, physical water quality risks, regulatory risks, etc.

Status of Water Consumption

GRI303-1, 2, 3, 4, 306-1

Most of the water used at our cement plants is for the cooling of production equipment, exhaust gas and in-house power generators. Therefore, the water discharged from the plants is mostly cooling water, which is not polluted as defined in the Water Pollution Control Act. Our plants near the ocean use seawater to cool in-house power generation equipment. We circulate and reuse all freshwater at these facilities (except for household wastewater) in order to reduce water withdrawal and prevent water pollution by the discharged water.

The total withdrawal of freshwater for FY2020 was about 27.61 million m^3 and the total seawater withdrawal for the same year was about 147 million m^3. The seawater was used to cool in-house power generation equipment at our plants near the ocean and then released back into the sea after use. The amount of freshwater discharged was approximately 13.67 million m^3, meaning that about 13.93 million m^3 of freshwater was used at the plants. However, it is not used as a raw material input but for the cooling of equipment so is consequently released into the atmosphere through evaporation.

In FY2020 we withdrew 0.817 m^3 of freshwater (withdrawal per unit of production) to produce 1 tonne of cement. Moreover, there was little change in our water consumption efficiency.

Status of Water Consumed GCCA

(Unit: 1,000 m^3)

		FY2016	FY2017	FY2018	FY2019	FY2020
	Surface water	13,717	7,505	8,130	6,521	5,626
	Ground water	18,329	16,232	16,370	16,884	18,656
	Industrial water	3,037	2,983	3,095	3,251	3,325
	Other	0	0	0	0	0
Total freshwater withdrawal (I)		35,083	26,719	27,596	26,656	27,607
Total seawater withdrawal		148,836	146,097	149,056	149,776	147,372
Total withdrawal		183,918	172,816	176,652	176,432	174,979
Total freshwater discharge (O)		13,871	12,964	12,294	12,167	13,674
Total seawater discharge (O)		148,836	146,097	149,056	149,781	147,377
Total discharge		162,707	159,061	161,350	161,948	161,051
Total freshwater used (I-O)		21,212	13,755	15,302	14,489	13,933

Guidelines: "GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing Ver. 0.1"

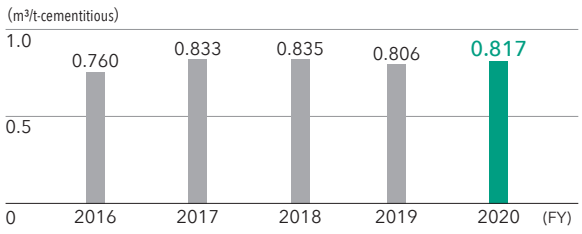
Appropriate Use of Water Resources

GRI203-1, 303-1, 2, 3, 4, 5, 306-1, 413-1

At present there are no foreseeable specific concerns regarding water resources that may be raised by local communities. We therefore remain focused on reducing the amount of water withdrawal from the perspective of improving production efficiency. Also, we will continue to contribute to promoting the appropriate use of water resources for local communities by maintaining close communication with them.

As for Taiheiyo Cement Philippines, it supplies clean water to local communities in the Philippines from a well drilled by the company.

Fresh Water Withdrawal per Unit of Production GCCA



Environmental Accounting GRI103-2, 3

Closely Related SDGs

Environmental Conservation Costs Non-consolidated GRI201-2

(Unit: million yen)

Category		Main Activities	Investment			Cost		
			FY2018	FY2019	FY2020	FY2018	FY2019	FY2020
Business area costs			1,490	2,161	3,624	15,783	10,632	10,834
Details	Pollution prevention	Water pollution prevention	673	1,537	2,128	7,932	3,996	3,927
	Global environmental conservation	Waste pretreatment facilities	779	381	1,352	7,314	6,197	6,427
	Resource recycling	Waste treatment	38	243	144	537	439	481
Upstream and downstream costs		Recycling waste and by-products as alternative raw materials and fuels for cement	1,313	3,933	3,020	4,933	4,955	5,741
Administrative costs		Implementation of the environmental management system	31	65	113	173	141	149
R&D costs		Innovations to the cement production process	256	556	539	774	812	770
Social activity costs		Plant tours	0	2	0	19	28	33
Environmental remediation costs		Emission levies	169	0	97	53	87	109
Total			3,259	6,717	7,393	21,735	16,655	17,636

(Unit: million yen)

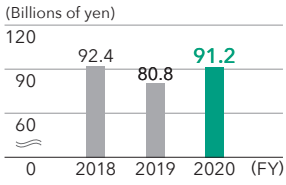
	FY2018	FY2019	FY2020
Total investment	14,526	20,020	20,975
Total R&D expenditure	1,192	1,195	1,154

External Economic Benefits Derived from the Recycled-Waste-to-Cement System

Taiheiyo Cement uses the external economic benefit (EEB) evaluation method to express, in monetary terms, its evaluation of socioeconomic benefits from environmental impact reduction due to the increase in recycling of wastes accepted from outside the company. As a type of deemed benefit, an EEB of 91.2 billion yen was identified for FY2020, representing a 13% increase on the previous year as a result of an increase in the total amount of waste and by-products used.

External Economic Benefits (FY2020) Non-consolidated GRI201-1

Impact	Inventory	Reduction (t)	Inventory Market Price (Yen/t)	Economic Benefit (Billions of Yen)
Climate change mitigation	CO_2	1,838,421	818	1.5
Depletion of energy resources	Crude oil	112,098	18,400	2.1
Depletion of mining resources	Natural resources	4,805,295	1,000	4.8
Shortage of landfills	Waste	5,517,698	15,000	82.8
Total				91.2



About Taiheiyo Cement's External Economic Benefit Evaluation

- Taiheiyo has developed a unique evaluation method to estimate the contribution to overall environmental benefit to society by utilizing waste materials from other industries.
- We use information, including data collected for the GCCA Cement CO_2 Protocol, to calculate the reduction in consumption of fossil energy and natural resources associated with the use of waste and by-products.
- EEBs are calculated by multiplying the reduced volumes of CO_2, crude oil, natural resources and waste (resulting from the utilization of waste and by-products in the cement production process compared to cement production without using waste and by-products) by market prices for each of the four items. The prices, assumed to be kept constant at year 2000 levels, are estimated as follows: CO_2: 3,000 yen/t (a hypothetical CO_2 emission tax rate); crude oil: import price; natural resources: estimated price; waste: controlled landfill cost in the Tokyo area.
- A portion of the EEB, such as the waste treatment fee, is accounted for in Taiheiyo's profit and loss statement.

Environmental Accounting for One of Our Projects

Introduction of a Highly Efficient Clinker Cooler for the No. 5 Kiln at the Oita Plant GRI201-2

A clinker cooler uses air to cool clinker, an intermediate product of cement that is burned at a high temperature of 1,450°C in a rotary kiln. The hot air generated by heat exchange during the cooling process is effectively used as combustion air for the rotary kiln.

The clinker cooler introduced for the No. 5 kiln at the Oita plant in FY2020 is a new type of cooler that only requires a small amount of air and is significantly more efficient in heat recovery than conventional units. Requiring less heat energy for clinker burning, the new cooler will further reduce CO_2 emissions and environmental impact.

Investment: Approximately 740 million yen

Reduction in CO_2 emissions: 12,313 tonnes/year

No. 5 kiln at the Oita plant

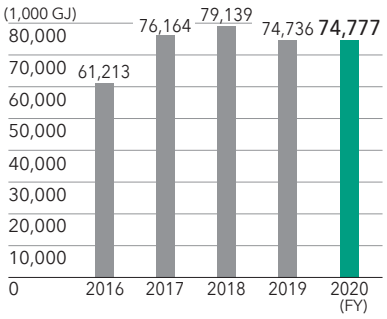
Material Balance of Business Activities

GRI102-6, 7, 45, 301-1, 2, 302-1, 305-1, 2, 7, 306-1, 2

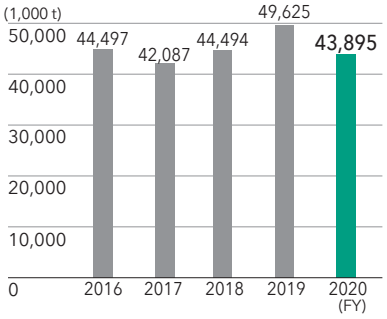
INPUT

Energy		Raw Materials			Other Materials		Water	
Coal (t)	2,192,325	Natural Resources	Limestone (t)	36,550,209	Additives, etc. (t)	8,823	Water total (1,000 m³)	167,314
Petroleum coke (t)	275,462	Natural Resources	Silica (t)	1,707,189	Explosives (t)	3,996	Tap water (1,000 m³)	1,836
Heavy oil (kl)	20,011	Natural Resources	Gypsum (t)	119,361	Refractory material (t)	14,671	Industrial water (1,000 m³)	3,316
Diesel oil (kl)	20,753	Wastes/By-products	Iron wastes (t)	226,404	Grinding media/ Steel casing (t)	3,174	River water (1,000 m³)	5,123
Kerosene, other (kl)	10,373	Wastes/By-products	By-product gypsum (t)	461,690			Ground water (1,000 m³)	11,125
Recycled fuels (t)	679,702	Wastes/By-products	Coal ash (t)	2,090,550	Lubricants/ Chemicals (kl)	6,259	Rainwater (1,000 m³)	354
Purchased electricity (MWh)	591,471	Wastes/By-products	Blast furnace slag (t)	837,738			Seawater (1,000 m³)	145,561
		Wastes/By-products	Other (t)	1,831,071	Other (t)	33,938		

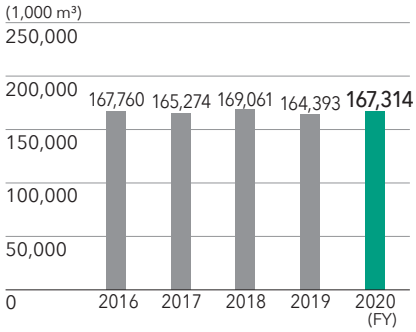
Total Energy Input

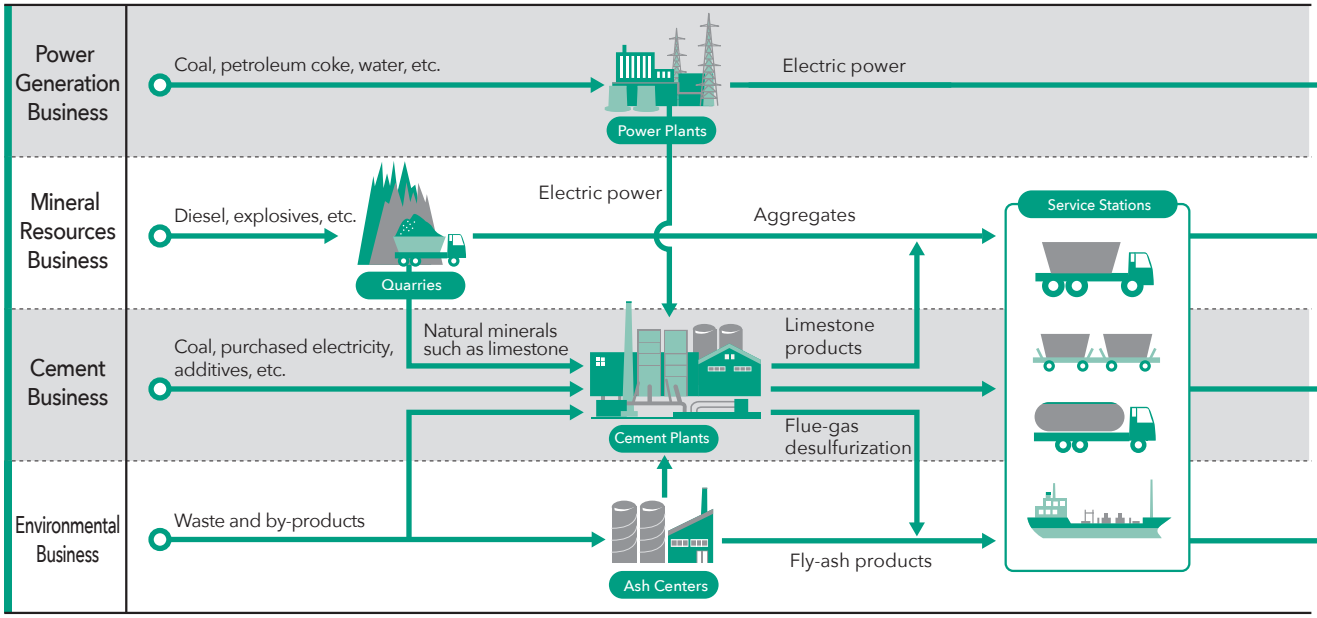


Total Material Input



Water Withdrawal





● Scope of reporting organizations

The scope of reporting organizations includes our four business segments (cement, mineral resources, environment and power generation) at our (non-consolidated) quarries and plants and the following quarries of our subsidiaries that supply material to us (9 quarries of 8 companies) and power plants of our affiliated companies (2 plants).

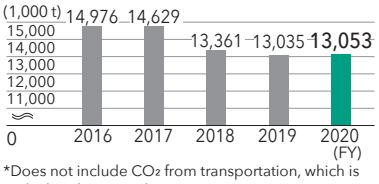
Ofunato Quarry (Iwate Prefecture)
Buko Quarry (Saitama Prefecture)
Mido Quarry (Saitama Prefecture)
Fujiwara Quarry (Mie Prefecture)
Shin-Tsukumi Quarry (Oita Prefecture)
Toumi Quarry (Niigata Prefecture)
Ryushin Mining Co., Ltd.
Buko Mining Co., Ltd.
Chichibu Mining Co., Ltd.
Ishizaki Co., Ltd.
Oita Taiheiyo Mining Corporation
Myojo Cement Co., Ltd.
Miwa Quarry (Saitama Prefecture)
Kanouyama Quarry (Gunma Prefecture)
Tosayama Quarry (Kochi Prefecture)
Tosa Power Plant (Kochi Prefecture)
Itoigawa Power Plant (Niigata Prefecture)
Chichibu Taiheiyo Cement Corporation
Chichibu Taiheiyo Cement Corporation
Tosayama Taiheiyo Mining Corporation
Tosa Power Inc.
Itoigawa Power Inc.

OUTPUT

CO_2 Emissions

CO_2* (1,000 t)	13,053
From purchased electricity (1,000 t)	205

CO_2 Emissions

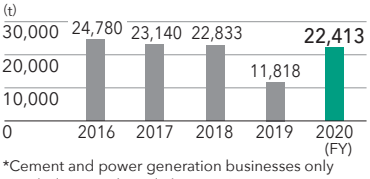


*Does not include CO_2 from transportation, which is calculated separately (see page 63)

NOx Emissions

NOx* (t)	22,413

NOx Emissions

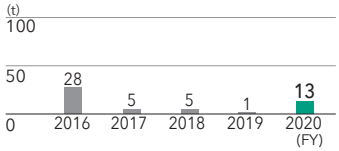


*Cement and power generation businesses only (excluding purchased electricity)

Waste Emissions

Waste externally consigned for treatment (t)	3,021
Amounts to landfill (t)	13
Valuables such as scrap metals (t)	3,807

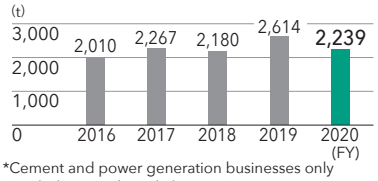
Amounts to Landfill



SOx Emissions

SOx* (t)	2,239

SOx Emissions

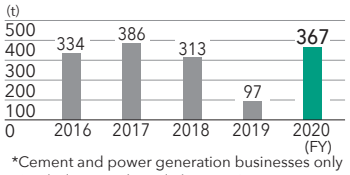


*Cement and power generation businesses only (excluding purchased electricity)

Dust Emissions

Dust* (t)	367

Dust Emissions

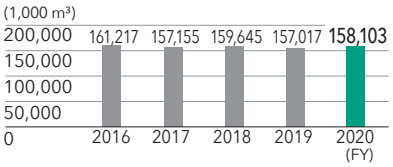


*Cement and power generation businesses only (excluding purchased electricity)

Water Discharge

Total water discharge (1,000 m³)	158,103
Seawater (1,000 m³)	145,561
Fresh water (1,000 m³)	12,274
Household waste water (1,000 m³)	267

Water Discharge



Dioxin Emissions

Dioxins* (g-TEQ/year)	0.15

*Cement and power generation businesses only (excluding purchased electricity)

	FY2018	FY2019	FY2020
Number of kilns covered by the study	12	12	12
Average exhaust gas concentration (ng-TEQ/m³N[O_2=12%])	0.005	0.005	0.004
Total emissions (g-TEQ/year)	0.17	0.23	0.15

Products by Business

Power Generation	Electric power (sales of electricity) (MWh)	1,903,870
Mineral Resources	Aggregates (t)	8,413,475
	Limestone products (t)	4,988,852
	Other (t)	336,086
Cement	Portland cement (t)	12,852,306
	Blended cement (t)	2,139,201
	Cement based soil stabilizers (t)	581,192
	Clinker (for export) (t)	1,890,704
Environment	Flue-gas desulfurization (t)	122,718
	Fly-ash products (t)	216,204

Partnership with Customers

Quality and Technologies GRI103-2, 3

Closely Related SDGs

Quality Policy

In 1998, the year of Taiheiyo Cement's inception, we established a quality policy based on our management policy. We revised the policy by incorporating a visual description of the code of conduct. Through those efforts we have been continually raising awareness of the policy across the organization. Moreover, it represents our aspiration to continue to be a company that customers trust and rely on by sharing a sense of achievement through each employee's actions and by providing high-quality products and services, leveraging our high technological capabilities and quality assurance system.

Quality Policy

Improve customer satisfaction by ensuring each employee is pursuing quality that meets the needs of users in the Pacific Rim from a global perspective and providing quality assurance.

Quality Assurance Initiatives and Quality Management System

GRI416-1

We focus on stabilizing and improving product quality while capitalizing on the production and quality control technologies we have developed over the years. Recently, we have further enhanced product quality control by capitalizing on advanced technologies to ensure improved stability such as an online analysis system for raw materials, clinker and cement, the measurement of clinker minerals by X-ray diffraction and our proprietary Taiheiyo Cement Quality Predictive System (TQPS).

All of our cement plants in Japan, including those of group companies, have obtained ISO 9001 certification, the international standard for quality management systems. Furthermore, all of our overseas cement plants in countries that adopt ISO have obtained ISO 9001 certification. To ensure product quality and improve business operations, we obtained ISO 9001 certification from the Japan Testing Center for Construction Materials. The scope of our certification encompasses the development, design and production of a range of cement, cement clinker and cement-based soil stabilizer products.

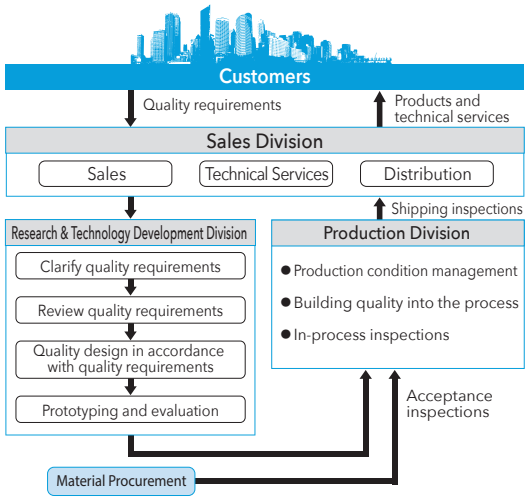
We will continue to fully apply the ISO 9001 approach in addition to our own quality management system to more deeply integrate our quality management system and business processes in an effort to strengthen our ability to continually provide ISO 9001-compliant products and deliver greater customer satisfaction.

■ Strengthening Our Relationship with Customers

We place the highest priority on achieving greater customer satisfaction. We periodically exchange information among business units to strengthen production focused on quality that meets customer expectations. From our sales and technical staff at the branches and sales offices we collect information on customer requirements for product quality and services, including delivery, and analyze the information in order to provide suggestions for improvements. To encourage overseas customers to adopt our high-quality products we have started to incorporate local needs into product quality, just as we do for domestic customers, and we are fine-tuning our products to meet the requirements of each overseas market. We respond to each quality issue raised by customers and strive to improve product quality and customer satisfaction. Also, we actively identify potential quality risks, investigate their causes and implement extensive countermeasures while enhancing cross-divisional coordination toward establishing a more secure and safer quality assurance system.

In addition, we have been expanding our quality assurance system to include the products of our group companies beyond Taiheiyo Cement products. We strive to identify and address material issues in a well-organized manner through cross-divisional activities toward strengthening the reliability of the Taiheiyo brand as well as customer satisfaction.

QMS Management System



Safe Cement and Cement Products

GRI416-1

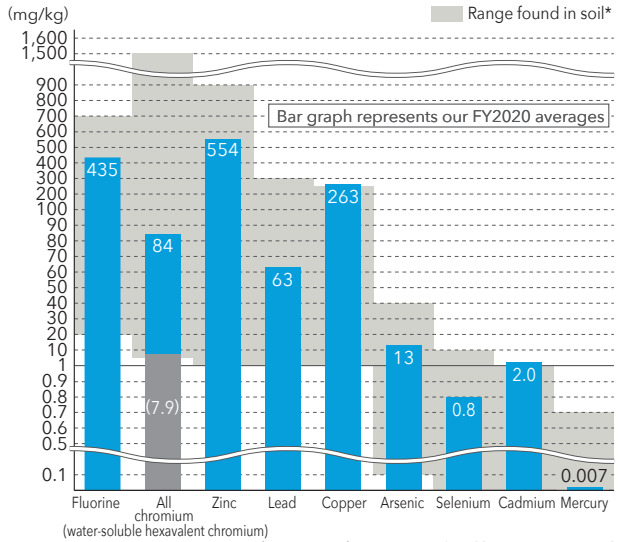
Today every product is expected to be safe and cement, as a construction material that is indispensable for developing social infrastructure, is no exception. The cement industry has long made use of industrial waste and by-products such as blast furnace slag, coal ash and by-product gypsum as substitutes for natural mineral resources. Furthermore, using technologies we developed to recycle household waste such as the AK system to recycle municipal waste and the incineration residue recycling system, we also recycle construction-related soil and waste materials into raw material and fuel for cement production. When our cement plants accept waste we prevent its dispersal and minimize the release of odor by transporting the waste in a tightly sealed panel truck and storing it in a fully enclosed facility to protect the environment of the surrounding area as well as inside the plants.

Wastes, as well as natural raw materials, contain minute quantities of heavy metals such as chromium and lead. We continually reinforce the control of minor components as the volume of waste we receive at our cement plants increases. When we receive new types of waste or waste from new sources we strictly apply rules under which we conduct three kinds of inspection related to the source of the waste, its chemical composition and the results of trial use to identify any potentially negative impact on product quality or the surrounding environment. We will then make a final determination on whether to receive the waste. These measures help us ensure product safety.

Transition of Minor Components of Ordinary Portland Cementa (Unit: mg/kg)

		FY1988	FY2016	FY2017	FY2018	FY2019	FY2020
Fluorine	Average	—	421	382	448	427	435
	Maximum	—	522	485	543	504	578
	Minimum	—	376	313	339	355	337
All chromium	Average	—	74	81	79	77	84
	Maximum	—	81	91	88	95	95
	Minimum	—	61	74	69	64	75
Water-soluble hexavalent	Average	17.4	7.4	8.3	7.4	8.6	7.9
	Maximum	32.3	10.6	9.8	9.3	11.4	9.8
	Minimum	5.3	5.7	7.1	6.0	5.4	6.6
Zinc	Average	556	529	627	530	600	554
	Maximum	1,059	659	741	659	772	677
	Minimum	137	436	496	390	449	493
Lead	Average	221	62	65	57	62	63
	Maximum	668	80	89	84	84	77
	Minimum	18	45	53	41	38	43
Copper	Average	122	216	259	223	274	263
	Maximum	233	355	355	319	415	359
	Minimum	17	133	154	162	163	181
Arsenic	Average	17	10	14	12	18	13
	Maximum	39	17	39	43	47	28
	Minimum	2	4	4	2	6	7
Selenium	Average	—	0.6	0.5>	0.7	0.5>	0.8
	Maximum	—	0.7	0.5>	1.2	0.5>	0.9
	Minimum	—	0.5>	0.5>	0.5>	0.5>	0.6
Fluorine Cadmium	Average	1.5	1.8	1.5	1.3	1.3	2.0
	Maximum	2.6	3.0	2.0	2.0	2.0	3.0
	Minimum	0.6	1.0>	1.0>	1.0>	1.0>	1.0>
Mercury	Average	—	0.005>	0.005>	0.008	0.005>	0.007
	Maximum	—	0.005>	0.005>	0.015	0.005>	0.011
	Minimum	—	0.005>	0.005>	0.005>	0.005>	0.005>

Minor Components of Ordinary Portland Cementa



*H.J.M. Bowen, Environmental Inorganic Chemistry. Translated by Teruo Asami and Mitsuo Chino. Hakuyusha, 1983.

Quality and Technologies

Ensuring Product Safety Following a Nuclear Accident

GRI416-1, 417-1

As a consequence of the nuclear accident at the Fukushima Daiichi Nuclear Power Station of Tokyo Electric Power Company in 2011, we discovered that some industrial waste used for making cement contained radioactive material. We have established a system to ensure that the radioactive concentration in cement shipped from our plants is below the safety limit* set by the Japanese government by strictly controlling the radioactive concentrations in raw materials and fuels for cement. In the interest of full disclosure we post measurements of radioactive concentrations in our products on our website every month.

*The Japanese government set the limit of 100 Bq/kg, effective May 2011, as the safety standard for radioactive concentrations in cement.

For more information about radioactive concentration in our products, please visit:

WEB https://www.taiheiyo-cement.co.jp/news/sokutei.html (Japanese only)

Information Provision Using SDS and Labeling

GRI417-1

To ensure the safety of cement users we prepare Safety Data Sheets which contain hazard identification details and make these sheets available on our website. Labels showing safety information are also attached to bags and flexible containers.

User Societies and Industry Associations

GRI417-1

We founded and manage a variety of societies for cement users and industry associations to support them in strengthening their businesses and developing technological competitiveness. The National Taiheiyo Cement Ready-mixed Concrete Society, the largest of these organizations, has established 10 Taiheiyo Cement Ready-mixed Concrete Societies from Hokkaido to Kyushu. For technical support we hold technical sessions and presentations while conducting activities under a specific theme that meets regional user requirements. We also support users in obtaining qualifications such as Authorized Concrete Engineer, Authorized Chief Concrete Engineer, and Authorized Concrete Diagnosis and Maintenance Engineer.

In addition to the Ready-mixed Concrete Society, we established other associations such as the Taiheiyo Cement Association for the Paving Block Industry and SPLITTON Association Japan to proactively deliver technical support for the mutual development of concrete companies. We will continue to support activities that benefit cement users.

Representative Activities of the Ready-mixed Concrete Society (under Specific Themes)

Region	Description
Hokkaido	Survey of technical staff and education/training at ready-mixed concrete plants
Tohoku	Compiling a booklet on representative near-miss cases at ready-mixed concrete plants
Tokyo	Workshop on concrete work technologies by general contractor's engineers
Kanto	Workshop on safety management at ready-mixed concrete plants
Hokuriku	Survey of trial mixing of concrete using fly ash from different sources
Chubu	Training workshop for young engineers at concrete plants in each prefecture
Kansai	Case study of annual policy and quality policy at ready-mixed concrete plants
Shikoku	Workshop on health and safety for operators
Chugoku	Compiling technical materials for hot-weather concrete in response to work in hot or extremely hot seasonal conditions
Kyushu	Developing an FAQ on ready-mixed concrete technologies

■ Initiatives through the Taiheiyo Cement Association for the Paving Block Industry

Concrete paving blocks are being deployed to lower vehicle speeds and reduce traffic accidents associated with excessive speed. To encourage the dissemination of our roadway blocks developed by the association, we are conducting an anecdotal evaluation of performance required for roadway pavement, their durability, and other properties at the Central Research Laboratory.

Work style reform is currently in high demand at production and construction worksites for paving blocks. To gather information on the world's advanced technologies to address this challenge, we, accompanied by association members, attended bauma2019, one of the world's largest trade shows for construction machinery held in Germany in April 2019, and visited precast concrete-related companies.

The knowledge we gained there has been shared with other member companies so that, as a means of contributing to society, we can promote a wider spread use of concrete block paving.

Paving blocks constructed for evaluation

Studying construction machinery

Partnership with Society and Employees

Respecting Human Rights and Diversity and Creating an Energetic Workplace

GRI103-2, 3

Closely Related SDGs

Basic Policy Concerning Human Rights and Labor Practices

GRI102-16

We formulated our Basic Policy Concerning Human Rights and Labor Practices in April 2015 with the acknowledgement that respecting human rights and diversity is a fundamental principle for a sustainable society, and taking into consideration the Universal Declaration of Human Rights and the labor standards of the International Labor Organization.

Basic Policy Concerning Human Rights and Labor Practices

1. Recognizing that respecting human rights is a foundational management concern, we will strive to address human rights issues.
2. We will respect diversity and will not tolerate discrimination or harassment in any form.
3. Applying accepted international principles and laws and labor practices in each country, we will respect the rights of all our workers, treat them to employment free of discrimination and strive to ensure equal employment opportunities.
4. We will strive for better working conditions and a workplace environment that ensures the health and safety of our employees.
5. We will not tolerate child labor or forced labor under any circumstances.

Respect for Human Rights

GRI102-17, 412-2

Under the Basic Policy Concerning Human Rights and Labor Practices we are committed to respecting the human rights of our employees and all those involved in our business activities. These strong commitments are reflected in our Standard of Conduct (see page 52-53), which governs the actions of each employee and is clearly expressed in statements such as "We will respect human rights and will not discriminate on the basis of national origin, gender or other factors" and "We will maintain a harassment-free workplace."

■ Educational Activities on Human Rights

We have been conducting a variety of educational activities with the belief that education is the foundation for human rights.

In FY2020 our human rights seminars for employees were focused on the Dowa discrimination issue in Japan and preventing harassment, and the sessions for the top management of our affiliates were about unconscious bias. Moreover, during Human Rights Week, we promoted human rights awareness by collecting slogans from company employees and their families as well as our partner companies.

We have been conducting a questionnaire on employee harassment every two years and plan to conduct the next in FY2021.

We also assisted group companies in conducting training courses and distributed a booklet to raise awareness of human rights.

In-house Training Related to Human Rights Issues and Call for Slogans (FY2020) Non-consolidated

In-house Training and Slogans Collected	Results
Group company top management lecture by CSR executive officers	138 participants
Human rights seminar for HQ employees by position (including 67 from our affiliates)	390 participants
Human rights training at plants and branches	741 participants
Human Rights Week slogans collected (from employees and their families)	1,507 slogans

■ Operating the Human Rights Hotline

Members of the Harassment Counseling Committee and Human Rights Committee assigned at all business sites conduct activities to raise awareness of human rights to prevent harassment, and handle any related complaints to create a positive workplace environment. In FY2020 we received 15 reports via the hotline, reviewed the details of each report based on requests from the complainants, and responded appropriately.

Harassment Hotline

Internal	The Human Rights Committee and harassment counselors have been allocated at all our business sites (56 in total).
External	Telephone and website consultations have been contracted to the Japan Institute of Workers' Evolution Harassment Hotline.

Number of Reports to the Harassment Hotline (FY2020) Non-consolidated

(Unit: report)

	Sexual harassment	Power harassment	Other	Total
Internal	1	8	0	9
External	1	4	1	6

Human Resource Development and Evaluation

GRI404-2, 3

We see our employees as the most important management resources for achieving the sustainable growth of our group. We maintain a long-term human resource development system in accordance with our Basic Human Resources Development Policy and a fair evaluation system to support the performance of all our human resources. These systems reflect diverse individual characteristics and values, regardless of nationality or gender.

Respecting Human Rights and Diversity and Creating an Energetic Workplace

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 Resource Development

We implement company-wide measures, including group training by position, and the development of global human resources. We also introduce measures aimed at developing the individual potential of each employee as a basis for energizing the organization. These efforts provide our employees with opportunities for personalized learning experiences that foster autonomy and independence, and ultimately raise their motivation to the next level. We actively encourage and create environments in which employees can freely make decisions about their careers during their work and training.

In addition, we ask all employees to submit self-appraisals once a year, including future career development aspirations, worksite preferences and family considerations, to help us improve the work environment so they can fully demonstrate their abilities and to ensure stable employment.

Characteristics of Ideal Employees

From the standpoint of human resource development we have identified the following desirable characteristics and traits for revolutionizing the company and creating a dynamic Taiheiyo Cement.

Self-confident individuals who are able to contribute to the sustainable growth of the group with a firm commitment to achieving the group mission:

1. Individuals with innovative ideas, strong leadership and the ability to take bold actions
2. Individuals who can be competent by global standards
3. Individuals who can contribute to group management

Education/Training-Related Expenses per Employee Non-consolidated

(Unit: 1,000 yen)

FY2018	FY2019	FY2020
71	74	75

WEB Our Training System

Our website https://www.taiheiyo-cement.co.jp/english/index.html

CSR → Integrated Report → Appendix

■ Human Resource Evaluation System

We have adopted a human resource evaluation system that prioritizes development over compensation. The system assists employees in deepening their understanding of their evaluation results through feedback. It also strongly emphasizes the exchange of opinions between evaluators and employees, who share their thoughts on issues such as identifying areas for future development.

We have been implementing a management (HR evaluation) training program since FY2008 to enhance the evaluation, development and management of skills of evaluators. As of the end of FY2020, 770 people had participated in training under these programs.

Respecting Diversity

GRI404-2, 405-1

■ Promoting Diversity and the Empowerment of Women

Acknowledging that promoting diversity and empowering women is the biggest and most immediate challenge for creating an innovative labor force, we have engaged in a wide range of efforts.

In July 2015 we established the Diversity Promotion Office (name at the time) to review various measures and strengthened our awareness-raising efforts. In addition to reviewing company systems and establishing new ones, the office operates the Kirakira Palette portal site*, which provides employees with information such as details of company programs and available fringe benefits.

In October 2019 we held the fifth Diversity Forum and invited an external lecturer who has long been engaged in initiatives for enabling diverse human resources to demonstrate their capabilities and realize diverse workstyles. The theme of the lecture was diversity among role models. We made the video of the forum available online via the Kirakira Palette site for all employees to watch at their convenience.

We have been participating since FY2018 in the Science, Technology, Engineering and Mathematics Challenge (Riko-challe) program led by the Gender Equality Bureau of the Cabinet Office, to empower women in the workplace. In August 2019 we organized a plant tour for experiencing work and interacting with our female engineers at the Fujiwara Plant and Quarry.

We are steadily working on the general business owner action plans pursuant to the Act of Promotion of Women's Participation and Advancement in the Workplace. In addition, we have been participating in Keidanren's Action Plan on Women's Active Participation in the Workforce and announced our voluntary action plans. We will continue our sincere efforts to increase job opportunities for women and create an environment that fosters more female managers.

We have been actively recruiting female employees to increase the ratio of female employees to over 10% by 2020 (the ratio of female employees as of March 31, 2020 was approximately 9.0%). Women who are "G Course" employees accounted for approximately 21% of the new employees joining the company in April 2020. We also hired one female foreign national and will continue to hire outstanding employees with a focus on individual capabilities, regardless of nationality.

While our target of at least 10% of female employees by 2020 expires at the end of FY2021, we will continue to promote the empowerment of women toward achieving the target in our CSR Objectives for 2025.

ポジティブ・アクションに取り組んでいます

*Kirakira Palette portal site for supporting employees to continue working while caring for family members

Establishing Kirakira Palette portal site

The Science, Technology, Engineering and Mathematics Challenge (Riko-challe) program held in August 2019

WEB The general business owner action plans pursuant to the Act of Promotion of Women's Participation and Advancement in the Workplace

Our website https://www.taiheiyo-cement.co.jp/english/index.html

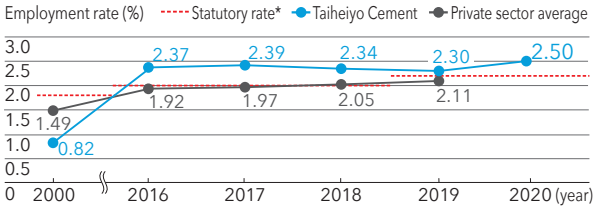
CSR → Collaborating with Society → Human Resources

■ Promoting Employment Opportunities for Persons with Disabilities

We have been working to improve the working environment for employees with disabilities, including the establishment of three special purpose subsidiaries. As a result, our employment rate of persons with disabilities has steadily improved. The rate was 2.30% as of June 2019 and the annual average employment rate for FY2020 was 2.44%, exceeding the statutory rate for the 13th consecutive year. The statutory employment rate was raised to 2.2% in April 2018. Our employment rate was 2.50% as of June 1, 2020, which also exceeded the statutory rate.

We intend to continue doing all we can to increase the number of employees with disabilities, including visiting schools, inviting school staff to our workplaces, collaborating with support organizations for persons with disabilities, and participating in recruitment events or seminars for persons with disabilities.

Trends in the Employment Rate for Persons with Disabilities (as of June 1 of Each Year) Non-consolidated



*Statutory employment rates were 1.8% until March 31, 2013, 2.0% until March 31, 2018, and 2.2% since April 1, 2018.

■ System to Rehire Employees Who Have Reached Retirement Age

We rehire employees who want to continue working after they have reached the traditional retirement age of 60 until they become eligible for their pension. After they start receiving a pension we rehire them in accordance with specific rehiring standards under a labor-management agreement until they reach 65. We will continue to make sure there is a workplace for individuals who seek re-employment by expanding opportunities in group companies.

Number of Employees Rehired after Reaching Retirement Age

Non-consolidated (Unit: person)

	2019
Rehired by the company	21
Rehired by other companies (including those that are not group companies)	21

Respecting Human Rights and Diversity and Creating an Energetic Workplace

Employee-friendly Workplaces

GRI401-3, 403-6

■ Flexible Work Arrangements

We are working to provide flexible work arrangements by adopting various employment systems that will enable our employees to enhance work-life balance.

Support for Childcare and Caregivers

We established a long-term leave system in 2017 for employees who are given no choice but to give up their careers due to unavoidable circumstances such as relocating for their spouse's job or childcare. We also operate a reemployment system for employees who leave their jobs due to child or family care. In addition to our childcare/family-care leave, we have instituted measures that support employees who do not want to take leave, such as a telecommuting, flextime, shortened work hours and starting work early or finishing late.

Responding to the Act for Measures to Support the Development of the Next Generation

Since FY2006 we have been formulating general business owner action plans based on the Act for Measures to Support the Development of the Next Generation. After having obtained the initial "Kurumin" certification in 2017, we achieved the objectives set in the general business owner action plan during the plan's fifth term, from April 2017 to March 2019. We also met multiple certification criteria such as the rate of childcare leave taken and actual overtime work. In recognition of our efforts we obtained the second "Kurumin" certification in January 2020. Also, in FY2020 we started implementing various efforts in accordance with our sixth-term general business owner action plan.

General Business Owner Action Plans

Duration of plan: April 1, 2019 to March 31, 2021 (2 years)

Objective 1	**Disseminate information about the systems for balancing work and family based on the Act on Childcare Leave, Caregiver Leave and Other Measures for the Welfare of Workers Caring for Children and Other Family Members**
Measures	Run a portal site in support of the continuation of employment which introduces internal systems systematically
Objective 2	**Implement an initiative to realize flexible work arrangements**
Measures	Implement trial telework arrangements
Objective 3	**Implement measures to promote the use of annual paid leave**
Measures	Improve the rate of annual paid leave taken by setting up days when employees are encouraged to take annual paid leave, systematically providing annual paid leave, etc.
Objective 4	**Implement a social contribution program concerning the development of the next generation**
Measures	Conduct internships, etc., that provide young people with opportunities to gain workplace experience

Major Work Systems that Allow Flexible Work Arrangements

- Telecommuting system
- Flextime system
- Discretionary labor system
- Half-day paid vacation
- "Special Reserved" leave (use of accumulated paid leave that has expired)
- Refresh System
- Human resource management system per course (region-limited employment) and others

Status of Leaves Taken and Work Hours Non-consolidated

Items	2017	2018	2019
Number of employees who took childcare leave (male employees in parentheses)	21(10)	22(8)	24(17)
Childcare leave rate for female employees	100%	100%	100%
Rate of annual paid leave taken	66.0%	67.6%	78.5%
Overtime work (monthly average)	16.4 hours	16.7 hours	17.4 hours

■ Support for Volunteer Activities

In June 2012 we formulated a volunteer activity leave scheme and have been supporting volunteer activities undertaken by employees. A total of 44 employees have taken this leave up to FY2020.

■ Efforts to Promote Employees Health

In March 2018 the company formulated the "Taiheiyo Cement Group Commitment to Health" as its policy for employee health. Under the commitment we have since undertaken initiatives based on the "Kenkokeiei*" concept to maintain and improve the mental and physical health of every employee.

*Kenkokeiei (Management of Health on Company and Employee) is a trademark of the NPO Health Management Study Group

Taiheiyo Cement Group Commitment to Health

The Taiheiyo Cement Group regards its employees as key management resources ("human assets") and intends to be a corporate group in which every employee can enthusiastically work while maintaining their mental and physical health.

Mental Healthcare

We provide mental health checkups for all our employees (consultation rate: 95.3% in FY2020). Mental healthcare is a key focus in our efforts to promote employee health. We also conduct workshops focused on preventing mental health problems. In addition, we offer free counseling services on mental health to employees and their families under a contract with the company's healthcare trust for this purpose.

Initiative for Improving Employees Health

We conduct annual health examinations for all employees in accordance with the Industrial Safety and Health Act. As in FY2018 and 2019 the attendance rate in FY2020 was 100%. In the event that any doubt is raised over a diagnosis, we help the employee to undergo an extensive examination and provide lifestyle improvement training.

Moreover, as part of the initiative we hold nutrition seminars at each business site, provide information through an in-house newsletter and distribute a pamphlet for raising health awareness.

Employee Awareness Survey

Toward increasing employee job satisfaction we have conducted an employee survey every two years from FY2014 to FY2018. In FY2021 we plan to conduct the survey after reviewing its content.

Employee Status

GRI102-7, 8, 401-1

Employee Status (as of the End of FY2020)

(Unit: person)

		Male	Female	Total
Non-consolidated	Permanent employees	1,606	192	1,798
	Temporary employees	52	6	58
Consolidated	Permanent employees	11,507	1,612	13,119
	Temporary employees	782	260	1,042

Note: The number of temporary employees refers to the annual average number of temporary employees.

Average Length of Employment for Employees (Years) (as of the End of Each Fiscal Year) Non-consolidated

(Unit: year)

	FY2018	FY2019	FY2020
Male	20.5	20.4	20.0
Female	14.5	13.1	12.3

Note: A declining trend in the average years of employment is primarily due to an increase in the number of new graduate employees rather than an increase in turnover rate.

Number of Employees in Management Positions (as of the End of Each Fiscal Year) Non-consolidated

(Unit: person)

	FY2018	FY2019	FY2020
Male	767	767	760
Female	2	3	5

Number of New Graduate Employees Non-consolidated

(Unit: person)

	FY2018	FY2019	FY2020
Male	70	68	91
Female	24	24	18

Number of Newly Hired Mid-career Employees Non-consolidated

(Unit: person)

	FY2018	FY2019	FY2020
Male	1	6	9
Female	0	7	0

Sound Labor-management Relations

GRI102-41, 403-4

All employees who have entered into a labor agreement with the company are members of a union. We occasionally hold labor-management consultation and briefing sessions that provide opportunities for labor and management to exchange opinions and negotiate issues on the basis of mutual trust and understanding. In FY2020, 38 of these sessions were held encompassing labor contract negotiations as well as explanations of corporate performance, revisions to wages and bonuses, and amended systems and rules. Through the sessions we intend to improve communication between labor and management. In addition, four specialized committees set up as advisory bodies for labor-management consultation provide opportunities for active negotiation and exchanging views between labor and management.

Activities of Specialized Committees

Committee	Activities
Committee on personnel and treatment of employees	Review the entire personnel system and the treatment of employees
Committee on employment and employment formats	Examine the operation of personnel/labor management systems against the background of diversifying employment and employment status
Committee on work hours	Examine problems concerning work hours and work hour management, and the response to laws related to work hours
Committee on the promotion of diversity	Examine the measures necessary to promote diversity in the workplace

■ Direct Communication between Executive Officers and Employees

As part of our efforts to enhance communication across the company we have been holding talk sessions with the executive officers, providing both executive officers and employees with a valuable opportunity to interact directly. In FY2020 these sessions were held at our 18 business sites and attended by 1,168 people.

Partnership with Suppliers

Supply Chain Management

Closely Related SDGs

Our Business Partners

GRI102-9

We produce and use cement and concrete in our major business activities. Much of its main raw ingredient, limestone, is mined and supplied by our group companies, which also manage the quarries. Coal, the primary fossil fuel thermal energy is supplied by companies outside the group. The wastes and by-products that we recycle in our cement production process come from many different industries and a variety of locations.

A significant part of our production process is automated. The construction and maintenance of our production equipment is outsourced to partner companies and contractors when needed.

Our cement products are mainly supplied to building materials companies. Raw materials and products are transported by both group and non-group companies (for more on their activities, see pages 4-5). Our group operates cement production sites in Japan, the U.S., China, Vietnam, the Philippines and Papua New Guinea.

By closely communicating with the governments in the regions and countries where we operate we ensure that we observe their laws and strive to meet their needs and requests.

Fundamental Policy

GRI-102-16

Our growth depends on the growth of our business partners. To build relationships of trust we work in concert with our business partners, we are sincere and fair in our dealing with them and strictly adhere to our agreements. Under the section entitled "Dealing outside the company in good faith" in our Standards of Conduct, we declare a number of commitments to ensure that "We will act in an ethical manner and abide by the laws and regulations of those countries in which we operate," a statement in our Business Principles. We manage our supply chain in compliance with these commitments:

1. We will conduct fair marketing and bidding, free from unfair practices such as collusion and cartels.
2. We will maintain decent and transparent relationships with our contractors.
3. We will select business partners in a fair and equitable manner.
4. We will not offer entertainment or gifts to customers that go beyond what is legally and socially acceptable.
5. We will produce honest, sincere and faithful advertisements, displays and presentations.
6. We will respond sincerely to customer feedback.
7. We will maintain transparent relationships with governments.
8. We will respect the cultures and customs of the places in which we operate.

We also established the Basic Policy Concerning Procurement in October 2017 to reinforce commitments 2 and 3 and ask our contractors to share them.

WEB Taiheiyo Cement Basic Policy Concerning Procurement
Our website https://www.taiheiyo-cement.co.jp/english/index.html
CSR → Collaborating with Society → Supply Chain Management

To respond to internationally reinforced controls over acts of bribery and strengthen our prevention initiatives against corruption (commitments 4 and 7), we established the Anti-Bribery Policy in January 2017, concurrent with the release of a statement by our president declaring our group's stance against bribery.

WEB The Anti-Bribery Policy
Our website https://www.taiheiyo-cement.co.jp/english/index.html
CSR → Risk Management and Compliance → Compliance Guidelines

Safety of Our Business Partners at Production Sites

GRI-403-1, 3

Many of our operations at cement production and mining sites are mechanized. However, some operations require manual work at height or in high temperatures, and ensuring safety of workers at our production sites is a prerequisite to our stable business performance. In an effort to prevent employees of contractors working at our sites from becoming involved in any accidents, we request that they go through safety training, submit a safety plan and reflect our instructive feedback in advance.

Trade Compliance Training

GRI102-16, 205-2

Relationships of trust with business partners and governments depend on the conduct of each employee, so we encourage our employees to advance fair trade through a variety of means.

■ Distributing the Standard of Conduct Casebook

Our Standard of Conduct Casebook, designed to provide exemplary models of conduct for employees, includes a section about what constitutes fair trade. It is distributed to all employees of our major group companies.

■ Distributing the Antimonopoly Law Compliance Manual

Our Antimonopoly Law Compliance Manual is distributed to all employees toward ensuring compliance.

The manual first presents an outline of the Antimonopoly Law focusing on private monopoly, unfair restraint of competition (cartels) and unfair business practices, the three pillars of this law. It further offers examples of illegal conduct in the form of "Don't" statements to help employees more thoroughly understand the law. The manual is revised when laws and regulations are amended.

Antimonopoly Law Compliance Manual

■ E-learning Programs

To ensure that all employees understand compliance across our supply chain and act accordingly, we conduct monthly tests as part of e-learning programs to provide education on the Standard of Conduct Casebook and the Antimonopoly Law Compliance Manual for all company employees, including those on loan to group companies or others. The monthly tests that began in FY2019 always contain one question concerning anti-bribery.

Looking ahead, we will continue to provide e-learning education.

Partnership with Employees

Creating a Healthy and Safe Workplace

GRI103-2, 3

Closely Related SDGs

Taiheiyo Cement Health & Safety Policy

Our Occupational Health and Safety Policy is shown below. Under this policy, our headquarters and business sites review and implement yearly management policies on health and safety.

Taiheiyo Cement Health and Safety Policy

We are aware that the health and safety of our employees is part of the foundation of our company, and we effectively implement the following policy by devoting sufficient management resources to prevent work-related accidents and diseases in accordance with the Industrial Safety and Health Act and the Mine Safety Act.

Basic Policy

1. Promote health and safety activities through cooperation between management and labor, with the aim of eliminating work-related accidents.
2. Ensure the health and safety of our employees and those of our affiliates by complying with health and safety-related laws and regulations, the health and safety management regulations created by us, and health and safety 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 by 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 Health & Safety Committees, by applying technological progress and utilizing new knowledge and information about health and safety.
5. Ensure health and safety 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 Health & Safety Committees.

Occupational Health & Safety System

GRI403-1, 2, 3

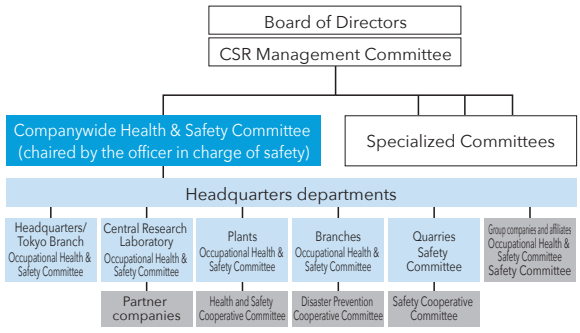
Under the Taiheiyo Cement Health & Safety Policy and health and safety management regulations, we provide for the basic aspects of the group's health and safety management and promote health and safety activities. This creates comfortable working environments while also ensuring the health and safety of our employees and those of our contractors at the group's business sites and other locations.

We established the Companywide Occupational Health & Safety Committee, chaired by the officer in charge of safety, as a Specialized Committee under the CSR Management Committee and reporting to the Board of Directors and reporting to the Board of Directors which oversees the system. The Companywide Occupational Health & Safety Committee oversees promotion activities at all business sites and also collects safety-related data from group companies as well as the company itself, and provides guidance.

All plants, quarries and branches have a Health & Safety Committee consisting of representatives from both management and labor to promote the activities at each business sites. We manage health and safety at our cement plants and quarries at home and abroad using the OSHMS*.

*Occupational Safety and Health Management System: A framework that allows organizations to reduce potential dangers at workplaces and promote comfortable worksites by voluntarily practicing continuous, uninterrupted health and safety management as prescribed in the guidelines of the Ministry of Health, Labor and Welfare in 1999.

Occupational Health & Safety System



■ Safety Operation Officer Certification System

Since FY2008 we have been using the Safety Operation Officer System which emphasizes the importance of improving leadership capabilities and therefore only certifies those who complete qualification seminars held at plants as leaders (safety operation officers) of working groups. To further improve the capabilities of these leaders we imposed a stricter requirement for the qualification seminars starting in FY2016, restricting participants to those who have completed the foreman training course stipulated in the Industrial Safety and Health Act.

■ Health and Safety Training Program

To ensure employee safety at work we conduct health and safety training in accordance with the

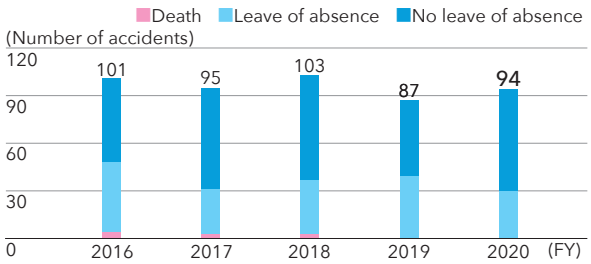
related implementation procedures. Training courses focus on newly hired employees, including those with professional experience, specialized courses, newly appointed managers, strengthening capabilities and new partner companies.

■ Report and Database of Work-related Accidents

Regardless of severity, any work-related accident is reported to the Companywide Occupational Health & Safety Committee immediately after it occurs. We promptly post the details of any accident on the group bulletin board in an effort toward avoiding recurrence.

We have maintained a work-related accident database since FY2009 to help avoid the recurrence of accidents. It contains information about accidents involving employees of the company and group companies as well as all employees of partner companies including temporary workers. It is also used to store information on identified accident causes and response reports, including measures taken in response to unsafe actions and equipment with respect to the "4 Ms" (men, machines, methods and management). Information on the database is translated into English and Chinese so that it can be understood by those at overseas business sites.

Number of Accidents Registered in the Work-related Accident Database



Status of Our Health and Safety Promotion Activities

GRI403-2, 3, 4, 5, 6, 7, 9, 10

The Companywide Occupational Health & Safety Committee set the objectives for FY2020 aiming to achieve zero fatalities, limit lost-time injuries to 30 or less and work-related accidents to 80 or less, while also setting the absence rate at a maximum of 0.69% and targeting 0.6%. Accordingly, we conducted health and safety promotion activities with a focus on: (1) basic safety activities for attaining the CSR Objectives for 2025 by (a) establishing the safety culture of the Taiheiyo Cement Group and (b) promoting ongoing safety activities at cement plants and by the industry; (2) implementing concrete actions to reduce accidents; (3) the speedy dissemination of information following an accident; (4) the horizontal rollout of countermeasures taken by the accident site; (5) prevention of occurrence or recurrence of serious work-related accidents at specific business sites and affiliates; and (6) checks on countermeasures taken in response to an accident.

As a result we attained our objective of zero fatalities in FY2020 following FY2019. We also achieved our objective of 30 or fewer lost-time injuries for the first time since the company's foundation and lost-time ratio of 0.580%. However, we fell short of meeting the work-related accident objective with 94. While we have sought to prevent serious accidents as a key activity, there was a serious accident in FY2020 involving human contact with heavy machinery. In response we are promoting thorough no entry and separation of pedestrians and vehicles to prevent contact between heavy machinery and people. The number of accidents at overseas group companies declined as a result of implementing the same safety policy and system used in Japan.

Reviewing accidents by type, we found that a large number of accidents involved being caught by and dragged into equipment, or falling, and we are now focused on preventing their recurrence. Among work-related health hazards, the number of incidents of heatstroke increased more than four-fold compared to the average for previous years with 15 cases reported, and so prevention of heatstroke has emerged as a key challenge.

Absence Rate Non-consolidated

(Unit: %)

	FY2016	FY2017	FY2018	FY2019	FY2020
Absence Rate	0.439	0.448	0.458	0.647	0.580

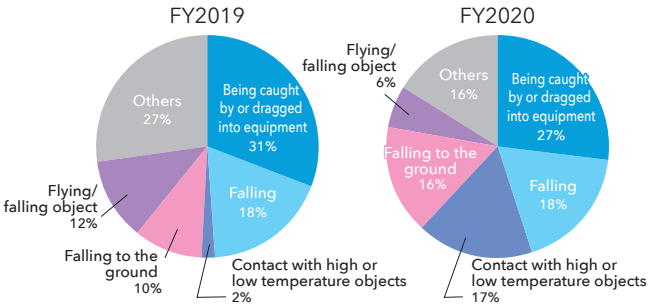
Number of Work-related Accidents

(Number of accidents)

		FY2016	FY2017	FY2018	FY2019	FY2020
By region	Japan	93	84	98	81	92
	Outside of Japan	8	11	5	6	2
By gender	Male	97	90	99	83	89
	Female	4	5	4	4	5
Work-related injuries/diseases	Injury	98	88	98	83	79
	Disease	3	7	5	4	15
Employees/ partner companies	Employees	52	42	41	45	40
	Partner companies	49	53	62	42	54

Creating a Healthy and Safe Workplace

Breakdown by Accident Type



■ Improving Equipment to Prevent the Recurrence of Accidents

By accident type, the most frequent were workers being caught by or dragged into equipment. Many of these involved workers being caught by transportation equipment while loading cement into trucks. We are therefore striving to prevent more of these serious accidents from occurring and have taken action including disseminating related information across our plants and service stations.

Measure to prevent being dragged into equipment at the Yokohama-Minami service station

■ Promoting Safety Activities at Group Companies

The Companywide Occupational Health & Safety Committee supports safety activities at group companies. We started conducting safety surveys in FY2019 and in FY2020 we conducted a survey covering the group's ten business sites in Japan and five sites overseas. We seek to raise safety standards by visiting the sites in order to hear about safety activities, conduct facility inspections and directly share information. Moreover, we are working to improve safety practices by, for example, having group companies conduct safety patrols together.

Safety patrol (Nghi Son Cement Corporation)

■ Hands-on Safety Training

To develop each employee's sense of safety we have promoted hands-on safety training during which employees experience simulated dangers that could happen in daily operations. In FY2019 we introduced hands-on safety training equipment for them to experience simulated dangers related to heights, rotating equipment, electricity and objects hanging from a crane. Furthermore, we introduced virtual reality equipment in each cement plant for quickly training young or inexperienced employees and also provide the equipment to partner and group companies upon request.

Hands-on safety training equipment (Kumagaya plant)

■ Safety Training Video

For employees who have just started working at a plant we made a DVD titled "The Promise of the Seven Safety Principles" in Japanese, English and Chinese. In an easy-to-understand manner it highlights certain dangerous conduct that could lead to serious accidents.

"The Promise of the Seven Safety Principles" video

■ Training to Prevent Heatstroke

We train employees of the company and of business partners on heatstroke prevention and treatment, including early detection, and how to respond quickly while not aggravating the condition.

Heatstroke training and prevention (Tsuruga Cement Co., Ltd.)

Partnership with Society

Communication with Communities

GRI103-2, 3, 203-1, 413-1

Closely Related SDGs

Major Activities (FY2020)

Theme	Activity	Sessions (Rounds)	Attendees (Persons)	Examples
Protection of the local environment	Community briefing	178	852	●Briefing on waste treatment ●Briefing on quarry development work ●Briefing on power generation
	Community briefing on environmental issues	64	173	●Briefing to members of a neighboring community on environmental issues
	Environmental monitoring system	93	83	●Meetings, briefings and social gatherings for environmental monitors
	Community cleanup activities	364	2,495	●Cleaning of roads and rivers surrounding business sites ●Participating in a community cleanup activity
	Community forest conservation and nature protection activities	136	198	●Participation in forest conservation activities such as planting seedlings and thinning ●Support for preserving local communities' farmlands ●Concluding a partnership agreement with the forest union ●Protecting rare regional plants and animals ●Donating money for environmental protection
Promotion of local culture and communication	Plant and quarry tours	448	6,508	●Plant and quarry tours for children, students, residents and government representatives in the community
	Opening facilities to the public	1,204	10,312	●Providing schools and local organizations with access to our grounds, gymnasiums and meeting rooms
	Sponsoring, participating in and cooperating in local events	282	45,478	●Sponsorship of a boys baseball tournament ●Participating and cooperating in a sports tournament, community festivals and events
Regional development	Provision of materials and rental of heavy machinery	31	350	●Providing and lending materials and heavy machinery to improve public spaces as-well as roads and waterways in local communities
	Support for community medical services	21	415	●Provision of free medical checkups and medication ●Agreement on use of the company's premises as a medical heliport ●Donating money to medical support
	Support for the development of local industries	26	330	●Participation and cooperation in activities to support the development of local industries ●Providing industrial water for agricultural use
	Disaster prevention activities	31	262	●Conclusion of a regional disaster assistance agreement ●Regional joint disaster prevention drills, regional fire-fighting activities ●Financial assistance for fire-fighting activities
	Others	20	401	●Support for economically distressed areas ●Developing community leaders
Education and development of human resources	Scholarships	11	517	●Scholarships for students who need financial assistance living near our business sites
	Developing engineers	31	1,254	●Opening free concrete technology schools to train concrete engineers ●Implementation of technical guidance programs
	Internships and career experience opportunities	32	10,897	●Acceptance of domestic and foreign interns ●Technical guidance for university students ●Career experience, on-site training at quarries
	Others	14	308	●Provision of materials for building schools in local communities ●Donations of funds to a public library
Support for areas affected by disaster	Disaster area support	4	—	●Participation in support groups ●Provision of company-managed housing and a gymnasium as an evacuation center (agreement with local authorities) ●Provision of a tentative storage yard for disaster waste, recycling of disaster waste as raw materials ●Donating money to affected areas

Protection of the Local Environment

■ Participating in a Volunteer Cleanup around Mt. Hiwada in Hidaka City and Fundraising for the Hidaka City Green Fund (Saitama Plant)

Once a year, employees at the Saitama plant volunteer to conserve the environment and protect nature around Mt. Hiwada, a symbol of Hidaka City. The employees, particularly younger workers, remove weeds, rake up fallen leaves and cut down dead trees. The activity offers employees the opportunity to contribute to passing on the rich natural wealth of Mt. Hiwada to coming generations and deepen communication with local residents.

The plant also cooperates in fundraising for the Green Fund, created to conserve the natural environment by maintaining green spaces in Hidaka City and promoting greening. The plant has participated in the activity since 1993 and received a letter of appreciation from the Hidaka City government. We will continue to participate in ways that help to maintain an attractive Hidaka City.

Employees participating in the volunteer work

■ Receiving the 2019 Iwate Governor's Award for Environmental Conservation Activity to Mitigate Global Warming (Ofunato Plant)

This award recognizes organizations and individuals for their outstanding efforts to prevent global warming and for the technological development and commercialization of products for reducing greenhouse gas emissions.

The plant raises employee awareness during a meeting on energy saving and energy saving proposal promotion month. It also focuses on decreasing electricity intensity by introducing highly efficient equipment, switching to LED light bulbs on chimneys and suspending the operation of unnecessary equipment. The plant, along with erex Co.,Ltd., jointly established a new company that is engaged in Japan's largest-scale biomass power generation business with a biomass plant that began operating in January 2020. For these reasons, the Iwate Prefectural government recognized the plant's initiatives toward limiting global warming.

Iwate Prefecture Environmental Conservation Activity award ceremony

Communication with Communities

Promotion of Local Culture and Communication

■ Holding a Local Specialties Sales Event (Tohoku Branch)

The company holds what it calls "Marche," an event for selling specialty products from regions in which it maintains close connections. We held Tohoku Restoration Support Marche for specialties of Iwate Prefecture in November 2018 and sales events for specialties of Fukushima Prefecture in March 2019 and Miyagi Prefecture in October 2019.

Prior to the events the company signed a comprehensive partnership agreement with the Miyagi Prefectural government in June 2019. Miyagi Prefecture is the first place where we do not operate a cement plant to sign a comprehensive partnership agreement with us. Visitors have told us that they were impressed by the attractiveness of Miyagi Prefecture, such as its specialty items and sightseeing spots. Through these activities we will continue to deepen communication with the region.

Sales event for specialty items of Miyagi Prefecture (head office)

■ Opening Our Facilities to the Community at DuPont Quarry (CalPortland Company, U.S.)

Annual Open House welcoming the community to our facilities took place at the DuPont Quarry of CalPortland Company in Washington State. It was attended by more than 200 people including local residents, representatives of the state assembly and city council, as well as our employees. Salmon purchased from the Nisqually Tribe was served to participants followed by a tour of DuPont Quarry, which is expected to be expanded by 177 acres (71.6 ha). The company is implementing an initiative to increase the flow of water in Sequalitchew Creek, which runs near the expansion area, in partnership with the environmental authorities of the state and regional municipalities. We look forward to seeing the return of salmon traveling upstream, something that has not happened in recent years.

Local residents participating in the tour

Regional Development

■ Removing Snow from Town Roads with Heavy Machinery after a Heavy Storm (Buko Mining Co., Ltd.)

A joint committee of four companies involved in quarrying at Mt Buko, including Taiheiyo Cement, removes snow at the request of the Yokoze Town Office in the Nekoya district and on Town Roads No. 1 and No. 3 after heavy snowfall. Each member company uses heavy machinery they own to remove the snow in their assigned areas.

At a joint committee meeting with the Yokoze Town Office every year, as the snow season nears, we confirm snow removal areas, storage spaces for removed snow and areas where a de-icing agent is applied. The companies and government work together to contribute to traffic safety in the Nekoya district where the quarry is located.

Heavy machinery used for snow removal

■ Donating a Microbus to the Education Department of the Community (Taiheiyo Cement Philippines, Inc., Philippines)

Taiheiyo Cement Philippines, Inc. and Solid Earth Development Corporation donated a microbus to the Education Department of San Fernando, the town where the companies' plant is located. The microbus is used by teachers to commute to and from elementary schools in the town and as a means of transport for students who attend after-school activities. The donation ceremony was held on April 25, 2019 and attended by the mayor and a representative of the local education department. The mayor expressed his appreciation for the company's contribution to the town's educational development.

In addition, we have a scholarship system for university and high school students. We also donate cement to 30 elementary schools in the town. Through these activities, we contribute to improving its educational programs.

A donated bus and the teachers who use it

Education and Development of Human Resources

■ Cooperating in Producing of "Secret of Cement" in the Let's Learn with Cartoons Series (General Affairs Department)

A cartoon book titled *Secret of Cement* by Gakken Plus Co., Ltd. was published in March 2020 as part of a series of cartoon books under the name "Let's Learn with Cartoons." The goal of the series is to explain about subjects in various fields using cartoons so children can readily understand them. The series is distributed to elementary schools, public libraries and children's halls, and is used as supplementary material for classes and for other proposes. In producing the book the company and its group companies cooperated extensively, and also invited the writer to its plants and laboratories where he was provided with useful reference materials. This facilitated the publication of a book that explains the cement industry in an easy-to-understand way. We received many comments from schools that received it, such as in reference to learning the difference between cement and concrete, having technical content explained in an easy-to-understand manner using cartoons and learning new things about something we see every day.

Secret of Cement cover

■ Participating in the "Riko-challe" Program (Fujiwara Plant)

The Science, Technology, Engineering and Mathematics Challenge (Riko-challe) program is led by the Gender Equality Bureau of the Cabinet Office. Its goal is to help female students who are interested in science, technology, engineering and mathematics select their careers. We have been participating in the program since 2017 while also holding in-house events for female students to experience work.

These took place at the Oita plant in 2017 and the Central Research Laboratory in 2018. Another was held this year at the Fujiwara plant. The students were given a tour of the cement plant and limestone quarry, and then met our female engineers to ask questions and talk about club activities and career selection.


Students with female engineers

Supporting Areas Affected by Disaster

■ Recycling Disaster Waste as Raw Materials (Chugoku Branch)

The Chugoku branch provided its former premises as a temporary storage yard for disaster waste caused by the West Japan Flood in July 2018. It transported some of the soil, approximately 31,500 tonnes, generated in Kure City, Hiroshima Prefecture, during the period between June 2019 and April 2020 to the Ofunato plant, the Oita plant and the Itoigawa plant of Myojo Cement Co., Ltd. by sea, where it was recycled as raw materials.

The branch implemented this initiative in close cooperation with COCCO Co., Ltd., an industrial waste treatment operator in the affected area, and REMATEC Holdings Corporation, headquartered in Kishiwada City, Osaka Prefecture, who have extensive experience in treating disaster waste for reconstruction and other operations for the Great East Japan Earthquake.


Handling Cargo at the Ofunato Plant

■ Maintaining the Agreement for Use of Matsuzaki Company-managed Housing as an Evacuation Center for Tsukumi City Residents (Oita Plant)

The area surrounding the Matsuzaki company-managed housing of the Oita plant lies near the bank of the Aoe River, a location that can be exposed to seawater forced upstream in the event of a tsunami. An evacuation is therefore required when a significant earthquake occurs. The evacuation center, however, is over a kilometer away from the area, raising concerns that small children and the elderly may be evacuated too late.

We therefore recommended that the Tsukumi City government use the common areas on and above the 4th floor of the six-story Matsuzaki company-managed housing as a temporary evacuation center. We concluded the agreement on its use for this purpose in July 2011.

Fortunately, the housing space has not yet been needed. We will continue to offer it to local residents as an evacuation center in the event of an emergency.


Matsuzaki company-managed housing of the Oita plant

GCCA Key Performance Indicators

GRI301-2, 302-1, 3, 303-1, 305-4, 5, 7, 403-2, 9, MM2

In accordance with the GCCA Sustainability Charter, member companies of the GCCA pledge to publicly disclose their performance on the priority issues facing the cement industry using the key performance indicators (KPIs) developed by the GCCA. They also pledge to set and make efforts to achieve reduction targets for CO_2 emissions and major air pollutants. We set Group targets using the KPIs and our progress toward achieving these targets are shown in the following chart.

In addition, Group performance for CO_2 and climate protection, emissions monitoring and reporting, health and safety, and water has been subjected to an independent limited assurance review by KPMG AZSA Sustainability Co., Ltd.

CO_2 Emission Reduction Targets

Cement production-related CO_2 emissions from Taiheiyo Cement and group companies

Reduce specific net CO_2 emissions per tonne of cementitious product by 10% or more from FY2001 levels by FY2026. (CSR Objectives for 2025)

Reduction Target for Main Air Pollutants

Emissions of NOx, SOx and dust from the main stacks of kilns at the cement production sites of Taiheiyo Cement and group companies

Limit NOx, SOx and dust levels per tonne of clinker (g/t-clinker) to the target levels achieved in FY2011

■ Key Performance Indicators of the GCCA for FY2020*1

CO_2 and Climate Protection (CO_2 emissions, energy consumption)		FY2018	FY2019	FY2020
Number of facilities using GCCA "The Cement CO_2 and Energy Protocol" guidelines for emissions inventory		18	18	18
Percentage of facilities using GCCA "The Cement CO_2 and Energy Protocol" guidelines for emissions inventory (%)		100	100	100
Total CO_2 emissions (million tonnes/year)	Scope 1*2	24.6	24.8	25.0
	Gross*3	23.3	23.5	23.7
	Net*4	22.4	22.6	22.8
CO_2 emissions per tonne of cementitious product*5 (kg-CO_2/t-cementitious)	Specific gross CO_2 emissions	703	696	701
	Specific net CO_2 emissions	679	671	675
Emissions from electricity purchased (million tonnes/year) (Scope 2)		0.985	0.963	0.896
Specific heat consumption of clinker production (MJ/t-clinker)		3,303	3,268	3,298
Alternative fuel rate (% of thermal energy consumption) of kiln		11.6	12.0	12.3
Biomass fuel rate (% of thermal energy consumption) of kiln		1.8	1.8	1.8
Clinker/cement ratio (%)		82.9	82.8	82.8

Alternative Raw Materials Use	FY2018	FY2019	FY2020
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)	15.5	16.0	15.5

Health and Safety	FY2018	FY2019	FY2020
Fatalities			
Number of fatalities for directly employed	1	0	0
Fatality rate per 10,000 for directly employed	2.63	0	0
Number of fatalities for indirectly employed (contractors and subcontractors)	0	1	1
Number of fatalities involving third parties (not employed)	0	0	0
Lost-time injuries			
Number of lost-time injuries for directly employed	7	8	9
Injury frequency rate of directly employed employees (per 1,000,000 working hours)	0.87	1.01	1.16
Number of lost time injuries for indirectly employed (contractors and subcontractors)	6	8	7

Emission Monitoring and Reporting		FY2018	FY2019	FY2020
Percentage of clinker produced by kilns covered by a monitoring system, either continuous or discontinuous for main and other pollutants		100	100	100
Percentage of clinker produced by kilns which have installed continuous measurements for the main pollutants	NOx	100	100	100
	SOx	84.7	84.2	84.0
	Dust	100	100	100
Total emissions (tonnes/year)	NOx	33,048	33,183	34,565
	SOx	2,214	1,881	1,778
	Dust	841	768	839
Specific emissions (g/t-clinker)	NOx	1,197	1,187	1,227
	SOx	80	67	63
	Dust	30	27	30

Local Impacts	FY2018	FY2019	FY2020
Percentage of sites with community engagement plans in place	100	100	100
Percentage of active sites with quarry rehabilitation plans in place	100	100	100
Number of active sites where biodiversity issues are addressed	3	3	3

Water		FY2018	FY2019	FY2020
Amount of withdrawal (1,000 m^3)	Fresh water	27,596	26,656	27,607
	Seawater	149,056	149,776	147,372
Amount of discharge (1,000 m^3)	Fresh water	12,294	12,167	13,674
	Seawater	149,056	149,781	147,377

*1Accounting and reporting of KPIs for FY2020 is in accordance with "GCCA Sustainability Guidelines for the monitoring and reporting of CO_2 emissions from cement manufacturing Ver. 0.1," "GGCA Sustainability Guidelines for the monitoring and reporting of safety in cement manufacturing Ver. 0.1," "GCCA Sustainability Guidelines for the monitoring and reporting of emissions from cement manufacturing Ver. 0.1," and " GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing Ver. 0.1." In addition, 100% of data for subsidiaries and partner companies (regardless of percentage of ownership) subject to aggregation is counted.
*2 CO_2 emissions that do not include the disclosure items mandated by the GCCA but derive from raw materials and fuels in the cement manufacturing process, including CO_2 emissions generated from in-house power generation, and fall under Scope 1.
*3 CO_2 emissions deriving from raw materials and fuels, excluding CO_2 emissions generated from in-house power generation, in the cement manufacturing process.
*4 CO_2 emissions deriving from raw materials and fuels, excluding CO_2 emissions generated from alternative fuels and in-house power generation, in the cement manufacturing process.
*5 Total clinker produced plus mineral components processed at the plants.

KPMG

Independent Assurance Report

To the President and Representative Director of Taiheiyo Cement Corporation

We were engaged by Taiheiyo Cement Corporation (the "Company") to undertake a limited assurance engagement of the Global Cement and Concrete Association (the "GCCA") Key Performance Indicators (the "KPIs") under the following areas included in its TAIHEIYO CEMENT REPORT 2020 (English version) (the "Report") for the fiscal year ended March 31, 2020.

- CO_2 and climate protection [1]
- Health and safety [2]
- Emission monitoring and reporting [1]
- Water [1]

1 Periodic accounting is based on the fiscal year 2019 for domestic plants and the calendar year 2019 for overseas plants.
2 Periodic accounting is based on the calendar year 2019 for domestic and overseas plants.

The Company's Responsibility

The Company is responsible for the preparation of the KPIs in accordance with the following standards (the "Criteria") issued by the GCCA:

- GCCA Sustainability Guidelines for the monitoring and reporting of CO_2 emissions from cement manufacturing Ver. 0.1
- GCCA Sustainability Guidelines for the monitoring and reporting of safety in cement manufacturing Ver. 0.1
- GCCA Sustainability Guidelines for the monitoring and reporting of emissions from cement manufacturing Ver. 0.1
- GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing Ver. 0.1

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the KPIs based on the procedures we have performed. We conducted our engagement in accordance with the 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' and the 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company's responsible personnel to obtain an understanding of its policy for preparing the Report.
- Inquiring about the design of the systems and methods used to collect and process the KPIs.
- Performing analytical procedures on the KPIs.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the KPIs in conformity with the Criteria, and recalculating the KPIs.
- Visiting one of the following four plants[*1] and making inquiries and reviewing materials including documented evidence as alternative procedures to site visits to three of the four plants[*2], out of a total of 18 plants of the Taiheiyo Cement Group, selected on the basis of a risk analysis. (CO_2 emissions covered by these four plants correspond to 35% [3] of the combined total of the Group's CO_2 emissions.)

  3 Based on the amount of absolute gross CO_2 for the fiscal year 2019 for domestic plants and the calendar year 2019 for overseas plants.

  Overseas plants
  - Nghi Son Cement Corporation [*2]

  Domestic plants
  - Taiheiyo Cement Corporation: Oita Plant [*2]
  - DC Co., Ltd. [*1]
  - Myojyo Cement Co., Ltd. [*2]

- Evaluating the overall presentation of the KPIs.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the KPIs in the Report are not prepared, in all material respects, in accordance with the Criteria.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
November 25, 2020

Primary Consolidated Financial Data (Ten-Year)

Fiscal year	FY2011 (April 1, 2010 through March 31, 2011)	FY2012 (April 1, 2011 through March 31, 2012)	FY2013 (April 1, 2012 through March 31, 2013)	FY2014 (April 1, 2013 through March 31, 2014)
Statement of Income (millions of yen)				
Net sales	726,475	727,849	747,616	840,288
Operating income	16,433	29,185	40,659	70,434
Ordinary income	7,412	18,496	32,667	69,590
Profit attributable to owners of parent	4,450	7,845	11,329	35,223
Financial Position (millions of yen)				
Net assets	166,819	196,144	219,826	273,312
Total assets	998,741	982,231	982,473	1,015,564
Interest-bearing debt	566,171	510,184	473,959	435,118
Per share information* (yen)				
Equity per share	1,492.8	1,380.9	1,558.5	1,955.7
Earnings per share	47.3	71.6	92.2	286.7
Cash Flows (millions of yen)				
Cash flows from operating activities	36,995	36,624	61,505	88,558
Cash flows from investing activities	14,177	(17,252)	(16,441)	(27,926)
Cash flows from financing activities	(100,480)	(19,227)	(51,792)	(62,269)
Cash and cash equivalents at year-end	61,265	59,785	54,408	55,604
Financial Indicator (%)				
Operating Income on Net Sales	2.3	4.0	5.4	8.4
Return on assets (ROA) (ordinary income)	0.7	1.9	3.3	7.0
Return on Equity (ROE)	3.0	5.1	6.3	16.3
Equity ratio	14.1	17.3	19.5	23.7
Other (millions of yen)				
Capital Expenditure	32,429	35,785	32,524	39,094
Depreciation	43,097	41,624	39,422	40,553
R&D expense	4,022	3,684	3,846	4,052

*The Company, effective October 1, 2017, conducted a reverse stock split for its common stock at a ratio of one for 10. Per share information are calculated assuming the share consolidation took place at the year to March 2011.

10 Medium-Term Management Plan → Business Restructuring

Business Restructuring in Light of the Withdrawal of Quantitative Targets Listed in the 10 Medium-Term Management Plan

The Company faced a harsh business environment due a sharp decline in domestic cement demand which was far below expectations. Therefore, we decided to withdraw the quantitative target for the final year of the 10 Medium-Term Management Plan (which ends in FY2011) and to implement business structural reforms.

Main business reform measures and profit improvement

- Review and restructuring of the domestic production structure
- Review of organizational personnel structure
- Review of domestic cement sales structure and streamlining of logistics

Profit improvement: 16 billion yen/year

14 Medium-Term Management Plan (FY2013-FY2015)

Business Strategies

Accomplishment of social mission
(Making maximum contributions to projects related to recovery from the Great East Japan Earthquake)

Pursuit of main businesses
(Establishing sustainability in the domestic cement business and fulfilling responsibilities as part of a social-infrastructure industry)

Expansion of growth field
(Promotion of the materials business / Further advancement of international business development)

Achievement in the final year of the plan

- Operating Income on Net Sales: 7.8%
- ROA (ordinary income): 6.6%
- Net debt/equity ratio (DER) : 1.1 times

	FY2015 (April 1, 2014 through March 31, 2015)	FY2016 (April 1, 2015 through March 31, 2016)	FY2017 (April 1, 2016 through March 31, 2017)	FY2018 (April 1, 2017 through March 31, 2018)	FY2019 (April 1, 2018 through March 31, 2019)	FY2020 (April 1, 2019 through March 31, 2020)
	842,848	835,359	798,588	871,113	916,071	884,350
	65,406	60,433	63,235	65,129	66,012	61,008
	67,890	60,225	59,802	64,366	64,306	60,541
	44,114	36,404	47,597	38,525	43,452	39,151
	347,490	357,073	400,034	432,326	450,645	473,241
	1,040,602	1,014,075	1,015,415	1,020,111	1,034,428	1,032,923
	399,138	394,497	340,930	288,606	279,615	266,115
	2,463.1	2,591.1	2,930.2	3,193.7	3,388.4	3,567.6
	359.1	296.3	383.9	311.4	351.7	319.9
	77,000	75,627	94,433	107,683	97,283	90,902
	(31,377)	(71,099)	(10,394)	(48,460)	(58,025)	(65,534)
	(52,713)	(4,027)	(81,855)	(65,818)	(33,753)	(29,436)
	50,645	50,072	51,974	44,976	50,084	45,748
	7.8	7.2	7.9	7.5	7.2	6.9
	6.6	5.9	5.9	6.3	6.3	5.9
	16.3	11.7	14.0	10.2	10.7	9.2
	29.1	31.4	35.6	38.7	40.1	42.3
	42,160	44,076	54,384	58,087	67,796	77,677
	42,401	43,957	44,459	44,003	44,008	48,863
	4,422	4,228	4,538	4,452	4,311	4,431

17 Medium-Term Management Plan (FY2016-FY2018)

Business Strategies

Enhancement of existing businesses and formulate/implement growth strategies

Strengthening of management foundations

Support for national projects

Enhancement of research & development

Achievement in the final year of the plan

- Operating Income on Net Sales: 7.5%
- ROA (ordinary income): 6.3%
- Net debt/equity ratio (DER) : 0.6 times

20 Medium-Term Management Plan (FY2019-FY2021)

Business Strategies

Strengthen the earnings capacity of existing businesses

Formulate and implement growth strategies

Support for national projects

Target for the final year of the plan

- Operating Income on Net Sales: 9% or more
- ROA (ordinary income): 8% or more
- Net debt/equity ratio (DER) : 0.5 times or less

Consolidated Balance Sheets

(Millions of yen) (Thousands of U.S. dollars)

	FY2019 (As of March 31, 2019)	FY2020 (As of March 31, 2020)	FY2020 (As of March 31, 2020)
Assets			
Current assets			
Cash and deposits	56,561	51,641	474,519
Notes and accounts receivable - trade	180,535	159,048	1,461,435
Electronically recorded monetary claims - operating	12,998	13,507	124,114
Merchandise and finished goods	31,138	30,897	283,903
Work in process	2,268	2,310	21,228
Raw materials and supplies	43,314	45,075	414,184
Short-term loans receivable	3,421	3,289	30,225
Other	11,714	14,035	128,965
Allowance for doubtful accounts	(646)	(1,302)	(11,970)
Total current assets	341,307	318,502	2,926,606
Non-current assets			
Property, plant and equipment			
Buildings and structures	483,443	490,824	4,510,011
Accumulated depreciation	(347,790)	(351,877)	(3,233,273)
Buildings and structures, net	135,653	138,947	1,276,738
Machinery, equipment and vehicles	886,495	919,556	8,449,473
Accumulated depreciation	(751,845)	(756,611)	(6,952,236)
Machinery, equipment and vehicles, net	134,649	162,944	1,497,237
Land	157,638	164,869	1,514,930
Leased assets	51,648	53,175	488,610
Accumulated depreciation	(29,527)	(31,234)	(287,000)
Leased assets, net	22,120	21,941	201,610
Construction in progress	48,678	30,665	281,778
Other	53,171	66,706	612,943
Accumulated depreciation	(30,971)	(41,521)	(381,528)
Other, net	22,199	25,184	231,414
Total property, plant and equipment	520,939	544,553	5,003,709
Intangible assets			
Goodwill	321	179	1,650
Other	30,553	29,634	272,301
Total intangible assets	30,875	29,814	273,952
Investments and other assets			
Investment securities	83,692	82,931	762,025
Long-term loans receivable	1,754	1,880	17,275
Retirement benefit asset	17,807	11,090	101,909
Deferred tax assets	17,109	21,118	194,053
Other	28,374	29,359	269,772
Allowance for doubtful accounts	(7,432)	(6,327)	(58,137)
Total investments and other assets	141,306	140,053	1,286,897
Total non-current assets	693,120	714,420	6,564,558
Total assets	1,034,428	1,032,923	9,491,164

	(Millions of yen)		(Thousands of U.S. dollars)
	FY2019 (As of March 31, 2019)	FY2020 (As of March 31, 2020)	FY2020 (As of March 31, 2020)
Liabilities			
Current liabilities			
Notes and accounts payable - trade	96,275	83,430	766,610
Electronically recorded obligations - operating	8,716	5,330	48,976
Short-term borrowings	135,381	120,783	1,109,832
Commercial papers	4,000	12,000	110,263
Current portion of bonds	10,000	–	–
Income taxes payable	8,376	6,024	55,358
Provision for bonuses	6,046	6,158	56,584
Other provisions	220	139	1,279
Other	80,373	79,906	734,228
Total current liabilities	349,390	313,771	2,883,134
Non-current liabilities			
Bonds payable	30,000	30,000	275,659
Long-term borrowings	100,233	103,332	949,488
Deferred tax liabilities	7,630	7,491	68,838
Retirement benefit liability	24,206	24,999	229,706
Provision for retirement benefits for directors	535	521	4,791
Provision for special repairs	75	128	1,176
Other provisions	757	828	7,614
Lease obligations	17,616	17,996	165,359
Asset retirement obligations	7,619	7,341	67,462
Other	45,718	53,270	489,487
Total non-current liabilities	234,392	245,910	2,259,584
Total liabilities	583,783	559,682	5,142,719
Net assets			
Shareholders' equity			
Share capital	86,174	86,174	791,824
Capital surplus	60,408	60,233	553,466
Retained earnings	294,265	326,086	2,996,289
Treasury shares	(16,081)	(16,098)	(147,927)
Total shareholders' equity	424,767	456,395	4,193,652
Accumulated other comprehensive income			
Valuation difference on available-for-sale securities	8,688	6,723	61,784
Deferred gains or losses on hedges	(3)	(0)	(3)
Revaluation reserve for land	5,019	4,968	45,653
Foreign currency translation adjustment	(20,128)	(21,413)	(196,761)
Remeasurements of defined benefit plans	(3,632)	(9,995)	(91,844)
Total accumulated other comprehensive income	(10,057)	(19,716)	(181,171)
Non-controlling interests	35,935	36,563	335,965
Total net assets	450,645	473,241	4,348,445
Total liabilities and net assets	1,034,428	1,032,923	9,491,164

Note: U.S. dollar amounts are translated from yen, for convenience only, at the rate of ¥108.83=US$1, the approximate exchange rate prevailing on the Foreign Exchange Market on March 31, 2020.

Consolidated Statements of Income

	(Millions of yen)		(Thousands of U.S. dollars)
	FY2019 (April 1, 2018 through March 31, 2019)	FY2020 (April 1, 2019 through March 31, 2020)	FY2020 (April 1, 2019 through March 31, 2020)
Net sales	916,071	884,350	8,125,979
Cost of sales	712,660	689,321	6,333,927
Gross profit	203,411	195,029	1,792,052
Selling, general and administrative expenses			
Amortization of goodwill	490	89	826
Other	136,907	133,930	1,230,642
Total selling, general and administrative expenses	137,398	134,020	1,231,469
Operating income	66,012	61,008	560,582
Non-operating income			
Interest income	632	540	4,966
Dividend income	1,227	1,267	11,648
Rental income from real estate	247	141	1,304
Share of profit of entities accounted for using equity method	2,288	2,427	22,306
Foreign exchange gains	–	1,035	9,516
Other	3,294	2,661	24,457
Total non-operating income	7,691	8,075	74,200
Non-operating expenses			
Interest expenses	4,068	3,876	35,617
Loss on disposal of inventories	1,126	126	1,166
Other	4,202	4,538	41,704
Total non-operating expenses	9,397	8,541	78,488
Ordinary income	64,306	60,541	556,294
Extraordinary income			
Gain on disposal of non-current assets	1,149	754	6,936
Gain on sales of investment securities	532	205	1,889
Compensation income	–	2,730	25,091
Other	234	147	1,352
Total extraordinary income	1,917	3,838	35,270
Extraordinary losses			
Loss on disposal of non-current assets	4,828	5,580	51,277
Loss on sales of investment securities	133	36	330
Loss on valuation of investment securities	326	222	2,041
Impairment loss	1,101	5,451	50,093
Other	660	1,311	12,054
Total extraordinary losses	7,049	12,602	115,798
Profit before income taxes	59,174	51,777	475,766
Income taxes - current	11,760	11,223	103,127
Income taxes - deferred	1,796	(300)	(2,759)
Total income taxes	13,557	10,923	100,368
Profit	45,616	40,854	375,398
Profit attributable to non-controlling interests	2,164	1,703	15,653
Profit attributable to owners of parent	43,452	39,151	359,745

Note: U.S. dollar amounts are translated from yen, for convenience only, at the rate of ¥108.83=US$1, the approximate exchange rate prevailing on the Foreign Exchange Market on March 31, 2020.

Consolidated Statements of Comprehensive Income

	(Millions of yen)		(Thousands of U.S. dollars)
	FY2019 (April 1, 2018 through March 31, 2019)	FY2020 (April 1, 2019 through March 31, 2020)	FY2020 (April 1, 2019 through March 31, 2020)
Profit	45,616	40,854	375,398
Other comprehensive income			
Valuation difference on available-for-sale securities	(1,657)	(1,720)	(15,812)
Deferred gains or losses on hedges	(4)	3	29
Foreign currency translation adjustment	(4,733)	(1,494)	(13,736)
Remeasurements of defined benefit plans	(3,553)	(6,193)	(56,911)
Share of other comprehensive income of entities accounted for using equity method	(641)	(302)	(2,781)
Total other comprehensive income	(10,590)	(9,708)	(89,211)
Comprehensive income	35,026	31,145	286,186
Comprehensive income attributable to			
Comprehensive income attributable to owners of parent	33,746	29,542	271,457
Comprehensive income attributable to non-controlling interests	1,280	1,602	14,728

Note: U.S. dollar amounts are translated from yen, for convenience only, at the rate of ¥108.83=US$1, the approximate exchange rate prevailing on the Foreign Exchange Market on March 31, 2020.

Consolidated Statements of Changes in Net Assets

(Millions of yen)

FY2020 (April 1, 2019 through March 31, 2020)

	Shareholders' equity					Accumulated other comprehensive income							
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at beginning of period	86,174	60,408	294,265	(16,081)	424,767	8,688	(3)	5,019	(20,128)	(3,632)	(10,057)	35,935	450,645
Cumulative effects of changes in accounting policies			(48)		(48)							(57)	(106)
Restated balance	86,174	60,408	294,217	(16,081)	424,718	8,688	(3)	5,019	(20,128)	(3,632)	(10,056)	35,878	450,539
Changes in items during period													
Change in ownership interest of parent due to transactions with non-controlling interests		(220)			(220)								(220)
Dividends of surplus			(7,350)		(7,350)								(7,350)
Profit attributable to owners of parent			39,151		39,151								39,151
Purchase of treasury shares				(60)	(60)								(60)
Disposal of treasury shares		35		43	78								78
Increase by merger of consolidated subsidiary and non-consolidated subsidiary		10	68		78								78
Adjustment to retained earnings due to change in US tax rate													–
Net changes in items other than shareholders' equity						(1,964)	3	(50)	(1,284)	(6,362)	(9,659)	684	(8,974)
Total changes in items during period	–	(174)	31,868	(17)	31,676	(1,964)	3	(50)	(1,284)	(6,362)	(9,659)	684	22,702
Balance at end of period	86,174	60,233	326,086	(16,098)	456,395	6,723	(0)	4,968	(21,413)	(9,995)	(19,716)	36,563	473,241

(Thousands of U.S. dollars)

FY2020 (April 1, 2019 through March 31, 2020)

	Shareholders' equity					Accumulated other comprehensive income							
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at beginning of period	791,824	555,073	2,703,904	(147,769)	3,903,033	79,832	(32)	46,120	(184,956)	(33,382)	(92,417)	330,202	4,140,818
Cumulative effects of changes in accounting policies			(443)		(443)							(531)	(975)
Restated balance	791,824	555,073	2,703,460	(147,769)	3,902,589	79,832	(32)	46,120	(184,956)	(33,382)	(92,417)	329,671	4,139,843
Changes in items during period													
Change in ownership interest of parent due to transactions with non-controlling interests		(2,022)			(2,022)								(2,022)
Dividends of surplus			(67,545)		(67,545)								(67,545)
Profit attributable to owners of parent			359,745		359,745								359,745
Purchase of treasury shares				(557)	(557)								(557)
Disposal of treasury shares		323		399	722								722
Increase by merger of consolidated subsidiary and non-consolidated subsidiary		91	628		720								720
Adjustment to retained earnings due to change in US tax rate													–
Net changes in items other than shareholders' equity						(18,048)	28	(466)	(11,804)	(58,462)	(88,754)	6,293	(82,460)
Total changes in items during period	–	(1,607)	292,828	(158)	291,062	(18,048)	28	(466)	(11,804)	(58,462)	(88,754)	6,293	208,602
Balance at end of period	791,824	553,466	2,996,289	(147,927)	4,193,652	61,784	(3)	45,653	(196,761)	(91,844)	(181,171)	335,965	4,348,445

Note: U.S. dollar amounts are translated from yen, for convenience only, at the rate of ¥108.83=US$1, the approximate exchange rate prevailing on the Foreign Exchange Market on March 31, 2020.

(Millions of yen)

FY2019 (April 1, 2018 through March 31, 2019)

	Shareholders' equity					Accumulated other comprehensive income							
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at beginning of period	86,174	60,339	260,016	(10,947)	395,582	10,941	1	5,057	(16,201)	(111)	(313)	37,058	432,326
Cumulative effects of changes in accounting policies													
Restated balance	86,174	60,339	260,016	(10,947)	395,582	10,941	1	5,057	(16,201)	(111)	(313)	37,058	432,326
Changes in items during period													
Change in ownership interest of parent due to transactions with non-controlling interests		69			69								69
Dividends of surplus			(9,909)		(9,909)								(9,909)
Profit attributable to owners of parent			43,452		43,452								43,452
Purchase of treasury shares				(5,134)	(5,134)								(5,134)
Disposal of treasury shares		0		0	0								0
Increase by merger of consolidated subsidiary and non-consolidated subsidiary			(53)		(53)								(53)
Adjustment to retained earnings due to change in US tax rate			759		759								759
Net changes in items other than shareholders' equity						(2,252)	(4)	(37)	(3,927)	(3,521)	(9,744)	(1,122)	(10,866)
Total changes in items during period	–	69	34,249	(5,134)	29,185	(2,252)	(4)	(37)	(3,927)	(3,521)	(9,744)	(1,122)	18,318
Balance at end of period	86,174	60,408	294,265	(16,081)	424,767	8,688	(3)	5,019	(20,128)	(3,632)	(10,057)	35,935	450,645

Consolidated Statements of Cash Flows

(Millions of yen) (Thousands of U.S. dollars)

	FY2019 (April 1, 2018 through March 31, 2019)	FY2020 (April 1, 2019 through March 31, 2020)	FY2020 (April 1, 2019 through March 31, 2020)
Cash flows from operating activities			
Profit before income taxes	59,174	51,777	475,766
Depreciation	44,008	48,863	448,989
Amortization of goodwill	490	89	826
Share of loss (profit) of entities accounted for using equity method	(2,288)	(2,427)	(22,306)
Loss (gain) on valuation of investment securities	326	222	2,041
Decrease (increase) in net retirement benefit asset and liability	(1,364)	(1,172)	(10,777)
Increase (decrease) in provision for retirement benefits for directors	15	(14)	(131)
Increase (decrease) in provision for bonuses	24	109	1,006
Increase (decrease) in allowance for doubtful accounts	(185)	91	838
Increase (decrease) in other provisions	52	42	394
Interest and dividend income	(1,860)	(1,808)	(16,614)
Interest expenses	4,068	3,876	35,617
Loss (gain) on sales of investment securities	(399)	(169)	(1,558)
Loss (gain) on disposal of non-current assets	3,678	4,825	44,341
Impairment loss	1,101	5,451	50,093
Decrease (increase) in trade receivables	(2,728)	20,800	191,126
Decrease (increase) in inventories	(4,207)	(1,661)	(15,269)
Increase (decrease) in trade payables	9,577	(16,151)	(148,414)
Other, net	(1,218)	(6,674)	(61,333)
Subtotal	108,266	106,069	974,636
Interest and dividends received	2,844	2,321	21,330
Interest paid	(4,019)	(3,890)	(35,752)
Income taxes paid	(9,808)	(13,597)	(124,946)
Cash flows from operating activities	97,283	90,902	835,268
Cash flows from investing activities			
Decrease (increase) in time deposits	1,995	515	4,733
Purchase of non-current assets	(64,520)	(66,378)	(609,927)
Proceeds from sales of non-current assets	2,208	1,367	12,567
Purchase of other depreciated assets	(142)	(240)	(2,210)
Proceeds from sales of other depreciated assets	–	0	2
Purchase of investment securities	(43)	(539)	(4,960)
Proceeds from sales and redemption of investment securities	1,132	393	3,612
Proceeds from sales of shares of subsidiaries resulting in change in scope of consolidation	1,308	–	–
Loan advances	(2,639)	(3,240)	(29,779)
Collection of loans receivable	3,078	2,782	25,570
Other, net	(402)	(193)	(1,782)
Cash flows from investing activities	(58,025)	(65,534)	(602,174)
Cash flows from financing activities			
Net increase (decrease) in short-term borrowings	1,509	200	1,838
Increase (decrease) in commercial papers	4,000	8,000	73,509
Proceeds from long-term borrowings	57,127	44,663	410,394
Repayments of long-term borrowings	(75,721)	(56,077)	(515,275)
Proceeds from issuance of bonds	20,000	–	–
Redemption of bonds	(15,035)	(10,000)	(91,886)
Proceeds from sales of treasury shares	0	94	871
Purchase of treasury shares	(5,026)	(22)	(204)
Dividends paid	(9,909)	(7,350)	(67,545)
Dividends paid to non-controlling interests	(1,565)	(681)	(6,265)
Other, net	(9,133)	(8,262)	(75,918)
Cash flows from financing activities	(33,753)	(29,436)	(270,481)
Effect of exchange rate change on cash and cash equivalents	(543)	(301)	(2,766)
Net increase (decrease) in cash and cash equivalents	4,960	(4,369)	(40,154)
Cash and cash equivalents at beginning of period	44,976	50,084	460,209
Increase in cash and cash equivalents resulting from merger	147	33	307
Cash and cash equivalents at end of period	50,084	45,748	420,363

Note: U.S. dollar amounts are translated from yen, for convenience only, at the rate of ¥108.83=US$1, the approximate exchange rate prevailing on the Foreign Exchange Market on March 31, 2020.

Consolidated Segment Information

■ Information of Net Sales, Profit or Loss, Assets, Liabilities, and Other Items by Reportable Segment* are as Follows:

(Millions of yen)

FY2020 (April 1, 2019 through March 31, 2020)

	Reportable Segments					Other[*1]	Total	Adjustment[*2]	Consolidated Total[*3]
	Cement Business	Mineral Resources Business	Environmental Business	Construction Materials Business	Total				
Net sales									
Sales to outside customers	617,838	55,965	76,281	77,035	827,121	57,228	884,350	–	884,350
Inter-segment sales	10,578	24,181	8,140	4,268	47,168	25,802	72,971	(72,971)	–
Total	628,416	80,147	84,422	81,303	874,290	83,031	957,321	(72,971)	884,350
Segment income	36,526	7,179	7,707	4,537	55,951	5,327	61,279	(270)	61,008
Segment assets	639,899	103,590	25,714	77,589	846,794	221,295	1,068,089	(35,165)	1,032,923
The Others									
Depreciation[*4]	34,333	4,956	666	2,502	42,459	5,879	48,339	523	48,863
Amortization of goodwill	89	–	–	–	89	–	89	–	89
Equity in earnings of unconsolidated subsidiaries and affiliates	662	(8)	(7)	1,354	2,001	421	2,423	4	2,427
Impairment loss	4,894	58	–	–	4,952	498	5,451	–	5,451
Investment in unconsolidated subsidiaries and affiliates accounted for by the equity method	18,245	–	267	16,079	34,592	15,614	50,207	434	50,641
Increase for property, plant, equipment, and intangible assets[*4]	45,709	10,972	2,750	3,035	62,467	13,246	75,714	1,963	77,677

(Thousands of U.S. dollars)

FY2020 (April 1, 2019 through March 31, 2020)

	Reportable Segments					Other[*1]	Total	Adjustment[*2]	Consolidated Total[*3]
	Cement Business	Mineral Resources Business	Environmental Business	Construction Materials Business	Total				
Net sales									
Sales to outside customers	5,677,097	514,250	700,924	707,853	7,600,125	525,854	8,125,979	–	8,125,979
Inter-segment sales	97,201	222,198	74,799	39,219	433,418	237,088	670,507	(670,507)	–
Total	5,774,298	736,448	775,724	747,072	8,033,544	762,942	8,796,487	(670,507)	8,125,979
Segment income	335,629	65,965	70,824	41,694	514,114	48,956	563,071	(2,488)	560,582
Segment assets	5,879,810	951,852	236,285	712,941	7,780,889	2,033,401	9,814,291	(323,126)	9,491,164
The Others									
Depreciation[*4]	315,475	45,547	6,128	22,995	390,146	54,028	444,175	4,813	448,989
Amortization of goodwill	826	–	–	–	826	–	826	–	826
Equity in earnings of unconsolidated subsidiaries and affiliates	6,086	(76)	(68)	12,448	18,389	3,877	22,266	40	22,306
Impairment loss	44,973	536	–	–	45,510	4,583	50,093	–	50,093
Investment in unconsolidated subsidiaries and affiliates accounted for by the equity method	167,649	–	2,456	147,748	317,854	143,479	461,334	3,988	465,323
Increase for property, plant, equipment, and intangible assets[*4]	420,006	100,820	25,277	27,889	573,994	121,717	695,711	18,037	713,749

Note: U.S. dollar amounts are translated from yen, for convenience only, at the rate of ¥108.83=US$1, the approximate exchange rate prevailing on the Foreign Exchange Market on March 31, 2020.

(Millions of yen)

FY2019 (April 1, 2018 through March 31, 2019)

	Reportable Segments					Other	Total	Adjustment	Consolidated Total[*3]
	Cement Business	Mineral Resources Business	Environmental Business	Construction Materials Business	Total				
Net sales									
Sales to outside customers	636,385	59,401	85,081	77,940	858,808	57,263	916,071	–	916,071
Inter-segment sales	10,092	24,860	7,611	4,245	46,809	28,765	75,575	(75,575)	–
Total	646,477	84,262	92,693	82,185	905,618	86,028	991,647	(75,575)	916,071
Segment income	41,743	8,242	6,614	4,999	61,559	4,658	66,257	(244)	66,012
Segment assets	647,846	101,608	21,292	80,813	851,561	217,462	1,069,023	(34,595)	1,034,428
The Others									
Depreciation[*4]	31,023	4,279	671	2,405	38,381	5,258	43,639	368	44,008
Amortization of goodwill	490	–	–	–	490	–	490	–	490
Equity in earnings of unconsolidated subsidiaries and affiliates	508	40	11	1,481	2,042	252	2,295	(6)	2,288
Impairment loss	39	353	–	103	496	604	1,101	–	1,101
Investment in unconsolidated subsidiaries and affiliates accounted for by the equity method	17,145	–	281	15,166	32,593	15,683	48,276	437	48,714
Increase for property, plant, equipment, and intangible assets[*4]	38,557	10,246	1,852	3,626	54,282	11,899	66,182	1,614	67,796

*1 The "Other" category accounts for business segments that do not constitute reportable segments and include the real estate, engineering, data processing, financial services, transportation and warehouse, chemical products, sports, and electric power supply businesses.
*2 Adjustment for segment income signifies the eliminated amount of intersegment transactions. The adjusted amount for segment assets signifies 55,055 million yen in corporate assets not allocated to each reportable segment and the eliminated amount of intersegment transactions. Corporate assets consist mainly of Taiheiyo Cement Corporation's surplus operating funds (deposits) and assets associated with the Administration Department.
*3 Segment income has been adjusted with regard to operating income reported in the Consolidated Statements of Income.
*4 The increase in depreciation and increase for property, plant, equipment and intangible assets reported under the "Other" category include amounts associated with long-term prepaid expenses.

■ Geographic Segments

(Millions of yen)

FY2020	Japan	U.S.A.	Other	Total
Net sales	653,524	143,705	87,120	884,350
Non-current assets	388,658	110,862	45,032	544,553

*Outline of Reportable Segments

The Company's reportable segments are component units of the Company for which discrete financial information is available and for which the Board of Directors regularly conducts a review to determine the allocation of management resources and assess performance. The reportable segments have been divided into "Cement," "Mineral Resources," "Environmental" and "Construction Materials" according to the products and services handled by each business. The following are major products provided by each reportable segment.

Cement	Material Resources	Environmental	Construction Materials
Various cement products, ready-mixed concrete	Aggregates, limestone products	Waste recycling, desulfurization materials	Precast concrete products, autoclaved lightweight concrete (ALC)

Method of Calculating Net Sales, Income or Loss, Assets, Liabilities and Other Items for Each Reportable Segment

The accounting method applied to reportable segments is basically the same as the accounting method used to prepare the consolidated financial statements. Income for each reportable segment is based on operating income.
Amounts reported as intersegment sales and transfers are based on actual market value.

Company Outline (as of March 31, 2020)

Company name	TAIHEIYO CEMENT CORPORATION
Established	May 3, 1881
Capital	86,174,248,572 yen
Headquarters*	BUNKYO GARDEN GATE TOWER, 1-1-1, Koishikawa, Bunkyo-ku, Tokyo 112-8503, Japan
Number of employees	Consolidated: 13,119 Non-consolidated: 1,798 (not including employees on loan to group companies)
Net sales	Consolidated: 884.3 billion yen Non-consolidated: 314.4 billion yen

*Relocated to the address on May 11, 2020.

Stock Overview (as of March 31, 2020)

Fiscal year	April 1–March 31	
Annual stockholders meeting	June	
Common Stock	Authorized	197,730,800
	Outstanding	127,140,278 (including 4,428,528 shares of treasury stock)
	Number of stockholders	52,477
Registrar of shareholders	Sumitomo Mitsui Trust Bank, Ltd.	

Major Shareholders (as of March 31, 2020)

Stockholder	Shares Owned (in thousands)	Holding (%)*
The Master Trust Bank of Japan, Ltd. (Trust Account)	10,949	8.9
Japan Trustee Services Bank, Ltd. (Trust Account)	8,460	6.8
Japan Trustee Services Bank, Ltd. (Trust Account 9)	3,880	3.1
State Street Bank And Trust Company 505001	2,672	2.1
Japan Trustee Services Bank, Ltd. (Trust Account 5)	2,572	2.0
Mizuho Bank, Ltd.	2,234	1.8
JP Morgan Chase Bank 385151	2,105	1.7
Government of Norway	1,910	1.5
BNY GCM Client Account JPRD AC ISG (Fe-Ac)	1,807	1.4
State Street Bank West Client-Treaty 505234	1,755	1.4

*Percentage of the number of shares held to the total number of outstanding shares (excluding treasury stock)

Website Information

https://www.taiheiyo-cement.co.jp/english/index.html

■ Organization and Business Information

About Us
https://www.taiheiyo-cement.co.jp/english/company/index.html

Products and Services
https://www.taiheiyo-cement.co.jp/english/service_product/index.html

Research and Development
https://www.taiheiyo-cement.co.jp/english/rd/index.html

■ IR Information

Investor Relations
https://www.taiheiyo-cement.co.jp/english/ir/index.html

■ CSR Information

CSR
https://www.taiheiyo-cement.co.jp/english/csr/index.html

List of Trademark Registered Products of Taiheiyo Cement Corporation Appearing in this Report

Ceraclean	SILICANITE
DENITE	TQPS
Healthy bed	恋水 こいみず

Independent Assurance Report

A limited assurance on the information regarding "Results of FY2020 CSR Efforts" on page 58-59 in this report is provided by an independent third party.

SuSA

Independent Assurance Statement

September 25, 2020

Mr. Masafumi Fushihara
President and Representative Director
TAIHEIYO CEMENT CORPORATION

1. Purpose

We, Sustainability Accounting Co., Ltd., have been engaged by TAIHEIYO CEMENT CORPORATION ("the Company") to provide a limited assurance on the information regarding "Results of FY2020 CSR Efforts" on page 58-59 in the "TAIHEIYO CEMENT REPORT 2020" prepared by the Company. The purpose of this process is to express our conclusion whether the descriptive information on "Results of FY2020 CSR Efforts" has been prepared in line with the Company's relevant information. The Company's management is responsible for preparing and publishing the descriptive information on "Results of FY2020 CSR Efforts." Our responsibility is to independently carry out the limited assurance engagement and to express our assurance conclusion.

2. Procedures Performed

We conducted our assurance engagement in accordance with International Standard on Assurance Engagement 3000 (ISAE 3000) and we carried out the following assurance procedures.

- Interviewing the Company's personnel who was responsible for drafting the "Results of FY2020 CSR Efforts".
- Performing cross-checks with internal and external documents.

3. Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the descriptive information on "Results of FY2020 CSR Efforts" has not been prepared in line with the Company's relevant information.

We have no conflict of interest relationships with the Company.

Takashi Fukushima
Representative Director
Sustainability Accounting Co., Ltd.

Third-party Opinion

GRI102-44

Takeshi Mizuguchi
Professor, Faculty of Economics, Takasaki City University of Economics

COVID-19 highlighted the significance of social issues in ESG. The direct challenges companies must address are focused on countermeasures for preventing employees from contracting the disease and protecting their operations from the deteriorating economic conditions. Given the continued focus on creating a healthy and safe workplace as a CSR activity, while I trust you have taken sufficient measures to address those challenges, I believe it would have been good to cover them in the report. Also, the fact that there are some who could not afford to take action against the infectious disease shines light on the problem of economic inequality. Your company fully understands the concept of an "inclusive economy," as is shown in regard to your supply chain as partners. I encourage further development of this philosophy and communication of your commitment as a global enterprise to address economic inequality as a material social issue.

The concept of a "green recovery" has been advocated across the world to link efforts to recover from COVD-19 by establishing this type of economy. Specifically, the European Commission has started to implement aspects of the Green Deal Program it announced in December 2019, which will accelerate the shift toward a green economy.

Your company has been proactive in this regard, such as by formulating the Long-term Vision of Greenhouse Gas Emissions Reduction toward 2050 and announcing support for the recommendations of the TCFD last year. Another major step forward was making public the results of the scenario analysis based on the recommendations of the TCFD. I highly value the ambitious vision of targeting an 80% reduction in CO_2 emissions in cement production by 2050. Responding as a third party, however, I wondered why the base year is 2000, or 20 years ago. That said, what counts is the level of a reduction rather than the base year. I recommend obtaining an objective evaluation at the global level through, for instance, Science Based Targets (SBT).

The Special Feature section reported on efforts in biomass and waste heat power generation. That report made me realize your strong commitment to addressing the issue of climate change. The use of palm kernel shell (PKS) is somewhat controversial. While PKS is an effective use of waste generated by squeezing palm for oil production, you do not face the conflict of generating power from burning palm oil, which is also used as food. Moreover, importing PKS from Indonesia and Malaysia raises the other issues of whether the renewable fuel can be used in those countries and of CO_2 emissions during its transport to Japan. I recommend discussing this with an environmental NGO that has broad knowledge in the field. The use of domestically produced biomass should also be explored.

The concept of a circular economy will also play a central role in the green economy as well as zero carbon. "Recycling waste and by-products into alternative raw materials and fuels for cement" such as the Ecocement system, is a commendable initiative that contributes to both zero carbon and a circular economy. However, duly pointed out in the scenario analysis based on the TCFD, the volume of coal ash produced at coal-fired power plants will decline in the future, and so I expect you will consider alternative measures. The Materials Recovery Complex initiative, presented in the Environmental Business section, is attractive for creating a circular economy. I look forward to its early commercialization.

The explanation of the assessment of biodiversity at the limestone quarries is very clear and easy to understand. In order to improve the reliability of this assessment, I suggest having it evaluated by an international environmental NGO that specializes in the field.

Response to Third-party Opinion

Hideaki Asakura
Managing Executive Officer, Vice-Chairperson of the CSR Management Committee

I am grateful to Mr. Mizuguchi for his valuable comments on the Taiheiyo Cement Report 2020. We are honored by your strong recognition of the formulation of our Long-term Vision of Greenhouse Gas Emissions Reduction toward 2050 and published results of the scenario analysis based on the recommendations of the TCFD as an effort to contribute to the shift toward a green economy. Given the growing importance of a circular economy, we are encouraged that you highly value the vital role the cement industry plays in recycling waste and by-products into alternative raw materials and fuels for cement, and we look forward to the early realization of our original Materials Recovery Complex initiative. On the other hand, you point out that we have our CO_2 emissions reduction target evaluated at a global level and explore the use of domestically produced biomass. You also suggest that we disclose our efforts to address social issues as part of ESG in connection with the spread of COVID-19, and we will sincerely respond to these recommendations.

As for this report, we will continue improving the content so that it can be more easily read and understood by all of our stakeholders.

TAIHEIYO CEMENT

We commissioned Abeam to print Japanese questionnaires and insert them into the report.

Abeam (Tokyo) is a support type B establishment for employment continuation with the aim of social self-reliance of persons with mental illness.

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