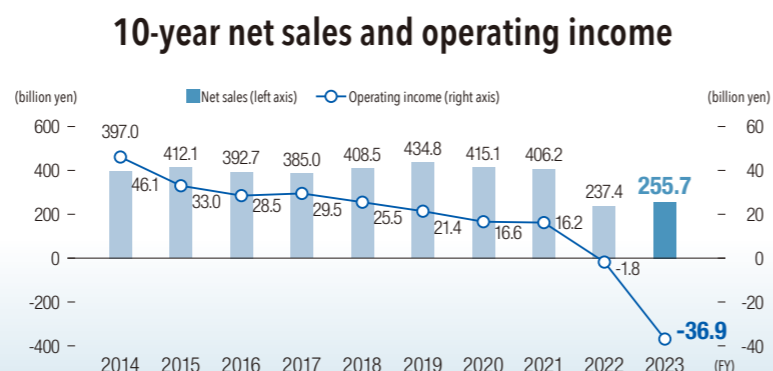


Business At a Glance



Cement Business (Japan)



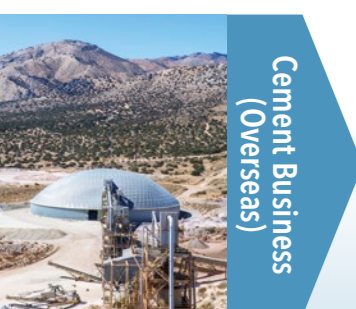
Business Overview

Based on a solid foundation for manufacturing, transportation and supply, our cement business in Japan reliably provides cement and ready-mixed concrete to users nationwide. As well as expanding our product lineup that includes special cements, blended cement and cement-based soil stabilizers, we are building a sales system that can accurately respond to changes in construction methods and the diverse needs of users, such as by deploying user meeting activities for each industry.

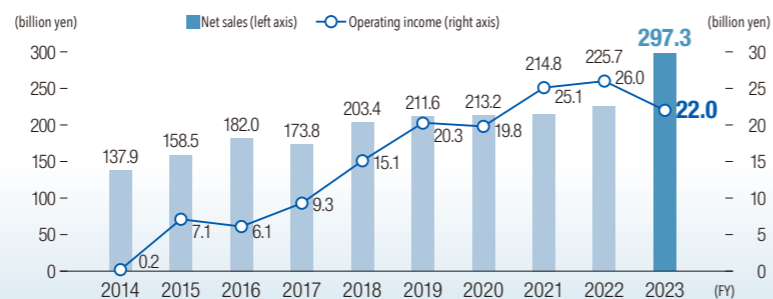
FY2023 Achievements

In response to cost increases due to soaring coal prices, we implemented a price increase of 2,000 yen per tonne for shipments from January 2022 and an additional 3,000 yen per tonne for shipments from October of the same year. Although the 2,000 yen price increase was achieved in the third quarter, the delay in the progress of implementing the price increase resulted in net sales of 255.7 billion yen (an increase of 18.2 billion yen from the previous fiscal year) and an operating loss of 36.9 billion yen (a decrease of 35.0 billion yen from the previous fiscal year).

P.44



Cement Business (Overseas)



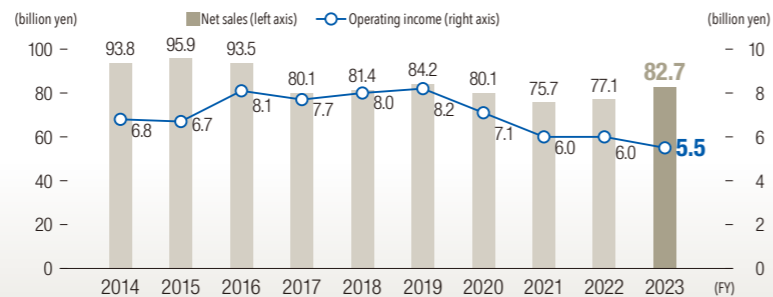
In the overseas cement business, we produce and sell cement at nine plants in the Pacific Rim, including four on the west coast of the United States, two in China, and one each in Vietnam, the Philippines, and Papua New Guinea.* In addition, we are developing a variety of other businesses, including the export of cement and clinker and trilateral trade, as well as increasing our handling of bulk materials.

In the U.S. business, although progress was made in passing on higher costs to customers, effects were felt from some technical issues at plants and other factors. A decrease in sales volume in the China business due to the effect of COVID-19, a decrease in export volume from the Vietnam business, and higher clinker import costs for the Philippine business, resulted in net sales of 297.3 billion yen (an increase of 71.5 billion yen from the previous fiscal year) and operating income of 22.0 billion yen (a decrease of 4.0 billion yen from the previous fiscal year).

P.46



Mineral Resources Business



In addition to our main businesses of the aggregates business that handles products for ready-mixed concrete and our mineral products business that handles products for steel and chemical manufacturers, the Mineral Resources Business is also engaged in developing our geo-solutions business that processes construction soil and contaminated soil, as well as the sale of new products developed by the group, such as functional hollow particles and ultra-pure silicon carbide.

The aggregates business remained strong, especially in the Kanto and Chubu regions. In addition, price increases were implemented in response to various cost increases, such as electric power and fuel costs, and although they had partial penetration they could not be fully passed on to prices, which resulted in net sales of 82.7 billion yen (an increase of 5.5 billion yen from the previous fiscal year) and operating income of 5.5 billion yen (a decrease of 0.4 billion yen from the previous fiscal year).

P.48



Environmental Business



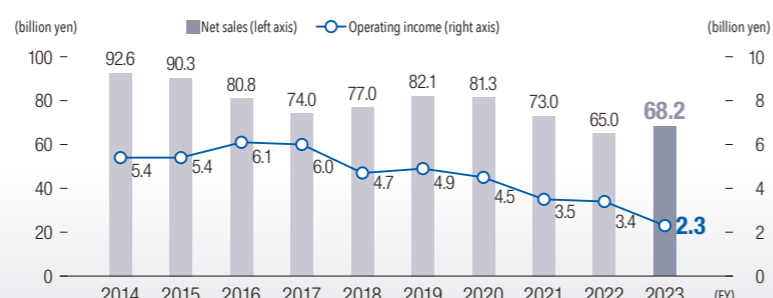
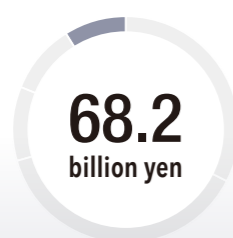
In the Environmental Business, our core business is recycling waste and by-products generated at thermal power plants, steelmakers and chemicals manufacturers, as well as recycling materials such as municipal waste incineration residues and household water and sewage sludge at the request of municipalities. In recent years we have also been developing the aquatics business via products such as water purification materials, which also contributes to the formation of a circular economy.

Sales of calcium carbonate for desulfurization, gypsum and coal remained strong. On the other hand, the biomass fuel business, which sells PKS (palm kernel shells), was affected by exchange rate fluctuations, resulting in net sales of 77.9 billion yen (an increase 5.5 billion yen from the previous fiscal year) and operating income of 5.8 billion yen (a decrease of 0.7 billion yen from the previous fiscal year).

P.50



Construction Materials Business



The Construction Materials Business consists of the construction materials business, which manufactures and sells products including premix products, concrete admixtures, ALC (autoclaved lightweight concrete) and interlocking blocks, and the construction and civil engineering business which is involved in ground improvement projects, sales of materials for shield tunnels, and repair and renovation work for concrete structures.

Although sales of building materials such as ALC remained strong, the partial failure to pass on the sharp rise in raw material prices and delays in various construction orders resulted in net sales of 68.2 billion yen (an increase of 3.1 billion yen from the previous fiscal year) and operating income of 2.3 billion yen (a decrease of 1.1 billion yen from the previous fiscal year).

P.52

* The "Accounting Standard for Revenue Recognition" (ASBJ Standard No. 29), etc. was applied from FY2022.

* Dalian Onoda Cement Co., Ltd. and Jiangnan-Onoda Cement Co., Ltd. ceased operations in December 2022 and February 2023, respectively.

Cement Business (Japan)



We aim to achieve a V-shaped recovery by generating profits through optimization of cement prices.

Naoyuki Kira

Managing Executive Officer,
Senior General Manager of
Cement Business Division



Our coastal cement tanker, Hokuyumaru



Concrete mixer truck (Harumi Onoda Remicon Co., Ltd.)

Profit projections for FY2023 and price optimization initiatives

In response to the sharp rise in coal prices, in October 2022 we implemented a second increase to cement prices, following the previous increase in January, and the increase was accepted by almost all users. Price increases for cement-based soil stabilizers also steadily penetrated the market in the same manner as those for cement. Although we expect the price of coal to be purchased this fiscal year to settle down, due to remaining inventory from the previous fiscal year's contracts in the first half of the year, as well as higher raw material prices, we expect operating income to improve by 44.2 billion yen to 7.3 billion yen. Learning from these price increases, we will consider cement price optimization in the next Medium-Term Management Plan.

Inheritance of cement business from Denka Company Limited

In April of this year, we began purchasing cement produced at Denka Co., Ltd.'s Omi Plant and selling it under the Taiheiyo Cement brand. Since the company has decided to withdraw from the cement business in FY2026, we plan to take over their business by optimizing the production and supply system within our group. As the population of Japan is declining and demand for cement is not expected to recover significantly in the future, as a company dedicated to the cement industry, we would like to consider whether there is anything we can do to help, with an eye to possible business alliances or acquisitions.

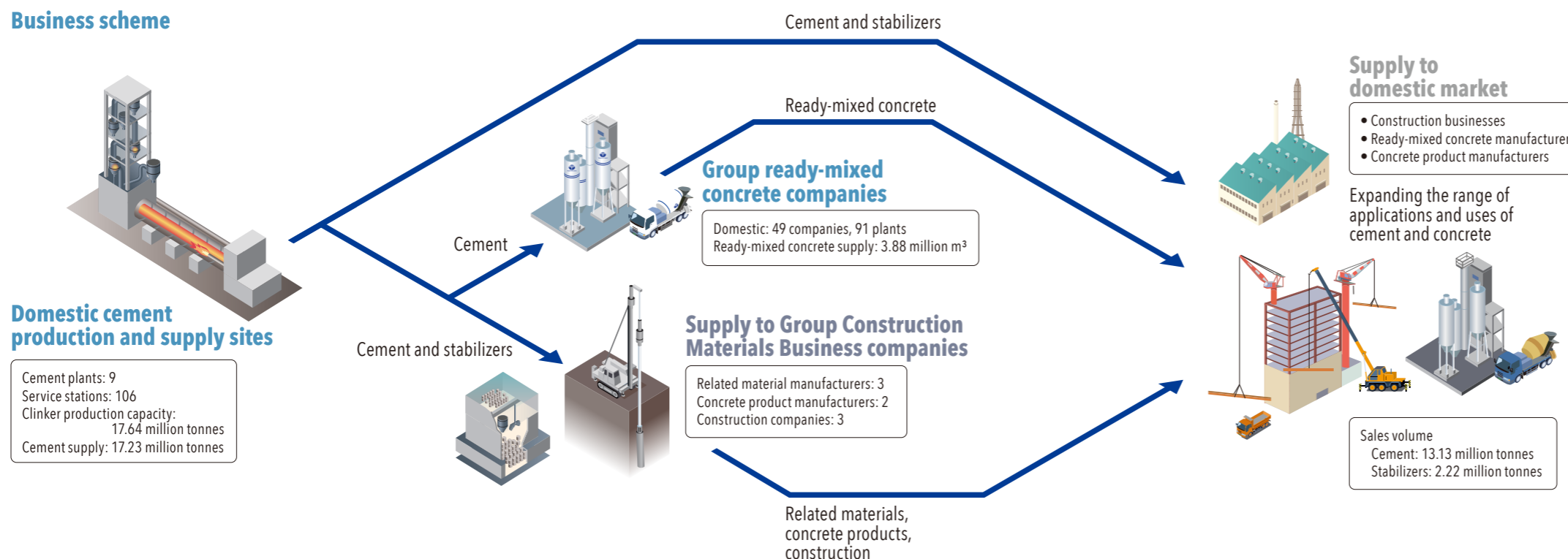
Improving logistics efficiency

In order to respond to the shortage of drivers under the revision of regulation in 2024, we have begun to develop systems using digital technology for both domestic marine and land transportation. Until now, ship and truck allocation has relied heavily on human experience, and the fact that only veterans are able to perform the work accurately has become a challenge. The development of a system for vessel and truck allocation cannot be achieved overnight and requires repeated trial and error to improve its accuracy. However, we will continue to work diligently to improve logistics efficiency, which will also lead to labor savings and energy cost reductions.

The future of the domestic cement business

Cement is an indispensable basic material that supports infrastructure. While we will continue to produce the cement needed in Japan as a dedicated manufacturer, we will also fulfill our social responsibility by accepting waste and by-products as raw materials and fuel for cement production. In order to do so the business must be profitable in order to survive, and we recognize that the future sales price policy is the most important challenge for the domestic cement business. We will also actively work to develop the human resources that support our business and to develop new applications for stabilizers that will contribute to national resilience.

Business scheme



Strengths Ability to handle, transport, and supply special products by utilizing the group's comprehensive strength

Challenges Long-term: Decrease in domestic demand
Short- to medium-term: Decrease in demand due to a drop in consumer confidence

Cement Business (Overseas)



We Will Steadily Achieve Results from Our Growth Investments in the U.S. and Southeast Asia.

Yoshifumi Taura
 Director and Senior Executive Officer,
 Senior General Manager of International Business Division



Renovation of production line (Taiheiyo Cement Philippines, Inc.)



Semen Indonesia Group visiting Taiheiyo Cement

Reconstructing the overseas business portfolio

We have withdrawn from China where we had been operating cement businesses since the second half of the 1980s, and have progressed the southward shift of our business portfolio to Southeast Asia. In addition to the capital and business alliance with Semen Indonesia Group in 2021, Taiheiyo Cement Philippines, Inc. has started construction of a new production line and plans to begin commercial operation in May 2024. Furthermore, in the U.S., CalPortland Company's acquisition of the assets of Martin Marietta Materials, Inc., including its cement plants, significantly increased its presence on the west coast of the U.S., particularly in California.

Profit forecast for FY2024

In the current fiscal year, we will steadily make good on the investments made under the 23 Medium-Term Management Plan. Sales in the U.S. will increase by \$194 million due to the effect of asset acquisitions, and sales in China will decrease by \$122 million due to the lack of sales from the current term. As a result, net sales of our overseas subsidiaries, etc. will increase by 24.7 billion yen to 322.0 billion yen, and operating income will increase by 6.7 billion yen to 28.7 billion yen. In the U.S., in addition to continued strong housing demand, we expect public investment based on the \$1.2 trillion infrastructure investment bill to be implemented in earnest in the future, which will lead to strong cement demand.

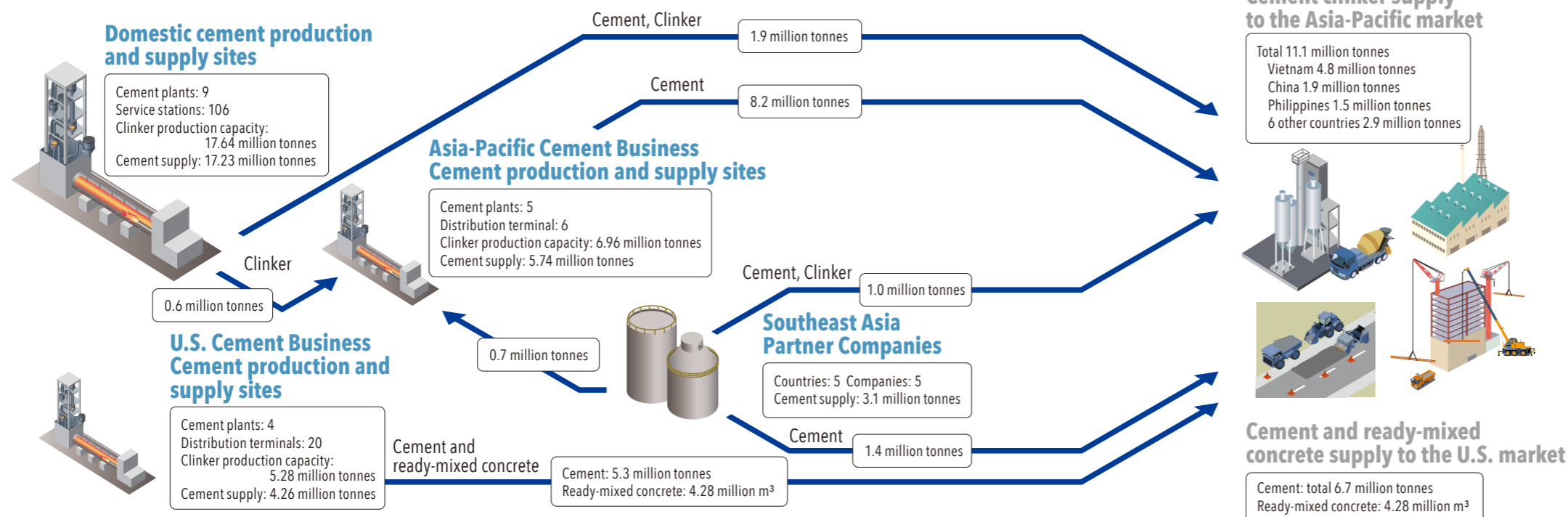
Carbon neutrality transition in overseas business

We will promote energy conservation and the use of blended cement at our overseas production sites, aimed at the steady transition to carbon neutrality. CalPortland Company has switched all of its agitator trucks at its ready-mixed concrete plants in central Los Angeles to natural gas-powered vehicles, and Nghi Son Cement Corporation in Vietnam plans to install a waste heat recovery power generation system. Regarding our initiative to shift to blended cement which can reduce CO₂ emissions from cement production, CalPortland Company's plan to expand the sale of its limestone cement and our TAIHEIYO GREEN CEMENT aimed at the Singapore market have received high acclaim. We also plan to double the percentage of blended cement exports from Japan to about 10%.

Human resource development for overseas business

As our overseas business expands, the governance of the overseas Group companies will be a challenge. In order to develop human resources with skills in auditing, business management and operation, it is essential to send employees abroad to gain experience early in their careers. At the same time, we believe that as a truly global company, it is necessary for us to develop the foreign permanent employees within the group and instill the Taiheiyo ethic in them. We will continue to diversify our workforce by actively recruiting foreign permanent employees at our headquarters.

Business scheme



Strengths Overseas business portfolio that incorporates the Pacific Rim's growth markets

Challenges Hedging the risk of a drop in demand on the U.S. west coast and expansion of the Southeast Asian business

Mineral Resources Business



We will build a solid supply chain through quarry development with a view to the next 100 years.

Kunihiro Ando Vice President and Director



Shin-Tsukumi Quarry (panoramic view)



Quarry site Greening (Buko Quarry)

Quarry development

To ensure the long-term stable supply of limestone, we will invest 100 billion yen in quarry development over 10 years, including the period of the 23 Medium-Term Management Plan. The core of the project is the development of the Yato area of the Shin-Tsukumi Quarry in Oita, which will secure 100 years' worth of limestone for the Oita Plant. Our Group currently owns 13 limestone quarries in Japan, quarrying a total of 38.2 million tonnes of limestone per year. Half of this is used for cement production and the other half is supplied as aggregates for ready-mixed concrete as well as for other industries such as steel and electric power. We will further strengthen our logistics sites and transportation systems to build a solid supply chain.

Profit forecast for FY2024

In response to soaring fuel prices, we have passed on higher production and logistics costs to our sales prices, and in FY2023 we raised prices to record highs. However, investments are needed to secure limestone resources from a long-term perspective in order to ensure a stable supply of high-grade limestone in the future. We will implement price increases this fiscal year that exceed those of the previous year, while gaining users' comprehensive understanding of these factors. We will also focus on improving profitability of the geo-solutions business, and forecast net sales of 92.0 billion yen, an increase of 9.3 billion yen from the previous fiscal year, and operating income of 7.6 billion yen, an increase of 2.1 billion yen from the previous fiscal year.

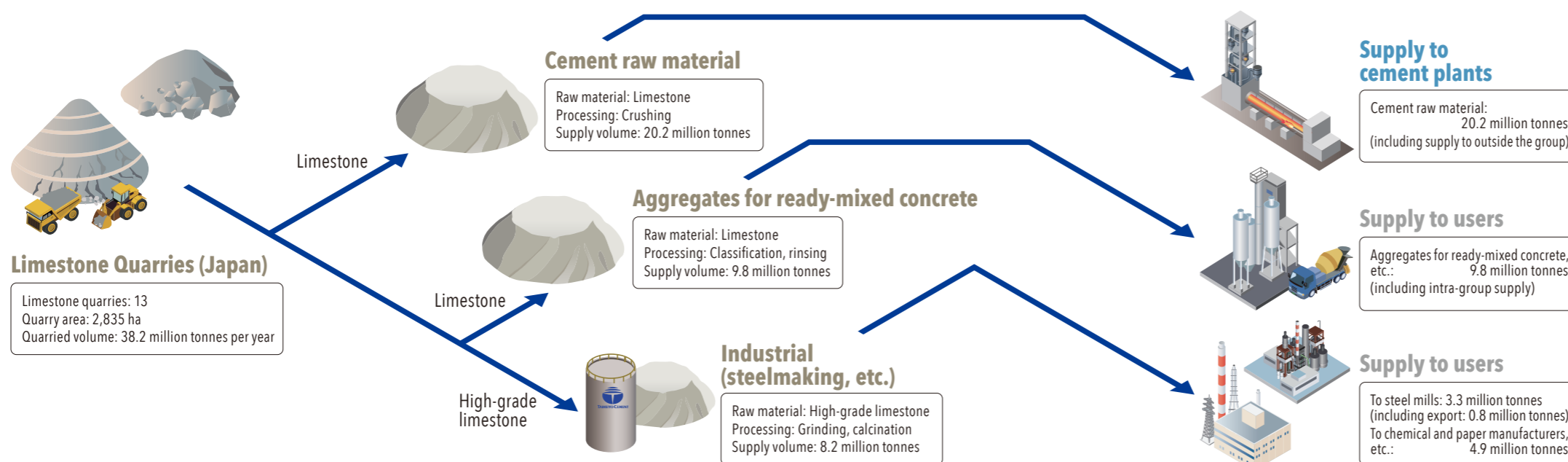
Fostering new businesses – functional materials

We are working to develop flexible products that meet user needs by fully utilizing our accumulated knowledge of minerals. Functional hollow particles "CellSpheres" are highly versatile products that can enhance the dielectric properties and heat resistance of paints and resin-molded parts due to their high level of hollowness. In addition, we have begun supplying ultra-pure silicon carbide (SiC) as a material for power semiconductors. These will require time for user evaluation, but we will develop them into core businesses in alignment with our intellectual property strategy.

Medium- to long-term strategy of mineral resources business

Limestone is said to be the only natural resource in which Japan is self-sufficient, but the development of new quarry areas is essential to ensure stable a supply over the long term. In addition, we are optimizing our supply network of limestone for cement production, aggregates for ready-mixed concrete, and other industries such as steel and electric power in accordance with the characteristics of the limestone produced from our 13 quarries in Japan. We recognize biodiversity initiatives as an important issue and joined the 30by30 Alliance for Biodiversity in July 2023. We will make further efforts toward being nature positive, including conservation of rare plants and animals, revegetation of former quarries, and conservation of water resources.

Business scheme



Strengths The 13 quarries in well-balanced locations across the country can provide a stable, long-term supply of high-quality limestone

Challenges Strengthen synergies with group companies

Environmental Business



We will expand businesses that contribute to the circular economy based on the effective use of waste and by-products.

Shinji Fukami Managing Executive Officer

Profit forecast for FY2024

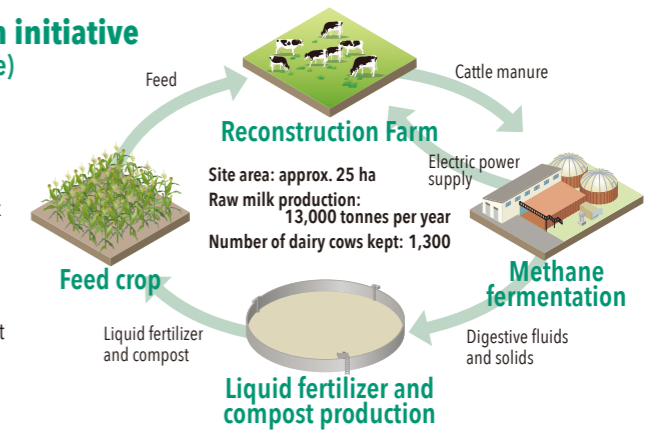
This fiscal year, in addition to properly reflecting foreign exchange fluctuations and higher transportation costs in our prices, we are focusing on increasing the volume of wastes processed as alternative fuels such as waste plastic and waste oil, in response to the soaring price of coal. The current fossil fuel substitution rate in cement production is approximately 30%, and we are studying specific measures to increase this rate to 50% by 2030. In addition, sales of gypsum and other products that are less dependent on kilns are expected to remain strong, and we forecast net sales of 81.0 billion yen, an increase of 3.1 billion yen from the previous fiscal year, and operating income of 6.9 billion yen, an increase of 1.1 billion yen from the previous fiscal year.

Maximization of environmental business using cement kilns

The cement industry's greatest feature is that it produces and supplies to society cement with stable quality without emitting dioxins or generating waste. At the same time, it uses waste and by-products as alternative raw materials and fuels in extremely efficient kilns with an energy efficiency of over 80%. In addition to various industrial wastes and by-products, our Environmental Business can also make effective use of municipal waste and incineration residue. In addition, agreements have been signed between all of our plants and local governments to facilitate waste disposal in the event of a natural disaster. In the future we will continue to be a key player in the circular economy.

Participation in the Reconstruction Farm initiative (Namie Town, Futaba District, Fukushima Prefecture)

We have decided to participate in the large-scale dairy farm (Reconstruction Farm) initiative in Namie Town, Futaba District, which is being led by the Fukushima Prefectural Dairy Cooperative Association. The Reconstruction Farm is scheduled to commence business in FY2027 with the aim of not only revitalizing the livestock and agriculture industries in Namie Town, but also establish new recycling-based farm operations. By applying the waste and by-product processing technologies we have cultivated over the years, we aim to contribute to the Restoration Farm by supporting the development of technologies to produce liquid fertilizer and compost through the effective use of cattle manure and to utilize methane gas, a by-product of liquid manure production, and work together with the local community to achieve sustainable development.



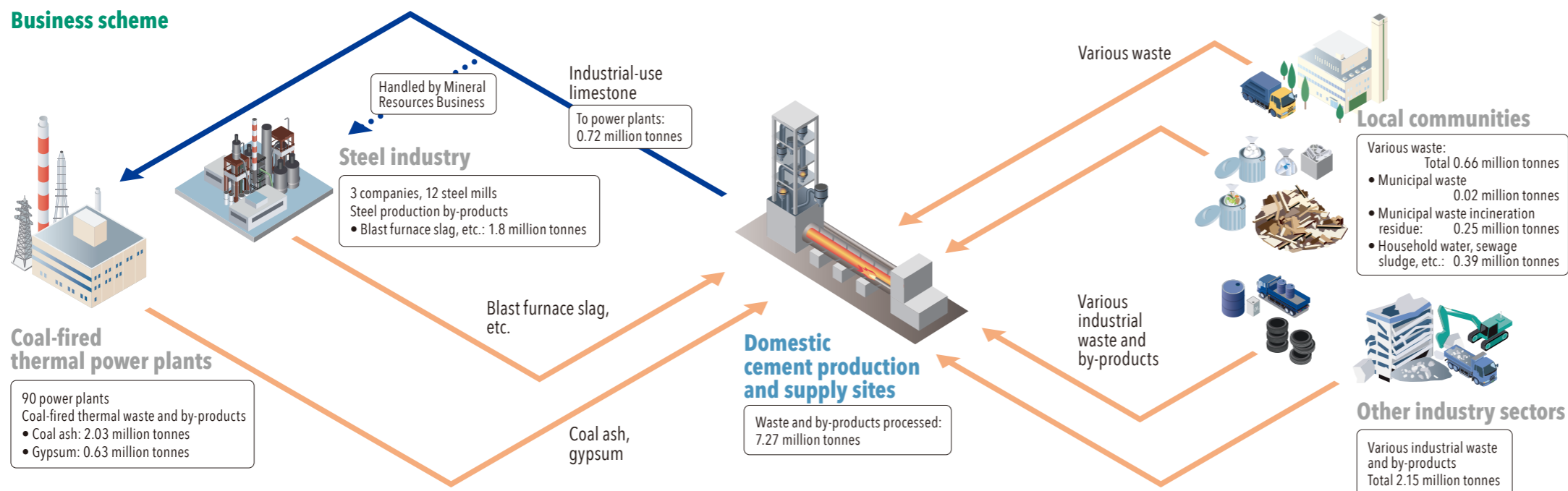
Cultivation of businesses that are not affected by cement production

While fulfilling the role of a venous industry that effectively uses waste and by-products, we are cultivating businesses that are not affected by cement production volumes. We are expanding the recycling of vehicle lithium-ion batteries that applies the cement production process, developing technology to recover phosphorus from dehydrated sewage sludge separation liquid, working on reconstruction farms, and working on the early commercialization of technology to reduce the volume of contaminated soil and other materials containing radioactive substances. In addition, because automobile shredder residue, which is considered a difficult waste to dispose of, can be easily separated into metals and plastics using our proprietary low-temperature embrittlement technology, we will expand it as a business that contributes to the circular economy.

Value creation compatible with carbon neutrality

We aim to contribute to the circular economy and make a steady transition to carbon neutrality by 2050, by effectively utilizing waste and by-products as alternative raw materials and fuels for cement. The goal is to fully utilize our plants which are located in a well-balanced manner throughout the country, and transition finance and government support in collaboration with governments, municipalities and leading companies in order to create CCS and CCU decarbonization hubs for the CO₂ that is separated and captured in each region, as well as the advancement of waste treatment to meet the characteristics and needs of each region.

Business scheme



Strengths Cement production process that boasts world-leading use of alternative raw materials and fuels

Challenges Cultivation of businesses that are not affected by cement production

Construction Materials Business



We aim to realize appropriate pricing and develop products and construction methods that contribute to labor saving and reducing labor demand.

Isao Matsui Managing Executive Officer



Ground improvement project for road construction (Onoda Chemo Co., Ltd.)



Thermalbarrier ILB and blocks for guiding visually impaired persons (Taiheiyo Precast Concrete Industry Co., Ltd.)

Profit forecast for FY2024

We will continue to pursue the realization of appropriate prices for building materials and construction and civil engineering projects, not to mention passing on increases in raw material and fuel prices. In addition, as labor shortages at construction and production sites are becoming more serious, as a pressing issue we are working on the development of products and construction methods that are effective in saving labor and reducing labor demand, which will lead to shorter construction periods and lower costs. As a result, we forecast net sales of 77.0 billion yen, an increase of 8.8 billion yen from the previous fiscal year, and operating income of 3.2 billion yen, an increase of 0.9 billion yen from the previous fiscal year.

Development of labor-saving and labor-demand reducing products and construction methods

In the Construction Materials Business, which manufactures and sells products that include premix products, concrete products and ALC (autoclaved lightweight concrete), we consider responding to labor shortages at construction sites as a key issue, and are working together with our related group companies to develop products and construction methods that are effective in saving labor and reducing labor demand. In the construction and civil engineering business, which carries out ground improvement projects, repair and renovation of concrete structures and seismic reinforcement work, we are proposing labor-saving and labor demand-reducing solutions that combine materials and construction methods to address increasingly serious labor shortages, and introducing digital technology to construction work sites.

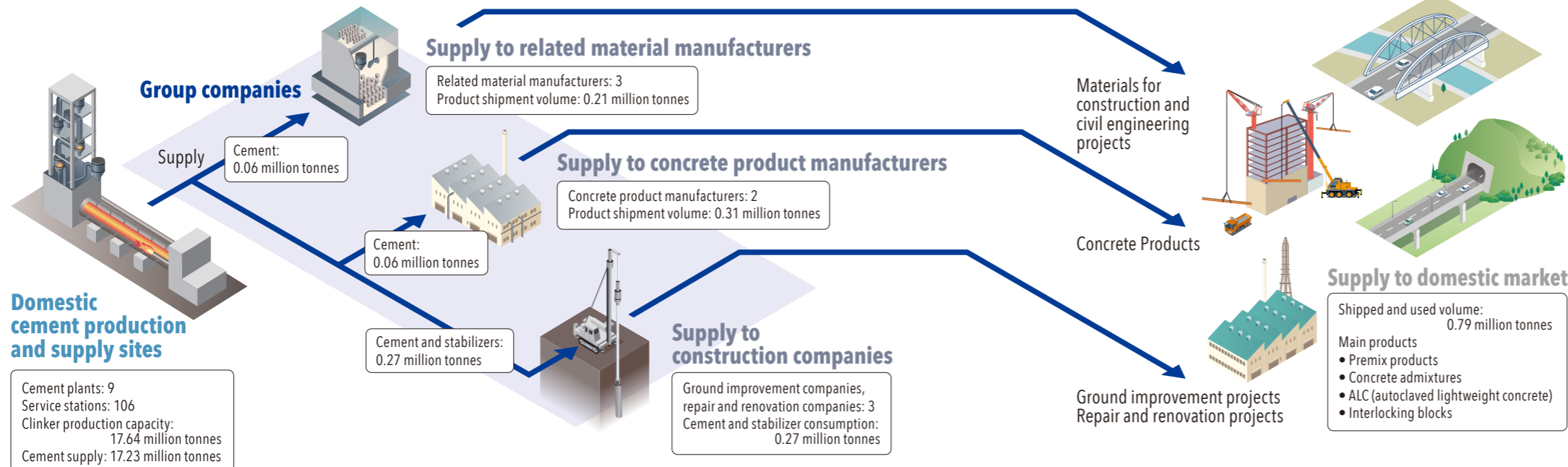
Overseas deployment

In Southeast Asia, which is experiencing remarkable economic development, the performance requirements for construction materials are increasing rapidly, and we expect that our group's products and construction methods, with their high technological capabilities, will provide significant business opportunities. In Indonesia, in particular, there are plans to relocate the capital to the eastern part of Kalimantan in 2024, and as there are many peat bogs in the relocation area, significant demand for stabilizers and ground improvement projects is expected. We will consider the overseas expansion of the ground improvement business while maximizing the effects of the capital and business alliance with Semen Indonesia Group.

Initiatives to reduce environmental impact

In addition to maintenance and repair services to ensure the continued safe use of existing concrete buildings and structures, we are also working on the manufacture of products with reducing environmental impact in mind. A familiar product is paving blocks, which are often used in locations such as sidewalks because of their heat shielding, water permeability and water retention properties. We will also cooperate in the research and development of CCU technology to utilize in the production of concrete products the CO₂ that is generated and captured during cement production, with the aim for a steady transition to carbon neutrality by 2050.

Business scheme



Strengths Development and sales expansion of diverse products and construction methods through synergy with group companies

Challenges Addressing labor shortages and the aging workforce at construction sites

Research and Development

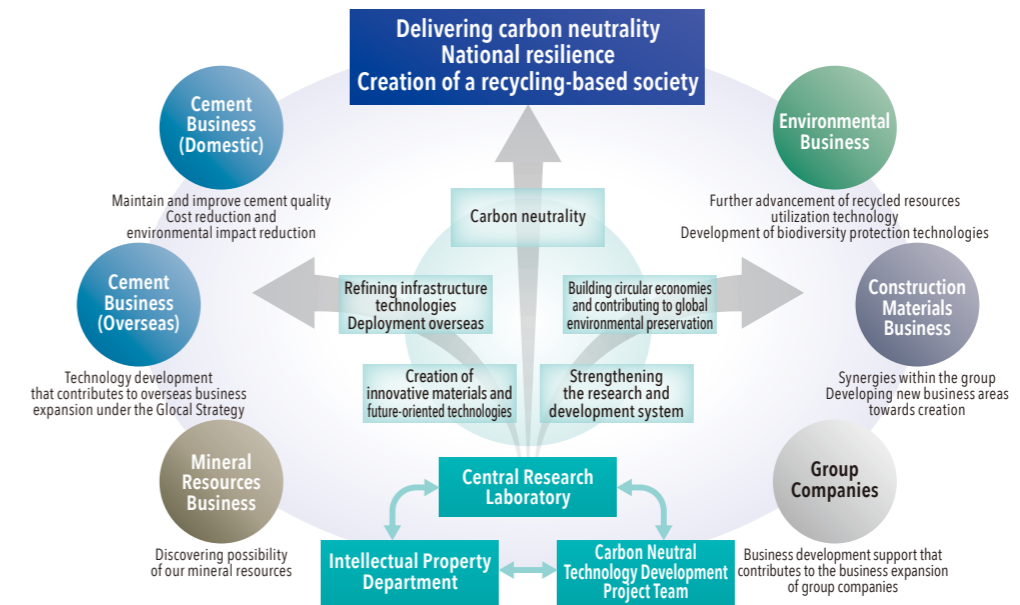


We will support the sustainable development of our group through our research and development capabilities and intellectual property strategy.

Takayoshi Okamura Managing Executive Officer

Key Strategies for FY2024

- (1) **Delivering carbon neutrality**
 - Technology development to achieve the 2030 targets
 - Development of innovative technologies related to CCUS
- (2) **Refine infrastructure technologies and expand overseas**
 - Cement: Maintain and improve quality, cost reductions
 - Concrete: Enhance functionality and expand applications
 - Stabilizer/insolubilizing agent: Business expansion
- (3) **Building circular economies and contributing to global environmental preservation**
 - Develop combustion and de-chlorination technologies
 - Research and development on biodiversity protection
- (4) **Creation of innovative materials and future-oriented technologies**
 - Functional materials
 - Utilization of AI and the IoT to boost productivity and reduce labor demand
- (5) **Strengthening the research and development system**
 - Promoting early commercialization by strengthening cooperation with business divisions and group companies, etc.
 - Conduct 'market in' based theme exploration



Direction and role of the Research and Development Department

In the Research and Development Department, the Central Research Laboratory, the Intellectual Property Department and the Carbon-Neutral Technology Development Project Team work in unison and conduct activities in collaboration with the business divisions. With the sustainable development of the group in mind, we are progressing research and development on technological development aimed at the resolution of social issues such as delivering carbon neutrality and building a recycling-based society, and on R&D strategies to contribute to the group's sustainable growth.

Among our five key strategies, the first is delivering carbon neutrality, which is the most important issue for the cement industry, and we are progressing the establishment of innovative technologies aimed at this goal and development to achieve social implementation. In addition, in order to maintain and develop "Taiheiyō quality," we are pursuing the further refinement of our infrastructure technologies and working to advance our recycling resource utilization technologies to contribute to the establishment of a circular economy and conservation of the global environment. We are also focusing on the development of innovative functional materials and the creation of future-oriented technologies. We have strengthened our R&D system by accepting specialist engineers from group companies as researchers, and we are also focusing on 'market in' based theme exploration.

In addition, we are prioritizing themes that can contribute to our business as soon as possible, and have established an "Overseas Technical Team" to respond to the strong overseas demand for cement, and have strengthened our research and development of carbon neutrality related materials in addition to cement, concrete and stabilizers for overseas markets.

In conjunction with this research and development, we will promote our intellectual property strategy to enhance the brand value and competitiveness of the Taiheiyō Cement Group and support the group's aim to become an outstanding leading company with our technological capabilities.

Major R&D initiatives and results

(1) Delivering of carbon neutrality and a circular economy

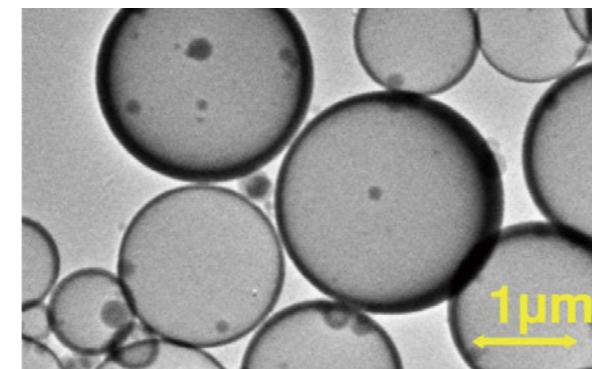
We are progressing the development of CCUS technology, of which the innovative technology of the C2SP Kiln as a key pillar, with the aim of delivering carbon neutrality in 2050. On the other hand, in order to achieve the 2030 Interim Target of reducing specific CO₂ emissions by 20% or more throughout the supply chain, we are working to revise specifications to enable a reduction in the amount of clinker in ordinary cement, and we are also considering new type of blended cement. We have also developed CO₂-absorbing/cured CARBOFIX cement and "CARBOCATCH", an efficient system to fix CO₂ into fresh concrete. In addition, we aim to expand the use of combustible waste as fossil fuel substitutes by promoting the advancement of burner combustion technology, etc., in order to deliver carbon neutrality and fulfill our role as a key player in the circular economy.



Trial laying of interlocking blocks manufactured with CARBOFIX cement
Interlocking blocks manufactured with CARBOFIX cement were laid in a parking lot to confirm their applicability as paving blocks. Technology development is in progress to further expand their CO₂ reduction effect.

(2) Prioritizing themes that can quickly contribute to the business

In order to meet the strong overseas demand for cement, we are focusing on the development of cement that meets local needs. We are resolutely supporting development by our US subsidiary, CalPortland Company, of new types of blended cement that utilize limestone and natural pozzolans, and the supply of these cements to the market has already begun. We are also working to demonstrate and disseminate the quality and performance of TAIHEIYO GREEN CEMENT, a fly ash-based blended cement that we are exporting to Singapore, and to standardize it in Singapore, while building up a track record of applications of low-heat cement to large concrete structures. We will prioritize research and development that will contribute to the expansion of our business, including overseas business.



Transmission electron microscope (TEM) image of "CellSpheres" functional hollow particles

A revolutionary material that achieves both a hollowness ratio of 75% or higher in the microscopic range of 1 to 10 μm particle size. It has excellent heat insulation and low dielectric properties, and is being developed for applications including in the electronic materials field.

(3) New business development and future-oriented technologies

We are promoting the development of functional materials for the generation of new profits. In particular, "CellSpheres", which are functional hollow particles, and "Nanolitia" cathode materials for lithium-ion batteries, are innovative materials that we expect to expand as a core business in the future, and we have already secured intellectual property rights and established stable production technologies in Japan and overseas. We are also focusing on technological development that will lead to innovation of production processes, such as 3D laser measurement technology for cement plant facilities utilizing AI/IoT, and "PreSLump AI", a system that uses AI to instantly and accurately predict the slump of concrete after mixing.



Monitor display of the post-mix slump prediction system "PreSLump AI"

Using AI-based image recognition, slump can be predicted instantly and with high accuracy from images of the concrete mix inside the mixer. Sales by Pacific Systems Corporation began in April 2023.

Intellectual Property

Fundamental Intellectual Property Policy

We are promoting activities that support the sustainable growth of the Group based on our fundamental policy of boosting the competitiveness and brand value of the Taiheiyo Cement Group via business-oriented intellectual property activities. We have defined three key policy initiatives of

building an inventory of intellectual property rights with a view to future businesses, deepening and expanding information analysis based on intellectual property, and strengthening the intellectual property capabilities of the entire Group.

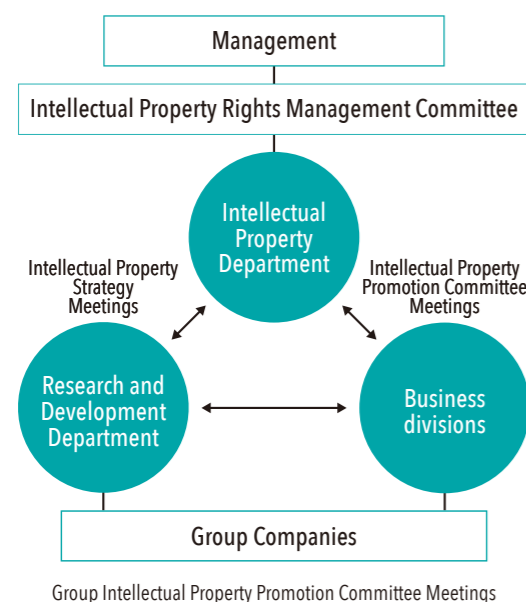
Intellectual Property Management

Intellectual Property Management System

We have established "Rules for Handling Intellectual Property Rights" to encourage permanent employees to create inventions and to promote the acquisition and use of intellectual property rights. We have also established and are implementing "Taiheiyo Cement Group Intellectual Property Management Guidelines" to contribute to the reduction of intellectual property risks and the utilization of intellectual property throughout the group.

The Intellectual Property Department has established an "Intellectual Property Strategy Meeting" with the Research and Development Department, which is at the core of invention creation, to deliberate on applications and rights acquisition, and "Intellectual Property Promotion Committee Meetings" with business divisions and major group companies to promote intellectual property activities according to their needs. In addition, the Intellectual Property Rights Management Committee (chaired by the officer in charge of the Intellectual Property Department), which is attended by the managers at business sites of relevant divisions, deliberates on the awarding of performance rewards and company-wide intellectual property activities.

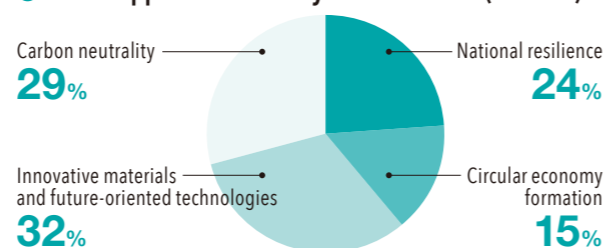
● Tripartite intellectual property action promotion system



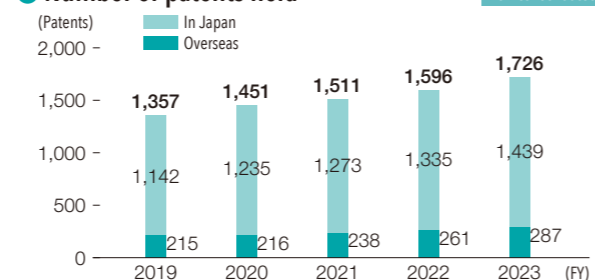
Securing intellectual property rights

In order to maintain and secure our business areas in the future, we are promoting the construction of a patent portfolio while also using means to protect the secrecy of our know-how. The development of the "Carbon Neutral Strategy 2050" has stimulated the development of related technologies and patent applications in the relevant fields have increased rapidly. At the same time, we are promoting patent applications related to innovative materials and future-oriented technologies, in addition to our cement and concrete infrastructure technologies related to national resilience and recycling technologies related to the formation of a circular economy. Overseas, we are proactively progressing with patent and trademark applications in the Southeast Asian countries where we are expanding our business. We are also focusing on brand building through trademarks, and have registered several trademark rights that are mainly related to carbon neutrality. As of March 31, 2023, we held 276 trademarks in Japan and 147 trademarks overseas, an increase of 8 from the end of the previous fiscal year.

● Patent application ratio by technical field (FY2023)



● Number of patents held



Aiming to improve brand value and strengthen competitiveness through "offensive" and "defensive" intellectual property strategies.

Our intellectual property strategy aims to improve our brand value and strengthen our competitiveness through "defensive" measures to acquire intellectual property rights and manage the risk of infringing on third-party rights, and "offensive" measures to proactively deploy our intellectual property to our business. In particular, we are working on the development of our own "C2SP Kiln," which will be the world's first kiln that enables the separation and capture of CO₂ directly from the cement production process, with the aim of it becoming the global standard model, and also position it as an important pillar of our intellectual property strategy.



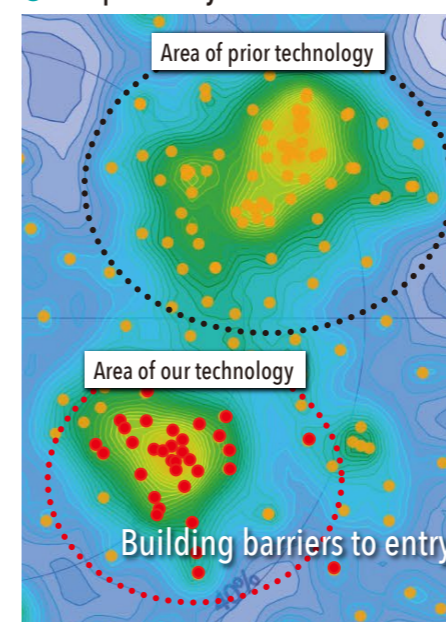
Takayoshi Okamura
Managing Executive Officer

IP Consulting

We are developing IP landscape activities that comprehensively analyze various types of information, mainly patent information, and utilize it for R&D and business development. We use IP landscapes primarily in the exploration of applications for developed technologies, the quantification of the value of patents, and the consideration of the directionality of development. Quantitative visualization of the distribution of patent clusters for developed technologies is used in the determination of the feasibility of technologies and products.

For example, the figure below displays the frequency of functional material patent clusters as a topographic map with contour lines and color tones (from blue increasing to yellow at the peaks), with our technologies indicated by ● and prior technologies by ●. This shows that our technology forms a high-density area that does not overlap with prior technologies, making it a differentiating technology and a high barrier to entry (which prevents later entrants).

● Example of analysis of functional material patent clusters



Boosting awareness of intellectual property

We are conducting various training programs to improve the intellectual property literacy of the group's employees. We also regularly review our education system and are promoting education at each job level according to years of experience and expertise. As an incentive related to intellectual property, we have awards for employees who have created outstanding inventions, discovered infringements or made other achievements, in addition to rewarding inventors for filing patents and other applications.

Our in-house training program includes sessions for newly hired employees, basic training for employees who have little experience dealing with intellectual property, patent description training for young inventors, and training for newly appointed managers, each of which are held annually, as well as patent research skills training which is held regularly. We are also incorporating training by external organizations such as the Japan Intellectual Property Association, to ensure that trainees acquire knowledge appropriate to their level and expertise.

● In-house attendance at intellectual property training sessions (FY2023)

Training Content	Taiheiyo Cement Corporation	Group Companies	Total
Basic Training	50	41	91
Patent Description Training	12	13	25
External Training	46	9	55
Total	108	63	171



Recipients of the FY2023 Outstanding Invention Awards